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**Sluicing and Stripping in Korean: A non-ellipsis,  
anaphoric analysis**

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**Sluicing and Stripping in Korean: A non-ellipsis,  
anaphoric analysis**

**by**

**Jungsoo Kim**

**DISSERTATION**

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# **Sluicing and Stripping in Korean: A non-ellipsis, anaphoric analysis**

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This dissertation examines some constructions that have been traditionally described as ellipsis phenomena in Korean. Specifically, I focus on the embedded sluicing construction and its two variants (i.e., the embedded sluicing-like construction and the embedded confirmative/contrastive construction), and the stripping construction. In doing so, I first show that there are two possible types for each of the constructions in terms of the presence of a copula. I then argue that regardless of whether or not they contain a copula they are not truly ‘ellipsis’, since they cannot be related to a full form by adding words. Instead they should be treated as simple full clauses. In particular, I claim that they are like other subject-predicate constructions, where the subject is a (possibly phonologically silent) anaphoric pronoun and a [VERBAL +] predicate. I show that previous analyses of these constructions face problems in accounting for their diverse intriguing properties, since they do not distinguish between these two types or they resort to PF deletion and silent



syntax. I then argue that when the clause occurs with a copula, the copula has a specificational use, whereas when it does not occur with a copula, the [VERBAL +] predicate simply denotes the property of the pronominal subject. I also offer formal representations of some representative examples of these constructions, adopting the framework of HPSG (Head-Driven Phrase Structure Grammar). This analysis enables us to capture their numerous common grammatical properties and to explain their different behavior in some respects, making the most of discourse/context information.

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## List of Abbreviations

The following is a list of abbreviations used in the glosses throughout the dissertation.

ACC	accusative marker
ASP	aspect marker
CL	classifier
COMP	complementizer
CONN	connective marker
COP	copula
DAT	dative marker
DECL	declarative marker
DEF	deferential marker
FUT	future tense marker
GEN	genitive marker
HON	honorific marker
IMP	imperative marker
KES	kes (bound noun)
LOC	locative marker
MOD	prenominal modifier
NEG	negation marker
NMLZ	nominalizer
NOM	nominative marker
PASS	passive marker
PL	plural marker
PRES	present tense marker
PST	past tense marker
QUE	question marker
SG	singular marker
SUGG	suggestive marker
TOP	topic marker

# Chapter 1

## Introduction

### 1.1 Motivation and Theoretical Question

Given that the primary goal of contemporary theoretical linguistics is to develop a theory that captures the correspondence between form (or sound) and meaning, ellipsis is a serious challenge to this form-meaning correspondence, since despite the absence of a certain linguistic form a particular meaning is still conveyed as if the form is present (Merchant 2001: 1). From the speaker's point of view the elided version of an utterance should be more desirable than the non-elided version of it as long as they can convey the same message, because for the speaker the elided version involves less physical work than the non-elided version. In this regard, the elided version is obviously more economical than the non-elided version. On the other hand, from the hearer's point of view, the non-elided version should be more desirable than the elided version, since the elided version requires more physical work than the non-elided version to interpret the message as the speaker intends in the sense that the hearer must derive the meaning in the absence of some overt linguistic form.

Nevertheless, diverse types of ellipsis are pervasive in natural language

and the pervasiveness of such ellipsis phenomena indicates that economy is preferred over redundancy in certain contexts. For instance, languages make use of several different kinds of ellipsis phenomena including VP ellipsis, pseudo-gapping, sluicing, fragment answers, gapping, null complement anaphora, and nominal ellipsis. Some basic English examples are given in (1) (cf. Lobeck 1995; Sag 1976; Craenenbroeck and Merchant 2013):

- (1) a. John likes coffee, but Mary doesn't. (VP ellipsis)
- b. John will read something to Mary, but he won't to Sue. (Pseudo-gapping)
- c. John drank something, but I don't know what. (Sluicing)
- d. A: What did John eat? B: Chocolate. (Fragment answers)
- e. John drank coffee and Mary green tea. (Gapping)
- f. John wanted Mary to help Sue, but she refused. (Null complement anaphora)
- g. John ate three apples and Mary ate four. (Nominal ellipsis)

Each of these ellipsis phenomena has distinct grammatical properties and languages differ in what kinds of ellipsis phenomena they have available.

Several different kinds of phenomena have been also discussed in the Korean ellipsis literature, including null arguments, fragment answers, sluicing,



stripping, and CP ellipsis, as exemplified in (2) (Kim, S. 1999; Sohn 2000; Kim, J.-S. 2006; Ahn and Cho 2012a, 2012b; Saito and An 2014).<sup>1,2</sup>

- (2) a. A: John-un khephi-lul coh-a ha-n-ta. B: Mary-nun  
 John-TOP coffee-ACC like-CONN do-PRES-DECL Mary-TOP  
 silh-e ha-n-ta.  
 dislike-CONN do-PRES-DECL  
 ‘A: John likes coffee. B: Mary dislikes (\*it).’ (Null arguments)
- b. A: John-i nwukwu-lul manna-ass-ni? B: Mary-(lul).  
 John-NOM who-ACC meet-PST-QUE Mary-ACC  
 ‘A: Who did John meet? B: Mary. (Fragment answers)
- c. John-i nwukwunka-lul manna-ass-nuntay, na-nun  
 John-NOM someone-ACC meet-PST-but I-TOP  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘John met someone, but I don’t know who.’ (Sluicing)
- d. A: John-i khephi-lul masi-ess-e. B: nokcha-to-(ya).  
 John-NOM coffee-ACC drink-PST-DECL green.tea-also-COP  
 ‘A: John drank coffee.’ B: Green tea too.’ (Stripping)
- e. A: na-nun John-i khephi-lul coh-a ha-n-ta-ko  
 I-TOP John-NOM coffee-ACC like-CONN do-PRES-DECL-COMP  
 mit-nun-ta. B: na-nun mit-ci anh-nun-ta.  
 believe-PRES-DECL I-TOP believe-CONN not-PRES-DECL  
 ‘A: I believe that John likes coffee. B: I don’t believe (\*it).’ (CP  
 ellipsis)

---

<sup>1</sup>Authors used different terms for some, if not all, of these Korean phenomena examples. I will not go over all the details and justifications about them; however, when it comes to sluicing and stripping, I will briefly mention what kinds of terms have been used in the literature.

<sup>2</sup>In traditional Korean grammar, the suffix *-keyss* in (2c) is usually glossed as a future tense marker; however, when it combines with a predicate like *molu*- ‘not.know’, it does not really indicate the future. Rather, it denotes some kind of conjecture meaning. Throughout the dissertation, I will gloss it as FUT, following the traditional convention.

Among what have been traditionally described as ellipsis phenomena in Korean, this dissertation particularly focuses on the embedded sluicing and sluicing-like constructions, the embedded confirmative/contrastive construction, and the stripping construction, whose basic examples are shown below:<sup>3</sup>

- (3) a. John-i nwukwunka-lul manna-ass-nuntey, na-nun  
 John-NOM someone-ACC meet-PST-but I-TOP  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘John met someone, but I don’t know who.’ (Embedded sluicing construction)
- b. John-i nwukwunka-lul manna-ass-nuntey, na-nun  
 John-NOM someone-ACC meet-PST-but I-TOP  
 Mary-i-nci kwungkumha-ta.  
 Mary-COP-QUE wonder-DECL  
 ‘John met someone, and I wonder whether it was Mary.’ (Embedded sluicing-like construction)
- c. John-i khephi-lul masi-ess-ta-ko tul-ess-nuntey,  
 John-NOM coffee-ACC drink-PST-DECL-COMP hear-PST-but  
 na-nun nokcha-la-ko sayngkakha-n-ta.  
 I-TOP green.tea-COP.DECL-COMP think-PRES-DECL  
 ‘I heard that John drank coffee, but I think that it was green tea.’  
 (Embedded confirmative/contrastive construction)
- d. John-i khephi-lul masi-ess-e. kuliko  
 John-NOM coffee-ACC drink-PST-DECL and  
 nokcha-to-ya.  
 green.tea-also-COP.DECL  
 ‘John drank coffee and green tea too.’ (Stripping construction)

---

<sup>3</sup>In traditional Korean grammar, the clausal connective/conjunctive morpheme *-nuntey* is usually glossed as ‘but’. However, it can mean ‘but’ as in (3a) or ‘and’ as in (3b), depending on the context. Throughout the dissertation, I will gloss it as ‘but’, following the traditional convention.

These linguistic phenomena all involve ellipsis of some part of the sentence that includes the verb. Another interesting observation that we can make here is that these constructions all contain a copula.

Observe, however, that the linguistic phenomena under discussion sometimes lack a copula, as in the following examples:

- (4) a. John-i cwumal-ey pissa-n cha-lul sa-ass-nuntay,  
 John-NOM weekend-on expensive-MOD car-ACC buy-PST-but  
 na-nun elmana pissa-(\*i)-nci kiekna-ci anh-nun-ta.  
 I-TOP how expensive-COP-QUE recall-CONN not-PRES-DECL  
 ‘John bought an expensive car on the weekend, but I don’t remember how expensive.’
- b. John-i ku chokholleys-ul mek-ess-ta-ko tul-ess-nuntay,  
 John-NOM the chocolate-ACC eat-PST-DECL-COMP hear-PST-but  
 na-nun peli-(\*i)-ess-ta-ko sayngkakha-n-ta.  
 I-TOP throw.away-COP-PST-DECL-COMP think-PRES-DECL  
 ‘I heard that John ate the chocolate, but I think that (he) threw (it) away.’
- c. A: Mary-nun yeppu-e. B: chakha-ki-to  
 Mary-TOP pretty-DECL kind-NMLZ-also  
 {\*ya/ha-y.}  
 COP.DECL/do-DECL  
 ‘A: Mary is pretty. B: Kind too.’

In the embedded sluicing construction example in (4a) the remnant is an adjective phrase (AdjP), *elmana pissa-* ‘how expensive’, and a copula cannot appear along with the remnant. Similarly, in the embedded confirmative/contrastive construction example in (4b) the remnant is a verb *peli-* ‘throw away’, and the presence of a copula in addition renders it ungrammatical. In the stripping

construction example in (4c), B's utterance is composed of an AdjP, a nominalizer *-ki*, an additive focus marker *-to* 'also', and an auxiliary *ha-* 'do' verb. When a copula occurs in place of a *ha-* 'do' verb, it becomes ungrammatical. These examples then show that it is not always the case that the linguistic phenomena dealt with in this dissertation require a copula.

In this dissertation, I will examine these two types of examples of the embedded sluicing and sluicing-like constructions, the embedded confirmative/contrastive construction, and the stripping construction in Korean. In one type they contain a copula, while in the other they cannot.

Before discussing all the constructions at issue in more detail, for terminology let us consider the English embedded sluicing construction example below as an illustration:

- (5) a. John ate something, but I don't know what.  
 b. [John ate *something*]<sub>antecedent clause</sub>, but I don't know [what ~~John ate~~<sub>‡</sub>].

correlate

remnant

In the English embedded sluicing construction example in (5a), a single *wh*-expression *what* is assumed to be the remaining material after PF deletion of IP takes place. In this sense, the remaining *wh*-expression is called the remnant. There is an expression in the antecedent clause that corresponds to the remnant and this corresponding expression in the antecedent clause

is called the correlate. In (5a), an indefinite expression *something* in the antecedent clause *John ate something* serves as the correlate of the *wh*-remnant *what*. Given the antecedent clause with the correlate in it, the *wh*-remnant embedded by a predicate *not know* here gives rise to an indirect question interpretation.

Observe then the Korean embedded sluicing construction examples in (6):

- (6) a. John-i mwuenka-lul mek-ess-nuntey, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what.’
- b. John-i pissa-n cha-lul sa-ass-nuntey, na-nun elmana  
 John-NOM expensive-MOD car-ACC buy-PST-but I-TOP how  
 pissa-(\*i)-nci kiekna-ci anh-nun-ta.  
 expensive-COP-QUE recall-CONN not-PRES-DECL  
 ‘John bought an expensive car, but I don’t remember how expensive.’

In the Korean example in (6a), the *wh*-expression occurs with a copula and an embedded interrogative clause marker and the constituent as a whole induces an indirect question interpretation given the antecedent clause meaning *John ate something* with its correlate *mwuenka* ‘something’ in it. Almost the same applies to the example in (6b) except for the absence of a copula.

An important theoretical question that can be addressed at this point is whether Korean examples as in (3), (4), and (6) are truly ‘ellipsis’ in the

sense that they can be related to a full form by adding words like English ones as in (5). On the one hand, it is not possible for the examples with a copula as in (3) and (6a); on the other hand, it is possible for the examples without a copula as in (4) and (6b). Thus, we can ask whether to assimilate both these two types (copula and copula-less types) to the construction without a copula in order to treat them all as involving ellipsis. Alternatively, we can ask whether to assimilate both these two types to the construction with a copula by treating them both as simple full clauses.

In this dissertation, I argue for the latter position rather than the former, showing that the Korean constructions at issue do not in fact involve ellipsis. In particular, I claim that syntactically they are straightforward subject-predicate constructions, with anaphoric relations to previous utterances.

## **1.2 Three Main Theories of Sluicing**

Although some kind of redundancy may be a necessary condition to license ellipsis, it is not a sufficient one and languages differ as to how redundancy can be reduced by the grammar (Merchant 2001: 2). Given this, the ellipsis possibility, being language- and structure-specific, cannot be solely attributed to information redundancy and must be dealt with by the grammar in some way. As far as ellipsis is concerned, three main issues arise: 1) syntactic structure; 2) identity; and 3) licensing conditions (Merchant 2001, 2013; van Craenenbroeck and Merchant 2013; Kim, J.-B. 2015). The syntactic

structure issue concerns whether or not there is syntactic structure for the unpronounced or presumptive elided part. The identity issue deals with the relationship between the understood material in ellipsis and its antecedent, focusing mainly on whether the identity relationship is syntactic or semantic. Additionally, the identity issue has to do with to what extent and in what way they need to be identical to each other. Lastly, the issue of the licensing conditions is related to what licenses the ellipsis. Different types of ellipsis show different behavior with respect to these issues.

Investigating some or all of these issues, there are three main theories of ellipsis: 1) movement + PF deletion theory; 2) LF copying theory; and 3) Direction Interpretation (DI) theory. In general, the movement + PF deletion theory assumes that a certain linguistic element moves to the specifier position of a functional category out of its original position for feature-checking purposes and the functional head licenses the ellipsis of the material remaining below the functional category under some kind of identity condition at PF (Ross 1967; Sag 1976; Merchant 2001). Some kind of syntactic structure for the elided and unpronounced part is posited under the movement + PF deletion theory. On the other hand, under the LF copying theory ellipsis is not the result of PF-deletion; rather it posits an empty category in the syntax. In order to calculate the interpretation, an LF representation of a syntactic constituent of the appropriate type that the antecedent provides is copied into the empty category (Williams 1977; Chung et al. 1995). Meanwhile, according to the Direct Interpretation theory, the remaining material is generated

‘as is’ and it is assigned an interpretation based on the surrounding context (Ginzburg and Sag 2000; Culicover and Jackendoff 2005).

In what follows, I first discuss these three main theories of ellipsis in more detail. In doing so, I use sluicing as an illustration, because it directly or indirectly pertains to all the Korean constructions that this dissertation examines. I then move on to the linguistic typology of sluicing to provide a better understanding of how it has been generally analyzed and why, from a typological perspective.

### 1.2.1 Movement + PF Deletion Theory

A first theory of sluicing is the movement + PF deletion theory (Ross 1969, Sag 1976, Merchant 2001 among others), where an interrogative *wh*-expression moves to the left periphery and then the redundant IP undergoes PF deletion, as sketched in (7):

- (7) a. John ate something, but I don’t know [<sub>CP</sub> C<sup>0</sup><sub>[+Wh, +Q]</sub> [<sub>IP</sub> John ate [what]]]. → *Wh*-movement
- b. ... but I don’t know [<sub>CP</sub> what<sub>i</sub> [<sub>+Wh, +Q</sub>] C<sup>0</sup><sub>[+Wh, +Q]</sub> [<sub>IP</sub> John ate t<sub>i</sub>]].  
→ IP deletion at PF
- c. ... but I don’t know [<sub>CP</sub> what<sub>i</sub> [<sub>+Wh, +Q</sub>] C<sup>0</sup><sub>[+Wh, +Q]</sub> [<sub>IP</sub> e]].

Merchant (2001) proposes that ellipsis of the IP in sluicing is licensed just in case there is a mutual entailment relationship between the elided material and



its antecedent. Ellipsis is possible in (7b) to derive the sluicing example in (7c), since such a mutual entailment relationship holds as shown in (8):<sup>4</sup>

- (8) a. John ate something, but I don't know what.
- b. Antecedent clause  $[[A]] = \exists x(\text{John ate } x)$
- c. Elided clause  $[[E]] = \exists x(\text{John ate } x)$

The strongest support for this kind of movement + PF deletion theory of sluicing comes from connectivity effects. The *wh*-remnant in sluicing displays a wide range of grammatical dependencies similar to those of the *wh*-phrase in its fully sentential non-elliptical counterpart (Merchant 2001, 2006: 273). One piece of evidence for the movement + PF deletion theory involving connectivity effects concerns case-matching. The movement + PF deletion theory predicts that the case of the *wh*-remnant in sluicing is the same as that of the *wh*-phrase in its non-elided counterpart and this prediction is borne out in a wide variety

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<sup>4</sup>The mutual entailment condition is more complicated than the one briefly described here; however, the gist of his idea involves the notion of e-GIVENNESS defined as in (i) and he proposes the licensing condition on IP ellipsis (sluicing) in (ii):

- (i) **e-givenness**  
 An expression E counts as e-GIVEN iff E has a salient antecedent A and modulo  $\exists$ -type shifting,
- a. A entails F-clo(E) and
- b. E entails F-clo(A).
- (ii) **Focus condition on IP-ellipsis**  
 An IP  $\alpha$  can be deleted if  $\alpha$  is e-GIVEN.

of languages (see Ross 1969: 253; Merchant 2001: 42-45, 2006: 273). As an illustration, consider the following German examples (Merchant 2001: 89-90):

- (9) a. Er will jemandem schmeicheln, aber sie wissen nicht,  
 he wants someone.DAT flatter but they know not  
 {wem/\*wen}.  
 who.DAT/who.ACC  
 ‘He wants to flatter someone, but they don’t know who.’
- b. Sie wissen nicht, {\*wer/\*wen/wem} er schmeicheln  
 they know not who.NOM/who.ACC/who.DAT he flatter  
 will.’  
 wants.  
 ‘They don’t know who he wants to flatter.’
- (10) a. Er will jemanden loben, aber sie wissen nicht,  
 he wants someone.ACC praise but they know not  
 {\*wem/wen}.  
 who.DAT/who.ACC  
 ‘He wants to praise someone, but they don’t know who.’
- b. Sie wissen nicht, {\*wer/wen/\*wem} er loben will.  
 they know not who.NOM/who.ACC/who.DAT he praise wants  
 ‘They don’t know who he wants to praise.’

In the sluicing example in (9a) the *wh*-remnant can only be the one with a dative case marker as the *wh*-phrase in its fully sentential non-elided counterpart in (9b). Similarly, in the sluicing example in (10a) the *wh*-remnant can only bear an accusative case marker just like the *wh*-phrase in its non-elliptical counterpart in (10b). These case-matching connectivity effects are accounted for once one assumes that the case of the *wh*-remnant is assigned by the embedded verb and it undergoes overt *wh*-movement and then IP deletion takes place.

Another type of connectivity effects can be seen in P(reposition)-stranding phenomena. Merchant (2001: 107) formulates the Preposition-Stranding Generalization (PSG) stating that P-stranding in sluicing is possible in a language if and only if the language allows P-stranding in regular *wh*-movement constructions. This generalization captures the dichotomy between P-stranding languages and non-P-stranding languages, as shown in the contrast between the English and German examples below (Merchant 2001: 92-94):

- (11) a. John was talking with someone, but I don't know (with) who.  
 b. Who was he talking with?  
 c. With whom was he talking?
- (12) a. Anna hat mit jemandem gesprochen, aber ich weiss nicht  
 Anna has with someone.DAT spoken but I know not  
 \*(mit) wem.  
 with whom.DAT  
 'Anna has spoken with someone, but I don't know with whom.'  
 b. \*wem hat Anna mit gesprochen?  
 whom.DAT has Anna with spoken  
 'Who has Anna spoken with?'  
 c. mit wem hat Anna gesprochen?  
 with who.DAT has Anna spoken  
 'With whom has Anna spoken?'

As shown in (11b) and (11c), the preposition *with* can be either stranded or or pied-piped in simple *wh*-question sentences in English. The same behavior is seen in the English sluicing example in (11a). On the other hand, as the

contrast between (12b) and (12c) illustrates, in German the preposition *mit* ‘with’ must be pied-piped in simple *wh*-question sentences and P-stranding renders them ungrammatical. The same contrast is observed in the German sluicing example in (12a). This parallelism about P-stranding possibilities in *wh*-questions and sluicing in languages shows an intimate connection between the form of the *wh*-remnant in sluicing and that of the *wh*-phrase in its fully sentential, non-elliptical *wh*-question counterpart.

The case-matching cases and the PSG are thus immediately and straightforwardly accounted for by the movement + PF deletion theory, since the grammatical constraints that regulate these operate uniformly in both sluicing and its non-elided structure.

However, the most serious problem with the movement + PF deletion theory comes from island insensitivity in sluicing. Consider the examples in (13) (Merchant 2001: 87):

- (13) a. They want to hire someone who speaks a Balkan language, but I don’t remember which.
- b. \*I don’t remember which (Balkan language) they want to hire someone [who speaks \_\_\_\_].

In the sluicing example in (13a) the *wh*-remnant corresponds to an indefinite expression within a relative clause island in the antecedent and the example is grammatical; however, its non-elided counterpart in (13b) is ungrammatical.

The difference in grammaticality here is not expected if sluicing is derived from its fully sentential, non-elided counterpart via overt movement of the *wh*-phrase and the deletion of the remaining material. Therefore, the most important issue for the movement + PF deletion theory involves how to explain this kind of island insensitivity in sluicing.<sup>5</sup>

### 1.2.2 LF Copying Theory

In the second theory of sluicing, referred to as ‘LF copying’, the antecedent clause provides an LF representation that is copied into the null element at the ellipsis site in syntax, in order for the structure to be interpreted (Lobeck 1995; Chung et al. 1995, 2011; Lappin 1996 among others). This process is illustrated in (14):

- (14) a. John ate something, but I don’t know what.  
 b. ... but I don’t know [<sub>CP</sub> what C<sup>0</sup> [<sub>IP</sub> e]] . (Spell-out)  
 c. ... but I don’t know [what<sub>i</sub> C<sup>0</sup> [<sub>IP</sub> John ate something<sub>i</sub>]] (LF copying of the IP into the empty IP)

The LF copying theory of sluicing does not posit movement of the *wh*-remnant. Instead, it is base-generated in [Spec, CP] and it binds a variable which corresponds to the indefinite expression in the copied IP at LF.

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<sup>5</sup>See Merchant (2001) for further discussion on how some kinds of island violations are repaired under the movement + PF deletion theory.

The LF copying theory has the opposite pros and cons compared to the movement + PF deletion theory with respect to connectivity effects and island sensitivity. The LF copying theory can immediately account for island insensitivity in sluicing, since under this theory the *wh*-remnant is base-generated in [Spec, CP]. If island sensitivity arises only from movement operations, the LF copying theory does not have to deal with island insensitivity in sluicing from the beginning.

However, this theory needs to explain the connectivity effects in sluicing. For instance, it should account for how the base-generated *wh*-remnant should have the same case as the indefinite expression in the antecedent that it corresponds to and why the PSG holds for various languages. Observe the German examples in (15) again:

- (15) a. Er will jemanden loben, aber sie wissen nicht,  
 he wants someone.ACC praise but they know not  
 {\*wem/wen}.  
 who.DAT/who.ACC  
 ‘He wants to flatter someone, but they don’t know who.’
- b. Anna hat mit jemandem gesprochen, aber ich weiss nicht  
 Anna has with someone.DAT spoken but I know not  
 \*(mit) wem.  
 with whom.DAT  
 ‘Anna has spoken with someone, but I don’t know with whom.’

Technically, if the *wh*-remnant is base-generated, it is unclear how to rule out the case mismatching examples, where the *wh*-remnant has a different case from the one on the indefinite expression in the antecedent to which it

corresponds as in (15a) and it is also mysterious how to rule out the cases where the *wh*-remnant is not a PP, but an NP, when the indefinite expression is a prepositional object in the antecedent. Therefore, the LF copying theory needs a mechanism to account for these kinds of connectivity effects in sluicing.

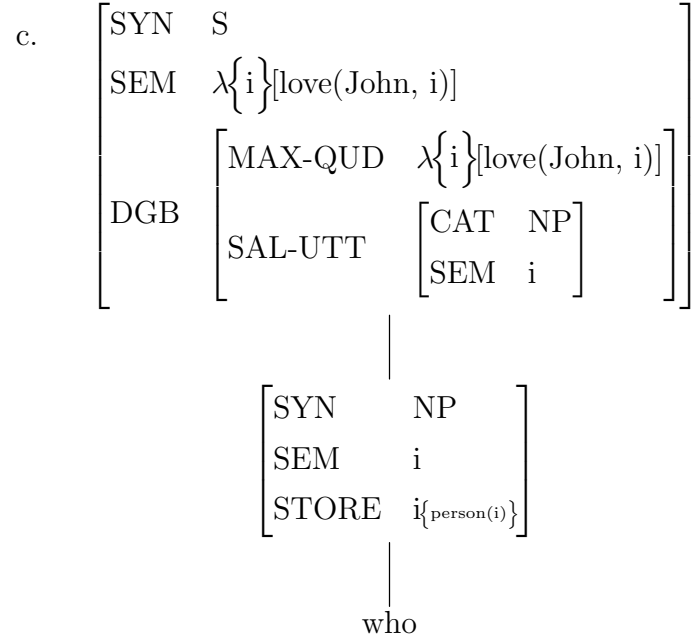
### 1.2.3 Direct Interpretation Theory

Unlike the movement + PF deletion and LF copying theories, the Direct Interpretation theory of sluicing does not posit internal structure of the silent material. Instead, the Direct Interpretation theory assumes that the *wh*-remnant is generated ‘as is’ and thus the *wh*-expression is immediately projected into a clausal node and it gets an interpretation from the surrounding context (Ginzburg and Sag 2000; Sag and Nykiel 2011). As an illustration, consider the English example in (16a) and its relevant formal representations in (16b) and (16c) below:

(16) a. John loves someone. I wonder who.

b. Uttering ‘John loves someone’:

$$\left[ \begin{array}{c} \text{DGB} \\ \text{SAL-UTT} \end{array} \left[ \begin{array}{cc} \text{MAX-QUD} & \lambda\{i\}[\text{love}(\text{John}, i)] \\ \text{CAT} & \text{NP} \\ \text{SEM} & i \end{array} \right] \right]$$



Let us first see what the terms above mean. Note that according to Ginzburg and Sag (2000), questions are basic semantic entities such as individuals and propositions. Under the Direct Interpretation theory, dialogues are described by means of a Dialogue GameBoard (DGB), which keeps a record of who said what to whom, what/who they were referring to, etc. In this respect, DGB monitors which questions are ‘under discussion’, what answers have been resolved, if so, by whom, etc. The Question Under Discussion (QUD) is the set of currently discussable questions, partially ordered according to which questions take precedence over which others. The QUD is not restricted to questions that have been explicitly uttered in the dialogue in the form of questions (Engdahl 2001). Instead, QUD contains the issues that can be addressed at a given point in the dialogue. For instance, an assertion  $p$  brings about the issue of



*whether p* for discussion. A question that no other question takes precedence over is said to be *maximal* in QUD, shown as MAX-QUD. MAX-QUD represents the question currently under discussion and corresponds to the current ‘discourse topic’ (Ginzburg and Fernández 2010). Thus, the semantic content of MAX-QUD is constantly updated as a dialogue progresses. SAL-UTT (Salient Utterance) is the most salient (sub)utterance within MAX-QUD.<sup>6</sup> For instance, the SAL-UTT in the QUD associated with a *wh*-query will be the *wh*-phrase (e.g., A: Who ate my pizza? B: *John.*), the SAL-UTT in the QUD emerging from a quantificational utterance will be the quantificational NP utterance (e.g., A: *John ate some food for lunch.* B: *Pizza, I think.*), and the SAL-UTT in a QUD accommodated in a clarification context will be the sub-utterance under clarification (e.g., A: *Did Mary leave?* B: *Mary?*) (Ginzburg, Fernández, and Schlangen 2012: 323). Lastly, STORE is where NP meanings go, for ‘storage’, to be used for ‘quantifier raising’ type phenomena.

With all the the terms in (16b) and (16c) explained, let us consider how the English sluicing construction example in (16a) is formally analyzed in the Direct Interpretation theory. In the Direct Interpretation theory, ‘who’ in (16a) is interpreted as equivalent to ‘who John loves’. This is encoded in a unary (also called ‘non-branching’) rule, where the mother node picks up part of its interpretation from the discourse context. Uttering the antecedent clause in (16a) updates the context in such a way as to make the issue of *whether there is some entity x such that John loves x* maximal in the QUD, while the

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<sup>6</sup>It is also called Focus Establishing Constituent (FEC).

SAL-UTT is derived from the sub-utterance *someone* whose syntactic category is a noun phrase (NP) and whose referential index is *i*. This context information is encoded in (16b). Notice then that in (16c) the syntactic category value and the semantic index of the *wh*-expression *who* are identical to those of the expression in the SAL-UTT in DGB, namely, the indefinite correlate *something*. This means that making use of the context information from the antecedent clause *John ate something* with the indefinite correlate *something* in it, the *wh*-expression *who* embedded by a predicate *not know* induces an indirect question interpretation ‘the speaker does not know who John loves’.

According to Ginzburg and Sag (2000), sluicing is licensed by a construction that fits into a broader family of ellipsis constructions such as fragment answers to *wh*-questions, reprise uses of sluicing, etc. English sluicing construction examples as in (16a) are then licensed by the constructional rule as in (17) (Sag and Nykiel 2011: 203-204):

$$(17) \quad \text{English sluicing construction:}$$

$$\left[ \begin{array}{ll} \text{SYN} & \text{S} \\ \text{SEM} & \lambda \Sigma \Phi \\ \text{DGB} & \left[ \begin{array}{ll} \text{SAL-UTT} & \left\{ \left[ \begin{array}{ll} \text{SYN} & [\text{CAT} \quad X] \end{array} \right] \right\} \\ & \left[ \begin{array}{ll} \text{SEM} & [\text{IND} \quad i] \end{array} \right] \end{array} \right] \\ & \left[ \text{MAX-QUD} \quad \lambda \{ \} \Phi \right] \end{array} \right] \rightarrow \left[ \begin{array}{ll} \text{SYN} & [\text{CAT} \quad X] \\ \text{SEM} & [\text{IND} \quad i] \\ \text{STORE} & \Sigma \end{array} \right]$$

where  $\Sigma$  is a nonempty set of parameters.

This construction ensures that the syntactic category (CAT) and the semantic index (IND) of the *wh*-remnant must match those of its correlate, as was seen

above. According to (17), the MAX-QUD provides the basis for an interpretation of a *wh*-remnant. Here, the symbol  $\Sigma$  is a nonempty set of PARAMS (parameters) and the symbol  $\Phi$  denotes a proposition. Notably, questions are distinguished from other types of messages in that they involve a feature, PARAMS (Ginzburg and Sag 2000). This feature takes a set as its value and it is empty for yes-no polar questions but it is nonempty for *wh*-questions. The feature consists of an index and restricting propositions. Thus, the semantic content of the *wh*-expression, *who*, can be represented as in (18), and this idea enables us to have the semantic representations for different types of questions as in (19):

(18) Semantic content of *who*:  $i_{\{\text{person}(i)\}}$

- (19) a. Polar question:  $\lambda\{\ }[\text{love}(j, m)]$  (Does John love Mary?)
- b. Unary *wh*-question:  $\lambda\{i_{\{\text{person}(i)\}}\}[\text{love}(j, i)]$  (Who does John love?)
- c. Multiple *wh*-questions:  $\lambda\{i_{\{\text{person}(i)\}}, j_{\{\text{person}(j)\}}\}[\text{love}(i, j)]$  (Who loves who?)

In a polar question example in (19a), the PARAMS feature has an empty set. On the other hand, in a unary *wh*-question example in (19b), the PARAMS feature has a set which states that it involves a *wh*-question expression whose index is *i* and it refers to a person. Meanwhile, in a multiple *wh*-question example in (19c), the PARAMS feature has a set which states that it involves

two *wh*-question expressions with one having the index *i* and referring to a person and the other having the index *j* and referring to a person.

The Direct Interpretation theory can successfully handle island insensitivity in sluicing, as there is no internal syntactic structure for the silent material. Since no syntactic movement operations are involved under this theory, island insensitivity in sluicing is explained.

The Direct Interpretation theory can also account for the case matching effects in sluicing. Given that the case feature specification is part of the category (CAT) value, the constructional constraints in (18) ensure the remnant-correlate case identity (Sag and Nykiel 2011: 204-205).

Nevertheless, like the LF copying theory, under the Direct Interpretation theory the PSG is hard to explain. Since the remnant is generated ‘as is’ under the theory it is unclear how it can account for the ungrammaticality of examples in German where the *wh*-remnant is an NP but its correlate is a prepositional object in the antecedent.<sup>7</sup>

#### 1.2.4 General Typology of Sluicing

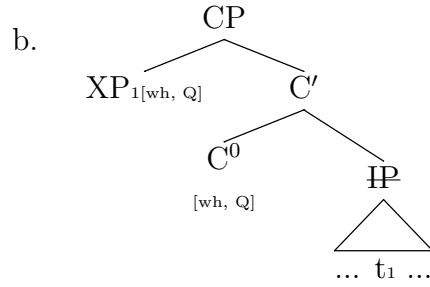
Note now that when it comes to *wh*-expressions, languages are usually classified into two different types. The first type involves overt movement

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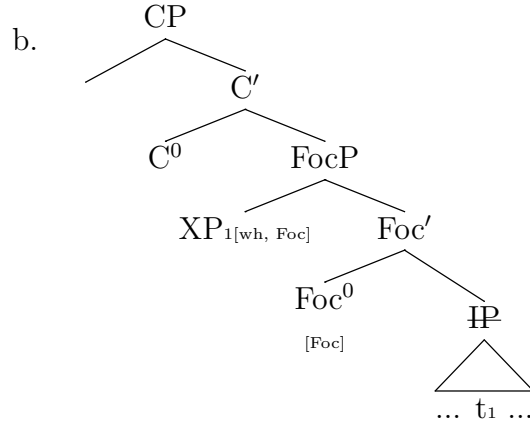
<sup>7</sup>If one wants to pursue the Direct Interpretation theory, one can provide counterexamples to the PSG and show that there is no cross-linguistic correlation of P-standing in general *wh*-movement and the possibility of P-omission in sluicing. Indeed numerous languages have been reported not to follow the PSG. See Sag and Nykiel (2011) and the references therein for such languages.

of *wh*-expressions and it includes English, German, and Hungarian. On the other hand, the second type does not involve such overt *wh*-movement and *wh*-expressions stay in-situ. This type includes Korean, Japanese, Chinese, and Farsi. Given the fact that sluicing that consists of a single *wh*-expression is interpreted as an interrogative clause, if a language employs overt movement of a *wh*-expression in an interrogative sentence, it is natural to analyze sluicing as being derived from its fully sentential, non-elided counterpart by means of overt *wh*-movement and ellipsis of the rest of the material. This is indeed how sluicing in numerous languages has been analyzed in the literature (Ross 1969; Merchant 2001, 2003; Grebenyova 2007 for Russian and Polish; Hoyt and Teodorescu 2012 for Romanian; van Craenenbroeck 2012, van Craenenbroeck and Lipták 2013 for Hungarian). In particular, overt movement in the literature on sluicing has two main different subtypes depending on the landing site of a *wh*-expression. In one type of movement in sluicing the *wh*-remnant moves to [Spec, CP], while in the other it moves to [Spec, FocP]. As an illustration, consider the following English and Hungarian sluicing examples and the schematic representations for their sluicing clauses.

- (20) a. John bought something, but I don't know [<sub>CP</sub> what<sub>i</sub> C<sup>0</sup> [<sub>TP</sub> ~~he bought~~  <sub>$\bar{t}_i$</sub> ]].



- (21) a. János meghívott egy lányt, de nem tudom [CP [FocP  
 John invited a girl-ACC but not know-1SG  
 kit<sub>1</sub> [Foc<sup>0</sup> [~~It~~ János meghívott t<sub>1</sub>]]]  
 who-ACC John invited  
 ‘John invited a girl, but I don’t know [CP [FocP who<sub>1</sub> Foc<sup>0</sup> [~~It~~ John  
 invited t<sub>1</sub>]].’ (van Craenenbroeck and Lipták 2013: 510, ex. (15))



English and Hungarian are known as overt *wh*-movement languages. However, these two languages differ in the surface position of the *wh*-expression. In English the *wh*-expression moves to [Spec, CP], whereas in Hungarian it moves to [Spec, FocP]. Regardless of the difference in the landing site of the *wh*-expression, if a language has overt *wh*-movement, it is not hard to think of sluicing as being derivationally related to its full interrogative clause coun-

terpart.<sup>8</sup>

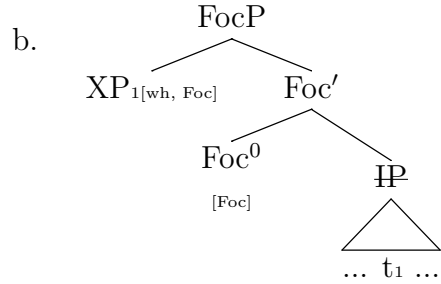
Unlike English and Hungarian, in some languages *wh*-movement is not obligatory and thus the *wh*-expression can remain in-situ. If *wh*-movement is a necessary condition for sluicing, the prediction is that sluicing is not possible in such *wh*-in-situ languages; however, this prediction is not borne out (Kuwabara 1996; Kizu 1997; Paul and Potsdam 2012; Gribanova 2013). Many linguists have shown that sluicing or something equivalent to it is available in numerous *wh*-in-situ languages (Merchant 2001, 2003; Vicente 2014 among others). Sluicing in such *wh*-in-situ languages has been analyzed in one of the two different lines. One posits some kind of overt movement of the *wh*-expression to a functional projection and deletion of the remaining material despite the fact that it can stay in-situ (Takahashi 1994 for Japanese; Kim, J.-S. 1997 for Korean; Adams 2005 for Javanese; Toosavandani 2008 for Farsi; Ince 2012 for Turkish; Paul and Potsdam 2012 for Malagasy). In this regard, overt *wh*-movement languages and *wh*-in-situ languages are analyzed in a similar way, although *wh*-movement is obligatory in the former but it is not in the latter. The other assumes that sluicing is derived from a (pseudo)-cleft or it is simply a type of copula construction. This is based on the observation that sluicing in such *wh*-in-situ languages can involve a copula (Merchant 1998, Kuwabara 1996, Nishiyama et al. 1996, Kizu 1997 for Japanese; Sohn 2000 for Korean; Wang 2002, Wei 2004, Adams and Tomioka 2012 for Chi-

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<sup>8</sup>See van Craenenbroeck and Lipták (2013) for a typology of *wh*-movement and sluicing and sample languages for each type.

nese; Gribanova 2013 for Uzbek). As an illustration, take a look at the Farsi, Japanese, and Chinese sluicing examples and the schematic representations for their sluicing clauses in (22) – (24):

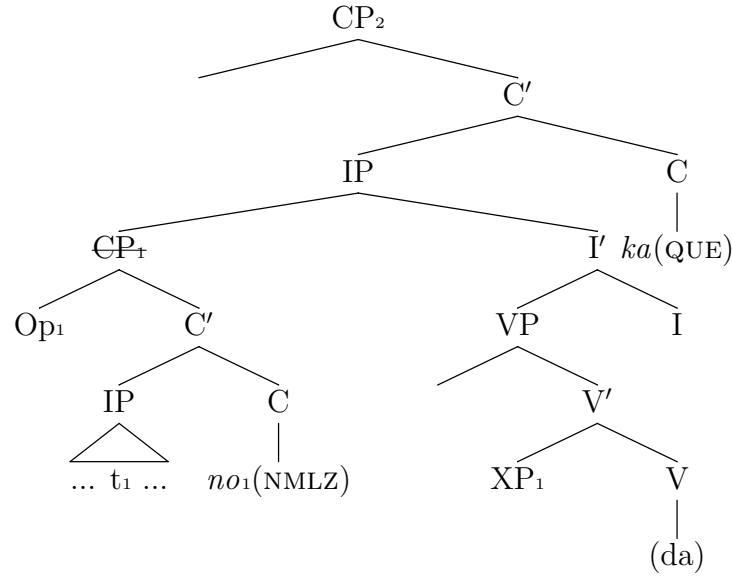
- (22) a. rāmin ye chiz-i xaride. hads bezan [FocP chi<sub>1</sub> [<sub>TP</sub> Ramin one thing-IND bought.3SG guess hit.2SG what ~~rāmin t<sub>1</sub> xaride~~]].  
 Ramin bought.3SG  
 ‘Ramin bought something. Guess [FocP what<sub>1</sub> [<sub>TP</sub> ~~Ramin t<sub>1</sub> bought~~]].’  
 (Toosavandani 2008: 700. ex. (78))



- (23) a. dareka-ga sono hon-o yonda rashii ga, watashi-wa  
 someone-NOM that book-ACC read-PST I.heard but I-TOP  
 [CP<sub>2</sub> [CP<sub>1</sub> Op<sub>1</sub> [<sub>IP</sub> t<sub>1</sub> sono hon-o yon-da]-no]-ga  
 that book-ACC read-PST-NMLZ-NOM  
 [dare<sub>1</sub>-(da)-ka]] wakaranai.  
 who-COP-QUE not.know  
 ‘I heard that someone read that book, but I don’t know who it was  
 that read that book.’ (Kizu 1997: 234. ex. (8a))



b.



- (24) Lisi mai le yiyang dongxi gei Dawu, dan wo bu zhidao [*pro*  
 Lisi buy ASP one-CL thing give Dawu but 1SG not know  
 shi shenme].  
 COP what  
 ‘Lisi bought something for Dawu, but I don’t know what it/that  
 was’ (Adams and Tomioka 2012: 220, ex. (4))

Farsi, Japanese, and Chinese are all *wh*-in-situ languages. As in (22), Toosavandani (2008) argues that sluicing in Farsi is derived from focus movement and subsequent deletion of the IP in a similar way as in *wh*-movement languages. On the other hand, many linguists including Kizu (1997) propose that the source of the sluicing construction in Japanese is the pseudo-cleft structure as in (23). A pseudo-cleft structure in Japanese consists of a presuppositional clause headed by the nominalizer *no*, a focused pivot, and a copula *da*. Once the presuppositional clause (CP<sub>1</sub>) in (23) undergoes deletion, we get the surface form of the Japanese sluicing construction. Note also that the copula can

be optional in the embedded sluicing clause in Japanese. Meanwhile, as shown in (24), Adams and Tomioka (2012) maintain that in Chinese the embedded sluicing clause consists of a phonologically silent pronominal subject followed by the copula *shi* and the *wh*-remnant, not involving any deletion.

In fact, previous studies on the Korean sluicing construction have adopted one of the views or a variant of them mentioned above. In Chapter 2, I will discuss all of them and point out that they are all incomplete in that they either deal with a partial amount of relevant data or make wrong predictions.

### 1.3 Goals of This Dissertation

Thus far, I have shown which linguistic phenomena I will examine in this dissertation. They are the embedded sluicing and sluicing-like constructions, the embedded confirmative/contrastive construction, and the stripping construction. They are similar in that all of them have been traditionally analyzed as involving ellipsis and each of them can be subclassified into two types depending on the presence/absence of a copula. Despite this similarity, they also have their own idiosyncratic grammatical properties. Therefore, one of the goals of this dissertation is to explore such intriguing grammatical properties of these Korean linguistic phenomena and compare them. In doing so, those properties of the the Korean constructions at issue are to be compared to those of other languages including English.

In the previous section, I have also briefly discussed the three main theories of ellipsis and we have seen how they work in sluicing and how sluicing has

been generally analyzed typologically. Needless to say, there have been various analyses of the Korean linguistic phenomena in question. However, I will show that previous analyses fail to properly capture their grammatical properties in the sense that they can only account for some of them, disregarding the fact that each of the Korean linguistic phenomena has its own subtypes, or they make wrong predictions. Then, I will claim that no ellipsis is involved in these linguistic phenomena and instead they are all subject-predicate constructions, each of which consists of a (possibly phonologically null) pronominal subject and a verbal predicate. When the remnant cannot serve as a verbal predicate on its own in the given environment, a copula is needed to form a verbal predicate and in this case the pronominal subject and the remnant are linked by means of a specificational copula. Of course, the claim that the copula is used specificationally in these constructions make some predictions, which will be discussed in detail in the following chapters. On the other hand, when the remnant can serve as a verbal predicate on its own, meaning that when it is either an AdjP or a verb, it denotes a property of the pronominal subject.

Furthermore, we will see that in order to capture a proper subject-predicate relation between and their grammatical properties, discourse/context needs to be taken into serious consideration. With this in mind, in offering formal representations, I will adopt the framework of HPSG (Head-Driven Phrase Structure Grammar), which puts great importance on context/discourse information. I will show that this enables us to describe licensing and identification conditions of the Korean linguistic phenomena at issue in a rather systematic

manner with appropriate feature structure specifications and fares better than the others appealing to strict syntactic operations.

## 1.4 Outline of the Following Chapters

Chapters 2 and 3 investigate the embedded sluicing construction and serve as preparing the ground for the subsequent chapters. In Chapter 2, I first explore grammatical properties of the construction with a copula, including similarities and differences between the merger type and the sprouting type, matching/mismatching effects, constraints on multiple remnants, and the possible occurrence of an overt pronominal subject *kukey* ‘it’. Next, I look into grammatical properties of the construction that cannot appear with a copula and show how this construction behaves differently from the one with a copula. I then discuss the previous analyses of the construction and point out that they are problematic in that they make wrong predictions or can explain only partial properties of the Korean embedded sluicing construction.

Chapter 3 provides a proposal and evidence for it and offers an analysis of the Korean embedded sluicing construction. In particular, I claim that the sluice is an ordinary clause, irrespective of whether it contains a copula or not. The *wh*-expression corresponding to the *wh*-remnant in the English sluicing construction forms a predicate with a copula, if there is a copula, and the *wh*-expression serves as a predicate on its own, if there is no copula. In other words, I argue that the *wh*-expression is not an extracted/moved constituent of an elided clause and the subject is anaphoric. Furthermore, I claim

that the copula in the embedded sluicing clause has a specificational use. To support this claim, I discuss the three types of canonical copula constructions first and show in what respects the canonical specificational copula construction and the Korean embedded sluicing construction with a copula behave the same and differently. I then provide formal representations of some representative Korean embedded sluicing construction examples within the framework of HPSG (Head-Driven Phrase Structure Grammar), which allows us to make the most of context information with features like MAX-QUD, SAL-UTT in DGB.

Chapter 4 moves on to the variants of the Korean embedded sluicing construction, namely, the embedded sluicing-like construction and the embedded confirmative/contrastive construction. I show that the anaphoric subject-predicate analysis proposed for the embedded sluicing construction in Chapter 3 can be extended to these two constructions, explaining their common grammatical properties. I also show that the different grammatical properties of these two constructions from the embedded sluicing construction follow if we understand the [WH] feature, the relation between the correlate and the remnant, and the positive/negative form of the [VERBAL +] predicate in the sluice part in these constructions. As these constructions have been discussed as part of the literature on sluicing/fragment in *wh*-in-situ languages, I then discuss what the movement + PF deletion analysis and the pseudo-cleft analysis can and cannot do. In providing formal representations, I make use of the [FOCUS +] feature and the *substitution* operation in the B(A)CKGR(OUN)D

to account for their differences from the embedded sluicing construction. Furthermore, I show that when the [VERBAL +] predicate does not have a copula in these constructions, information about the other argument(s) aside from the subject one, if any, should be retrieved from the antecedent clause.

Chapter 5 examines the stripping construction in Korean. I show that the anaphoric subject-predicate analysis can be further extended to the stripping construction, naturally capturing their similarities in diverse respects. I then show that its grammatical properties different from the embedded sluicing construction and its two variants can be explained if we understand how the [VERBAL +] predicate gets focus here. In offering formal representations, I use [MARKING] feature and introduce the lexical information for the dummy *ha-* ‘do’ verb to account for its differences from the other constructions.

Chapter 6 summarizes and concludes the dissertation by recapitulating the contributions of the previous chapters and discussing some theoretical and typological implications.

## Chapter 2

# The Embedded Sluicing Construction in Korean

### 2.1 Introduction

Sluicing is a construction introduced by a *wh*-expression, whereby all but the *wh*-expression is elided and yet it is still interpreted as a *wh*-question clause on the basis of the surrounding context. It has been known cross-linguistically that sluicing has two different subtypes, merger and sprouting (Chung et al. 1995; Chung 2013; Merchant 2001). As an illustration, consider the following English examples:

(1) Merger type of sluicing in English:

- a. John ate something, but I don't know what ~~<John ate>~~.
- b. Someone ate my pizza, but I don't know who ~~<ate pizza>~~.

(2) Sprouting type of sluicing in English:

- a. John received a present, but I don't know from whom ~~<John received a present>~~.

- b. John went to Austin, but I don't know {when/how/why/from where/with whom} <~~John went to Austin~~>.

In each of the examples in (1) and (2), a *wh*-expression, called a remnant, appears in the sluicing clause and the strike-through expression in the brackets is understood to be elided or missing. This clearly shows that the sluicing construction, regardless of its subtypes, consists of one single *wh*-expression, whose interpretation is supplied by the surrounding context as a clause. In the merger type of sluicing as in (1), the *wh*-remnant has an overt correlate like *something* or *someone* in the antecedent clause. On the other hand, in the sprouting type of sluicing as in (2), the *wh*-remnant does not have such an overt correlate in the antecedent clause but it rather corresponds to an implicit argument or adjunct in the antecedent clause.

Korean also employs the two types of sluicing, as shown in the corresponding Korean examples of (1) and (2) in (3) and (4), respectively (Kim, J.-B. 2015).

(3) Merger type of sluicing in Korean:

- a. John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 'John ate something, but I don't know what.'
- b. nwukunka-ka nay phica-lul mek-ess-nuntay, na-nun  
 someone-NOM my pizza-ACC eat-PST-but I-TOP



nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘Someone ate my pizza, but I don’t know who.’

(4) Sprouting type of sluicing in Korean:

- a. John-i senmwul-ul pat-ass-nuntey, na-nun  
 John-NOM present-ACC receive-PST-but I-TOP  
 nwukwu-hantheyse-i-nci molu-keyss-ta.  
 who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present, but I don’t know from whom.’
- b. John-i Austin-ey ka-ass-nuntey, na-nun  
 John-NOM Austin-to go-PST-but I-TOP  
 {encey/ettehkey/way/eti-eyse/nkwukwu-wa}-i-nci  
 when/how/why/where-LOC/who-with-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John went to Austin, but I don’t know {when/how/why/from  
 where/with whom}.’

These two types of Korean embedded sluicing construction are found in at-  
 tested corpus data as well, as exemplified in (5) and (6):<sup>1,2,3,4,5,6</sup>

- (5) a. kulentey kekise nwukwunka-lul manna-ass-nuntey  
 by.the.way there someone-ACC meet-PST-but  
 nwukwu-i-nci kiek-i na-ci anh-neyo.  
 who-COP-QUE memory-NOM arise-CONN not-DECL  
 ‘By the way, I met someone there, but I don’t remember who.’

<sup>1</sup><http://blog.daum.net/cake4855/6292715>

<sup>2</sup><http://ko.heroquizz.com/t/rczpndfd3w>

<sup>3</sup><http://tip.daum.net/question/38993736>

<sup>4</sup>[http://www.ezday.co.kr/dream/view\\_dream.html?q\\_sq\\_dream=7282](http://www.ezday.co.kr/dream/view_dream.html?q_sq_dream=7282)

<sup>5</sup><http://ironsea.tistory.com/archive/20090807>

<sup>6</sup><http://bulgogibros.tistory.com/1478>

- b. (Fortune teller saying to a customer)

nwukwunka-ka kot chenghonha-l ke-pnita. nwukwu-i-nci  
 someone-NOM soon propose-FUT KES.COP-DECL who-COP-QUE  
 chac-a po-seyyo.  
 find-CONN see-IMP  
 Someone will soon propose to you. Find out who.'

- c. (Talking about music)

yenghwa-na hokun CF etinka-eyse tul-e  
 movie-or or commercial somewhere-LOC listen-CONN  
 po-n kes-i-ntey, eti-ese-i-nci yeksi kiek-i  
 see-MOD thing-COP-but where-LOC-COP-QUE also memory-NOM  
 an-na-pnita.  
 not-arise-DECL  
 I listened to it somewhere from a movie or a commercial, but I also  
 don't remember where.'

- (6) a. mwutang-tul-i ssu-nun khal-hako kin kem-kathun khal-ul  
 shaman-PL-NOM use-MOD knife-and long sword-like knife-ACC  
 wuyenhi pat-ass-nuntey, nwukwu-hantheyse-i-nci kiek-un  
 by.chance receive-PST-but who-from-COP-QUE memory-TOP  
 an-na-yo.  
 not-arise-DECL  
 'I received a knife shamans use and another like a long sword, I  
 don't remember from whom.'

- b. (Eye bath lotion advertisement)

cincca nwunmwul-ul sayongha-pnita. ettehkey-i-nci-nun  
 real tear-ACC use-DECL how-COP-QUE-TOP  
 mwut-ci ma-seyo.  
 ask-CONN not-IMP  
 We use real tears. Don't ask us how!'

- c. kho-kkuth-ey ttam-i songkulsongkul mayc-hi-ess-nuntey,  
 nose-tip-LOC sweat-NOM beads form-PASS-PST-but

way-i-nci        molu-keyss-supnita.  
 why-COP-QUE not.know-FUT-DECL  
 ‘Sweat beads have been formed on my nose tip, but I don’t know  
 why.’

The examples in (3) and (5) are instances of the merger type of the Korean embedded sluicing construction and in each of these examples the *wh*-remnant has an overt correlate in the antecedent clause like *mwuwunka* ‘something’, *nwukwunka* ‘someone’, or *etinka-eyse* ‘somewhere’. On the other hand, the examples in (4) and (6) are instances of the sprouting type of the Korean embedded sluicing construction and in each of these examples the *wh*-remnant does not have an overt correlate in the antecedent clause. Nonetheless, it can be assumed to correspond to an implicit argument or adjunct in the antecedent clause. For example, in (4a) and (6a), the *wh*-remnant corresponds to an implicit source argument of the verb *pat-* ‘to receive’ in the antecedent clause. In (4b), (6b), and (6c), the *wh*-remnant in the sprouting type of the Korean embedded sluicing construction corresponds to an implicit adjunct in the antecedent clause.<sup>7</sup>

Although the English embedded sluicing construction and the Korean one behave similarly in diverse respects, they also exhibit different behavior in many respects. One clear difference between them based on the examples we have looked at so far is related to the presence of a copula. Only the *wh*-phrase serves as the remnant in the embedded sluicing clause in English,

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<sup>7</sup>Although the Chinese sluicing construction is licensed when the *wh*-remnant corresponds to an adjunct as well as an explicit argument, it is not when it corresponds to an implicit argument (Adams 2004: 4; Adams and Tomioka 2012: 223-224; Song 2016: 266).

while a copula and a complementizer are needed in addition to the *wh*-phrase in Korean.

The rest of this chapter is organized as follows. Section 2 looks into grammatical properties of the Korean embedded sluicing construction with a copula, including similarities of and differences between merger and sprouting, matching/mismatching effects, multiple remnants, the possibility of the overt subject *kukey* ‘it.NOM’ in the embedded sluicing clause.

Next, Section 3 examines the Korean embedded sluicing construction without a copula and how it differs from the one with a copula discussed in Sections 2. The main difference between them lies in whether the *wh*-expression can serve as a predicate on its own in the embedded environment. Sections 2 and 3 basically suggest that when the *wh*-expression cannot serve as a predicate on its own in the embedded environment, it needs a copula to form a verbal predicate, while when it can serve as a predicate by itself, it does not and in fact it cannot co-occur with a copula.

Section 4 looks at previous analyses of the Korean embedded sluicing construction, pointing out that none of them accounts for a wide enough range of relevant data, although each of them can capture some partial properties of the construction. In particular, we will see that the cases which cannot co-occur with a copula are problematic for all the previous analyses, suggesting that two different types need to be distinguished.

## 2.2 Grammatical Properties of the Korean Embedded Sluicing Construction with a Copula

This section explores grammatical properties of the Korean embedded sluicing construction, with particular focus on the one with a copula. In doing so, I first discuss basic properties of the construction and similarities and differences between the merger type and the sprouting. Next, I look at matching and mismatching cases, addressing the identity issue. I then look more into the cases with multiple *wh*-expressions and the cases with the overt pronominal subject *kukey* ‘it.NOM’

### 2.2.1 Basic Properties and Similarities Between Merger and Sprouting in Korean

One property that has been taken for granted in the literature on the Korean embedded sluicing construction is that both the merger and the sprouting types in Korean are only licensed by a predicate selecting for an interrogative embedded clause (Sohn 2000; Kim, L. 2011: 132; Lee, J. 2012: 360-361; Choi 2012; Ok and Kim 2012; Yoo 2013: 52; Kim, J.-B. 2013: 105-106, 2015: 262; Cho 2014: 28-29). Consider the examples in (7):

- (7) a. John-i mwuenka-lul mek-ess-nuntey, na-nun  
John-NOM something-ACC eat-PST-but I-TOP  
mwues-i-nci molu-keyss-ta.  
what-COP-QUE not.know-FUT-DECL  
‘John ate something, but I don’t know what.’

- b. \*John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-i-nci mit-nun-ta.  
 what-COP-QUE believe-PRES-DECL  
 ‘\*John ate something, but I don’t believe what.’

As contrasted between (7a) and (7b), an interrogative-selecting predicate like *molu*- ‘not know’ licenses an embedded sluicing construction, whereas a declarative-selecting predicate like *mit*- ‘believe’ does not.

However, the commonly accepted generalization is not quite right. Observe the following example:

- (8) John-i mwuenka-lul mek-ess-nuntay, ne-nun  
 John-NOM something-ACC eat-PST-but you-TOP  
 mwues-i-la-ko sayngkakha-ni?  
 what-COP-DECL-COMP think-QUE  
 ‘John ate something, and what do you think it was?’

In this example, the sluicing construction is embedded by a declarative-selecting predicate, *sayngkakha*- ‘think’ and yet it is still grammatical.

Note that as shown below, a *wh*-expression stays in an embedded clause in Korean.

- (9) a. na-nun [John-i mwues-ul mek-ess-nunci] kwungkumha-ta.  
 I-TOP John-NOM what-ACC eat-PST-QUE wonder-DECL  
 ‘I wonder what John ate.’  
 b. ne-nun [John-i mwues-ul mek-ess-ta-ko]  
 you-TOP John-NOM what-ACC eat-PST-DECL-COMP  
 sayngkakha-ni?  
 think-QUE  
 ‘What do you think that John ate?’

The difference here simply lies in the scope of the *wh*-expression. In (9a) only the embedded interpretation of the *wh*-expression is possible, whereas in (9b) only the matrix interpretation of it is available (Yoo 1997: 156-157; Pollard and Yoo 1998: 438-439). We can then say that the same is seen in the embedded sluicing construction. In (7a) the embedded *wh*-remnant only induces an embedded interrogative interpretation, while in (8) it only gives rise to a matrix interrogative interpretation. Thus, these examples show that the generalization made by the previous literature that the embedded sluicing construction in Korean is licensed only by an interrogative-selecting predicate and thus there needs to be an interrogative complementizer like *-(nu)nci* in the embedded sluicing clause is not correct.

Another intriguing property of the Korean embedded sluicing construction concerns the presence of a copula. Unlike the English embedded sluicing construction, its Korean counterpart requires a copula (Sohn 2000; Kim, L. 2011: 132; Kim, J.-B. 2013, 2015: 262; Choi 2012; Ok and Kim 2012; Yoo 2013: 28; Saito and An 2014: 7).<sup>8</sup> Thus, the absence of a copula in the Korean embedded sluicing construction examples above makes them ungrammatical.<sup>9</sup>

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<sup>8</sup>Other languages also involve a copula in their sluicing construction; however, the obligatory/optional presence of it differs in those languages. For instance, in Japanese, a copula is optional in the embedded sluicing construction (Takahashi 1994: 270-271; Kizu 1997: 234-236; Hiraiwa and Ishihara 2002: 51-52). On the other hand, in the Chinese embedded sluicing construction, the obligatoriness/optionality of a copula is determined by the complexity of the *wh*-remnant (Adams 2004: 2; Adams and Tomioka 2012: 222).

<sup>9</sup>However, in Section 3, I will discuss the Korean embedded sluicing construction examples which cannot have a copula.

- (10) a. John-i mwuenka-lul mek-ess-nuntey, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-\*(i)-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what.’
- b. John-i senmwul-ul pat-ass-nuntey, na-nun  
 John-NOM present-ACC receive-PST-but I-TOP  
 nwukwu-hantheyse-\*(i)-nci molu-keyss-ta.  
 who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present, but I don’t know from whom.’

So far, I have tacitly assumed that the constituent that consists of a *wh*-remnant, a copula, a complementizer is some kind of clause and that is why I used the term, ‘sluicing clause’, from the beginning. In this respect, one important role of the copula in the Korean embedded sluicing construction is to guarantee a clausal status of the constituent in an embedded environment. The treatment of the constituent as some type of clause can be further supported by the possibility that the Korean embedded sluicing construction can have a pronoun *kukey* ‘it.NOM’ (short form of *ku kes-i* ‘the thing-NOM’) as an overt subject of the embedded sluicing clause (Sohn 2000; Park 2001; Kim, J.-B. 2015: 262-263; Takahashi 1994: 270-271 for Japanese), as demonstrated in the constructed examples in (11) and the authentic corpus data in (12):<sup>10,11</sup>

- (11) a. John-i mwuenka-lul mek-ess-nuntey, na-nun [(kukey)  
 John-NOM something-ACC eat-PST-but I-TOP it.NOM

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<sup>10</sup><http://privatter.net/p/1181322>

<sup>11</sup><http://halfances.egloos.com/v/4974138>



mwues-i-nci] molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what (it was).’

- b. John-i senmwul-ul pat-ass-nuntey, na-nun [(kukey)  
 John-NOM present-ACC receive-PST-but I-TOP it.NOM  
 nwukwu-hantheyse-i-nci] molu-keyss-ta.  
 who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present, but I don’t know from whom (it was).’

- (12) a. ku-nun mwuenka-ka pwucokha-ta-ko nukki-ess-ciman,  
 he-TOP something-NOM lack-DECL-COMP feel-PST-but  
 kukey mwues-i-nci-nun molu-ass-ta.  
 it.NOM what-COP-QUE-TOP not.know-PST-DECL  
 ‘He felt that something was lacking, but he didn’t know what it was.’

- b. na-nun pwunmyeng i chayk-ul sa-ass-ess-nuntey kukey  
 I-TOP certainly this book-ACC buy-PST-PST-but it.NOM  
 encey-i-nci kiekna-ci anh-a.  
 when-COP-QUE recall-CONN not-DECL  
 ‘I certainly bought this book, but I don’t remember when it was.’

Since the pronominal expression *kukey* ‘it.NOM’ here functions as the subject of the embedded sluicing clause, we can then assume that the *wh*-remnant behaves like the complement of the copula in the embedded sluicing clause.

Next, in the Korean embedded sluicing construction grammatical case markers like NOM(inative), ACC(usative), and GEN(itive) cannot appear on the remnant (Kim, L. 2011: 132; Kim, J.-E. 2012: 75-77; Lee 2012: 360-361; Kim, J.-B. 2013: 111, 2015: 269; contra Jo 2005: 158-161).

- (13) a. John-i mwuenka-lul mek-ess-nuntey, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP

mwues-(\*ul)-i-nci molu-keyss-ta.  
 what-ACC-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what.’

- b. nwukunka-ka phica-lul mek-ess-nuntay, na-nun  
 someone-NOM pizza-ACC eat-PST-but I-TOP  
 {nwukwu/\*nwuka}-i-nci molu-keyss-ta.  
 who/who.NOM-COP-QUE not.know-FUT-DECL  
 ‘Someone ate pizza, but I don’t know who.’
- c. John-i nwukwunka-uy phica-lul mek-ess-nuntay, na-nun  
 John-NOM someone-GEN pizza-ACC eat-PST-but I-TOP  
 {nwukwu/\*nwukwu-uy}-i-nci molu-keyss-ta.  
 who/who-GEN-COP-QUE not.know-FUT-DECL  
 ‘(int.) John ate someone’s pizza, but I don’t know whose.’

These grammatical case markers are typically assigned by grammatical configurations or grammar rules.<sup>12</sup> For instance, the NOM and ACC in (13a) and (13b) show that the syntactic functions of the nominal expressions taking them are the subject and the object, respectively. These two grammatical cases markers are assigned by verbal elements in general while the GEN is assigned by nominal elements. The examples in (13) show that a grammatical case marker is disallowed on the remnant in the Korean embedded sluicing construction.

Next, in general, in the Korean embedded sluicing construction the correlate of a *wh*-remnant should be an indefinite expression, introducing a variable (Sohn 2000; Park 2001; Kim, J.-B. 2013: 107, 2015: 264; Adams 2004: 2, Adams and Tomioka 2012: 221 for Chinese). Consider the contrast between (14a) and (14b):

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<sup>12</sup>The hierarchical structure of grammatical and semantic case markers will be discussed in more detail in Chapter 3

- (14) a. John-i nwukwunka-lul manna-ass-nuntey, na-nun  
 John-NOM someone-ACC meet-PST-but I-TOP  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘John met someone, but I don’t know who.’
- b. \*John-i Mary-lul manna-ass-nuntey, na-nun  
 John-NOM someone-ACC meet-PST-but I-TOP  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘\*John met Mary, but I don’t know who.’

The embedded sluicing example in (14a) is grammatical because the correlate of the *wh*-remnant is an indefinite NP, *nwukwunka-lul* ‘someone-ACC’ and thus it introduces a variable. By contrast, the example in (14b) is ungrammatical because the correlate is a definite one, *Mary-lul* ‘Mary-ACC’ and thus it does not introduce a variable.<sup>13</sup>

Both types of Korean embedded sluicing construction allow multiple *wh*-remnants, as shown in the following examples (Kim, J.-S. 1997b, 2000: 272; Sohn 2000; Park, B. 2007; Yoo 2013; Saito and An 2014: 10-11; Kim, J.-B. 2015: 264; Takahashi 1994: 284-285 for Japanese):

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<sup>13</sup>However, as pointed out by David Beaver, grammatical definiteness is not the relevant property. Consider the example below:

- (i) a. John met the owner of a big house, but I don’t know who.

Here, the correlate in the antecedent clause is grammatically definite, but the sluicing construction is possible. Note, then, that the correlate is still indeterminate, although it is grammatically definite. The indeterminacy of the correlate here introduces a variable. In Chapters 4 and 5 we will see more examples in which a non-indefinite correlate introduces a variable.

- (15) a. John-i ecey mwuenka-lul nwukwunka-hanthey  
 John-NOM yesterday something-ACC someone-DAT  
 cwu-ess-nuntay, na-nun (kukey) mwues-ul nwukwu-hanthey-i-nci  
 give-PST-but I-TOP it.NOM what-ACC who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John gave something to someone yesterday, but I don’t know what  
 to whom.’
- b. John-i senmwul-ul pat-ass-nuntay na-nun (kukey)  
 John-NOM present-ACC receive-PST-but I-TOP it.NOM  
 nwukwu-hantheyse way-i-nci molu-keyss-ta.  
 who-from why-COP-QUE not.know-FUT-DECL  
 ‘John received a present, but I don’t know from whom and why.’
- c. John-i cha-lul kochi-ess-nuntay, na-nun (kukey) encey  
 John-NOM car-ACC fix-PST-but I-TOP it.NOM when  
 ettehkey-i-nci molu-keyss-ta.  
 how-COP-QUE not.know-FUT-DECL  
 ‘John got his car fixed, but I don’t know when and how.’

In the merger example in (15a) the two *wh*-remnants have their overt correlates in the antecedent clause. In the sprouting example in (15b) the two *wh*-remnants do not have their overt correlates and one corresponds to an implicit argument while the other corresponds to an adjunct. Meanwhile, in the sprouting example in (15c) the two *wh*-remnants lack overt correlates and each of them corresponds to a different adjunct. Notice also here that even in multiple sluicing the pronominal subject *kukey* ‘it.NOM’ can optionally appear in the embedded sluicing clause.

We have thus far seen similar properties of the merger type and the sprouting type of the Korean embedded sluicing construction and they can be summarized as in the following table:

Table 2.1: Similar properties of merger and sprouting in the Korean embedded sluicing construction

Property	Merger	Sprouting
1. Selected by an interrogative-selecting predicate	Not necessarily	
2. Copula	Required	
3. Overt subject <i>kukey</i> ‘it.NOM’	Possible	
4. Grammatical case marker	No	
5. Indefinite correlate	Overt	Covert
6. Multiple remnants	Possible	

As shown above, the two subtypes of Korean embedded sluicing construction, merger and sprouting, have a few grammatical properties in common, including the possibility to occur in an interrogative or declarative embedded environment, the obligatory presence of a copula, the optional occurrence of a pronominal subject *kukey* ‘it.NOM’, the obligatory absence of a grammatical case marker on a single remnant, and the possibility to have multiple remnants. The two types are also the same in that the correlate should be an indefinite entity but they differ in that the merger type involves an overt indefinite correlate like *someone* or *something* in the antecedent clause, while the latter involves a covert one like an implicit source argument of the verb *receive* or an implicit adjunct in the antecedent clause.<sup>14</sup>

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<sup>14</sup>We will see the indefiniteness of a covert correlate for sprouting in more detail in Chapter 3.

### 2.2.2 Differences Between Merger and Sprouting in Korean

By definition, the difference between merger and sprouting in sluicing concerns the presence/absence of the overt correlate of a *wh*-remnant. However, they show further differences with respect to some grammatical properties and in this section I discuss such different grammatical properties between the two subtypes.

One notable difference between the two types of Korean embedded sluicing construction is observed in terms of the possibility to drop a semantic case marker of the *wh*-remnant. As shown in (16), the merger type, but not the sprouting type, allows for a semantic case marker drop (Kim, S. 2010: 153-154; Park, M.-K. 2001: 722-723, 2009a, 2009b, 2014b; Kim, J.-B. 2015: 266-267; Vlachos 2011: 276-277 for Greek).

- (16) a. John-i      nwukwnka-hantheyse senmwul-ul pat-ass-nuntay,  
John-NOM someone-from                      present-ACC receive-PST-but  
na-nun nwukwu-(hantheyse)-i-nci molu-keyss-ta.  
I-TOP who-from-COP-QUE                      not.know-FUT-DECL  
'John received a present from someone, but I don't know (from)  
whom.'
- b. John-i      senmwul-ul pat-ass-nuntay, na-nun  
John-NOM present-ACC receive-PST-but I-TOP  
nwukwu-\*(hantheyse)-i-nci molu-keyss-ta.  
who-from-COP-QUE                      not.know-FUT-DECL  
'John received a present, but I don't know \*(from) whom.'

The merger example in (16a) is acceptable with or without the semantic case marker *-hantheyse* 'from' on the *wh*-remnant; however, the sprouting example in (16b) is only acceptable with the semantic case marker retained.

Another difference between the two types of Korean embedded sluicing construction is that the merger type permits island violation repairs, while the sprouting type does not (Sohn 2000; Park 2001; Kim, S. 2010: 154-157; Kim, J.-B. 2013: 108, 2015: 265-267; Park, S. 2015: 118-120). Observe the examples in (17) – (18):

- (17) a.    na-nun ecey            nukwunka-hantheyse senmwul-ul pat-un  
              I-TOP yesterday someone-from            present-ACC receive-REL  
              chinkwu-ul manna-ass-nuntey, nwukwu-(hantheyse)-i-nci  
              person-ACC meet-PST-but            who-from-COP-QUE  
              kiekna-ci            anh-nun-ta.  
              recollect-CONN not-PRES-DECL  
              ‘Yesterday I met a friend who received a present from someone, but  
              I don’t remember (from) whom.’
- b.    \*na-nun ecey            nukwunka-hantheyse senmwul-ul pat-un  
              I-TOP yesterday someone-from            present-ACC receive-REL  
              chinkwu-ul manna-ass-nuntey, nwukwu-hantheyse na-nun  
              person-ACC meet-PST-but            who-from            I-TOP  
              ecey            senmwul-ul pat-un            chinkwu-lul manna-ass-nunci  
              yesterday present-ACC receive-REL friend-ACC meet-PST-QUE  
              kiekna-ci            anh-nun-ta.  
              recollect-CONN not-PRES-DECL  
              ‘\*Yesterday I met a friend who received a present from someone,  
              but I don’t remember from whom yesterday I met a friend who  
              received a present.’
- (18) a.    \*na-nun ecey            senmwul-ul pat-un            chinkwu-lul  
              I-TOP yesterday present-ACC receive-REL person-ACC  
              manna-ass-nuntey, nwukwu-hantheyse-i-nci kiekna-ci  
              meet-PST-but            who-from-COP-QUE            recollect-CONN  
              anh-nun-ta.  
              not-PRES-DECL  
              ‘Yesterday I met a friend who received a present, but I don’t re-  
              member from whom.’

- b. \*na-nun ecey        senmwul-ul pat-un        chinkwu-lul  
 I-TOP    yesterday present-ACC receive-REL person-ACC  
 manna-ass-nuntey, nwukwu-hantheyse na-nun ecey  
 meet-PST-but        who-from                I-TOP    yesterday  
 senmwul-ul pat-un        chinkwu-lul manna-ass-nunci  
 present-ACC receive-REL friend-ACC meet-PST-QUE  
 kiekna-ci        anh-nun-ta.  
 recollect-CONN not-PRES-DECL  
 ‘\*Yesterday I met a friend who received a present, but I don’t  
 remember from whom yesterday I met a friend who received a  
 present.’

Note first that *wh*-movement from a relative clause is not allowed as it is treated as an island and thus such movement violates an island constraint. In the merger type example in (17a), the correlate of the *wh*-remnant is within a relative clause and the example is grammatical. On the other hand, in the sprouting type example in (18a), the covert correlate of the *wh*-remnant is also assumed to be within a relative clause but the example is ungrammatical. The examples in (17b) and (18b) are the non-elided, putative source sentences of (17a) and (18a), respectively, with the *wh*-phrase moved to the initial position in the embedded clause from inside the relative clause and both of them are ungrammatical as they violate an island constraint. The examples in (16) and (17) then show that only the merger type, not the sprouting type, repairs island violations, although their source examples are all ungrammatical.

So far, we have looked at how the merger type and the sprouting type in the Korean embedded sluicing construction differ and their different properties are summarized in the table below:



Table 2.2: Different properties of merger and sprouting in the Korean embedded sluicing construction

Property	Merger	Sprouting
1. Indefinite correlate	Overt	Covert
2. Semantic case marker	Optional	Obligatory
3. Island violations	Possible	Impossible (?)

A good analysis should explain why these differences arise between the two types in addition to capturing the similarities between them. In Chapter 3, I will discuss how to capture the difference between the overt correlate and the covert one within the framework of HPSG and why the difference comes about in terms of the optionality of a semantic case marker on a single remnant, and I will also revisit the island insensitivity issue in sluicing.

### 2.2.3 Matches and Mismatches

As mentioned in Chapter 1, in dealing with ellipsis phenomena, the identity issue is important. In this regard, in this section, I discuss cases where the information of the embedded sluicing clause after the retrieval of the information of the presumptive elided/missing part and that of its antecedent clause match and do not match.

First, cross-linguistically unlike VP ellipsis sluicing does not tolerate voice mismatches and Korean is no exception to this (Kim, J.-B. 2015: 274; Adams and Tomioka 2012: 222 for Chinese; Merchant 2001, 2013 and Chung 2006 in general). As shown below, the Korean embedded sluicing construction

does not permit voice mismatches:

- (19) \*nwukwunka-ka ku pemin-ul cap-ass-nuntey, na-nun  
 someone-NOM the criminal-ACC catch-PST-but I-TOP  
 nwukwu-eykey-i-nci molu-keyss-ta.  
 who-DAT-COP-QUE not.know-FUT-DECL  
 ‘\*Someone caught the criminal, but I don’t know by whom.’

Here, the *wh*-remnant *nwukwu-eykey* ‘who-DAT’ in the embedded sluicing clause serves as the non-subject agent in the passive voice, whereas its indefinite correlate in the antecedent clause functions as the subject in the active voice. This voice mismatch renders the example ungrammatical. Given that pairs of active and passive sentences are generally truth-conditionally or semantically equivalent, examples like (19) show that semantic identity is not enough and some syntactic identity is needed to license the Korean embedded sluicing construction.

In addition, case/argument alternations are not possible in the Korean embedded sluicing construction (Chung et al. 1995; Merchant 2013; Chung 2013). As demonstrated in (20), predicates like *philyoha-* ‘need/necessary’ can take either a nominative or a dative subject and as in (21), predicates like *chaywu-* ‘fill’ allow argument alternations.

- (20) John-i/hanthey ton-i philyoha-ta.  
 John-NOM/DAT money-NOM necessary-DECL  
 ‘John needs money.’
- (21) a. John-i pyeng-ey mwul-ul chaywu-ess-ta.  
 John-NOM bottle-LOC water-ACC fill-PST-DECL  
 ‘John filled water in the bottle.’

- b. John-i mwul-lo peyng-ul chaywu-ess-ta.  
 John-NOM water-with bottle-ACC fill-PST-DECL  
 ‘John filled the bottle with water.’

However, in the Korean embedded sluicing construction the form of the case and argument alternation must match between the correlate and the remnant as in (22):

- (22) a. \*nwukwunka-ka ton-i philyoha-ntey, na-nun  
 someone-NOM money-NOM necessary-but I-TOP  
 nwukwu-hanthey-i-nci kiekna-ci anh-nun-ta.  
 who-DAT-COP-QUE recall-CONN not-PRES-DECL  
 ‘\*Someone needs money, but I don’t remember whom.’
- b. \*John-i pyeng-ey mwuenka-lul chaywu-ess-nuntey, na-nun  
 John-NOM bottle-LOC something-ACC fill-PST-but I-TOP  
 mwues-ulo-i-nci molu-keyss-ta.  
 what-with-COP-QUE not.know-FUT-DECL  
 ‘\*John filled something into the bottle, but I don’t know with what.’

The examples indicate that the argument structure of the predicate in the presumed elided/missing part in the embedded sluicing clause must be identical to that of the corresponding predicate in the antecedent clause. Therefore, this further supports the idea that there is some syntactic identity between the information of the embedded sluicing clause after the retrieval of the presumed elided/missing part and that of the antecedent clause.

However, some mismatches are also possible and sometimes obligatory in the Korean embedded sluicing construction. For example, notice first that the Korean embedded sluicing construction examples we have looked at so far all involve the bare copula form with no specific tense morpheme, *i-* ‘be’. This

bare form is used to denote the present in canonical copula constructions as demonstrated in (23):<sup>15</sup>

- (23) a. John-un haksayng-i-ta. (Predicational)  
 John-TOP student-COP-DECL  
 ‘John is a student.’
- b. John-i Bill-i-ta. (Equative)  
 John-NOM Bill-COP-DECL  
 ‘John is Bill’.
- c. ku kyengki-uy sungca-nun John-i-ta. (Specificational)  
 the game-GEN winner-TOP John-COP-DECL  
 ‘The winner of the game is John.’

As can be seen in the predicational, equative, and specificational copula constructions in (23), the copula form with no specific tense morpheme, *i-* ‘be’, denotes the present time.

With that in mind, now consider the example below:

- (24) John-i ecey nwukwunka-lul manna-ass-nuntay, na-nun  
 John-NOM yesterday someone-ACC meet-PST-but I-TOP  
 nwukwu-i-(ess)-nunci molu-keyss-ta.  
 who-COP-PST-QUE not.know-FUT-DECL  
 ‘John met someone yesterday, but I don’t know who.’

The predicate in the antecedent clause here has past tense information, but the copula in the embedded sluicing clause can have a bare form or a past tense form (Sohn 2000; Kim, J.-B. 2013: 112; Kizu 1997: 234-235 for Japanese).

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<sup>15</sup>Three types of copula constructions in Korean are based on Kim (2016) and they will be discussed in more detail in Chapter 3.

This means that there can be mismatches between the tense of the bare form copula in the embedded sluicing clause and that of the predicate in the antecedent clause.

Another kind of mismatch between the embedded sluicing clause and its antecedent clause concerns negation information. As illustrated in (25), even when the antecedent clause involves a negative predicate, the copula in the embedded sluicing clause cannot be in its negative form.

- (25) a.   nwukwunka-ka swuep-ey o-ci                   anh-ass-nuntay, na-nun  
           someone-NOM class-to come-CONN not-PST-but    I-TOP  
           nwukwu-i-nci molu-keyss-ta.  
           who-COP-QUE not.know-FUT-DECL  
           ‘Someone didn’t come to class, but I don’t know who.’
- b.   \*nwukwunka-ka swuep-ey o-ci                   anh-ass-nuntay, na-nun  
           someone-NOM class-to come-CONN not-PST-but    I-TOP  
           nwuka    ani-nci                   molu-keyss-ta.  
           who.NOM NEG.COP-QUE not.know-FUT-DECL  
           ‘(int.) Someone didn’t come to class, but I don’t know who.’

In each of these examples in (25), the antecedent clause contains a negative verb, *o-ci an-ass-* ‘did not come’. Although the verb in the antecedent clause does not agree with the copula in the embedded sluicing clause in terms of polarity value in (25a), it is grammatical. However, although they agree with respect to polarity value in (25b), it is ungrammatical. Therefore, these examples show that the copula in the embedded sluicing clause cannot be negated, even if its antecedent clause is.

There are other Korean embedded sluicing construction examples, where the retrieval of the presumptive elided/missing material in the embedded sluicing clause based on syntactic identity with its antecedent clause results in ungrammaticality. Consider the following dialogue exchange (Kim, J.-B. 2015: 273-274):<sup>16</sup>

- (26) A:   nwukwunka-ka na-lul   ttayli-ess-ta.  
           someone-NOM me-ACC hit-PST-DECL  
           ‘Someone hit me.’
- B:   nwukwu-i-nci molu-keyss-ta.  
           who-COP-QUE not.know-FUT-DECL  
           ‘I don’t know who (hit you)  $\neq$  who (hit me).’

As indicated here, if the presumptive elided/missing part were syntactically identical to the corresponding part in the antecedent clause, a wrong interpretation would arise. This then indicates that rather than syntactic identity discourse/context plays an important role in licensing a Korean embedded sluicing construction with a desired interpretation.

So far, we have seen some matching and mismatching facts in the Korean embedded sluicing construction and they are summed up in Table 2.3.

In this section, I have investigated what kinds of information have to be matched and can be/have to be mismatched between the information of the embedded sluicing clause after the retrieval of the presumptive elided/missing material and that of the antecedent clause in the Korean embedded sluicing

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<sup>16</sup>See Sag and Nykiel (2011) for the same point in the English counterpart.

Table 2.3: Matches and mismatches in the Korean embedded sluicing construction

Match/mismatch	
1. Voice mismatches	Impossible
2. Case alternations	Impossible
3. Argument alternations	Impossible
4. Tense mismatches	Possible with a bare form copula
5. Tense matches	Possible with a tense marked copula
6. Polarity mismatches	Only a positive copula
7. Deictic changes	Yes

construction. On the one hand, we have seen that like other languages, Korean disallows voice mismatches and argument/case alternations between the embedded sluicing clause and the antecedent clause. These facts then suggest that semantic identity alone is not enough to license the Korean embedded sluicing construction and some syntactic identity is required to do so. On the other hand, we have also noted that there can be mismatches between the tense information of the bare form copula and that of the antecedent predicate. Furthermore, we have observed that only a positive copula is used regardless of the polarity value of the antecedent predicate, which can lead to a polarity mismatch between the positive copula and the negative antecedent predicate, and that the retrieval of a deictic expression like *na* ‘I’ in the embedded sluicing clause based on syntactic (or pure form) identity gives rise to a wrong interpretation. These facts then mean that instead of syntactic identity semantics/discourse is crucial to license the Korean embedded sluicing construction. Any analysis of the Korean embedded sluicing construction should

account for all these match and mismatch cases, which cannot be explained by either of syntactic or semantic identity alone.

#### 2.2.4 More on Multiple Remnants in the Korean Embedded Sluicing Construction

As we have seen above, one of the intriguing properties of the Korean embedded sluicing construction is that it allows for multiple *wh*-remnants and numerous previous studies on the Korean embedded sluicing construction have noted this property (Kim, J.-S. 1997b, 2000: 275-276; Sohn 2000; Park 2001; Jo 2005: 147-148; Lee 2012; Ok and Kim 2012; Yoo 2013; Kim, J.-B. 2013: 112, 2015; Saito and An 2014; Park, S. 2015). At this point, recall first that when the merger type of the Korean embedded sluicing construction involves a single *wh*-remnant, its semantic case marker can be optional as in (27a). Interestingly, when the embedded sluicing construction involves multiple *wh*-remnants, the semantic case marker of the last remnant is not optional any more, even if it has an overt correlate in the antecedent clause as in (27b) and (27c).

- (27) a. John-i ecey panci-lul nwukwunka-hanthey  
 John-NOM yesterday ring-ACC someone-DAT  
 cwu-ess-nuntey, na-nun nwukwu-(hanthey)-i-nci  
 give-PST-but I-TOP who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John gave a ring to someone, but I don’t know to whom.’



- b. John-i ecey mwuenka-lul nwukwunka-hanthey  
 John-NOM yesterday something-ACC someone-DAT  
 cwu-ess-nuntey, na-nun mwues-ul nwukwu-\*(hanthey)-i-nci  
 give-PST-but I-TOP what-ACC who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘(int.) John gave something to someone yesterday, but I don’t know  
 what (John gave) to whom (yesterday).’
- c. nwukwunka-ka ecey nwukwunka-hanthey panci-lul  
 someone-NOM yesterday someone-DAT ring-ACC  
 cwu-ess-nuntey, na-nun nwuka nwukwu-\*(hanthey)-i-nci  
 give-PST-but I-TOP who.NOM who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘(int.) Someone gave a ring to someone yesterday, but I don’t know  
 who (gave a ring) to whom (yesterday).’

We have also observed that when the embedded sluicing construction involves a single *wh*-remnant, its grammatical case marker cannot appear as in (28a) and (28b). However, when the embedded sluicing construction involves multiple *wh*-remnants, the grammatical case marker of the last remnant should appear as in (28c).

- (28) a. yeki-eyse nwukwunka-ka John-ul ttayli-ess-nuntey, na-nun  
 here-LOC someone-NOM John-ACC hit-PST-but I-TOP  
 {nwukwu/\*nwuka}-i-nci kiekna-ci anh-nun-ta.  
 who/who.NOM-COP-QUE recall-CONN not-PRES-DECL  
 ‘Someone hit John here, but I don’t remember who.’
- b. yeki-eyse John-i nwukwunka-lul ttayli-ess-nuntey, na-nun  
 here-LOC John-NOM someone-ACC hit-PST-but I-TOP  
 nwukwu-(\*lul)-i-nci kiekna-ci anh-nun-ta.  
 who-ACC-COP-QUE recall-CONN not-PRES-DECL  
 ‘John hit someone here, but I don’t remember whom.’

- c. yeki-eyse nwukwunka-ka nwukwunka-lul ttayli-ess-nuntay,  
 here-LOC someone-NOM someone-ACC hit-PST-but  
 na-nun nwuka nwukwu-\*(lul)-i-nci kiekna-ci  
 I-TOP who.NOM who-ACC-COP-QUE recall-CONN  
 anh-nun-ta.  
 not-PRES-DECL  
 (int.) ‘Someone hit someone here, but I don’t remember who (hit)  
 whom.’

It is not just the last remnant that needs to retain its grammatical or semantic case marker in the Korean embedded multiple sluicing construction. In fact, all the remnants must retain their grammatical and semantic case markers.

- (29) a. John-i ecey mwuenka-lul nwukwunka-hanthey  
 John-NOM yesterday something-ACC someone-DAT  
 cwu-ess-nuntay, na-nun mwues-\*(ul) nwukwu-\*(hanthey)-i-nci  
 give-PST-but I-TOP what-ACC who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘(int.) John gave something to someone yesterday, but I don’t know  
 what (John gave) to whom (yesterday).’
- b. yeki-eyse nwukwunka-ka nwukwunka-lul ttayli-ess-nuntay,  
 here-LOC someone-NOM someone-ACC hit-PST-but  
 na-nun {nwuka/\*nwukwu} {nwukwu-\*(lul)}-i-nci kiekna-ci  
 I-TOP who.NOM/who who-ACC-COP-QUE recall-CONN  
 anh-nun-ta.  
 not-PRES-DECL  
 ‘(int.) Someone hit someone here, but I don’t remember who (hit)  
 whom.’

The naturally occurring data in (30) further strengthen the idea. The

semantic case marker on the first *wh*-remnant in (30a) and the one on the second *wh*-remnant in (30b) are obligatory.<sup>17,18</sup>

- (30) a.    ne-ka        banyak talun        salam-ulo pakkwul swu iss-ta-myen,  
               you-NOM possibly different person-to change    can exist-DECL-if  
               nwukwu-\*(lo) way-i-nci        seswulha-sio.  
               who-to                why-COP-QUE explain-IMP  
               ‘If you can possibly change to a different person, please explain to  
               whom and why.’
- b.    (Context: In a blog post that introduces a book about traveling)
- ca, han pen ttena-po-cako! encey, eti-\*(lo)-i-nci-nun  
               well one time leave-see-SUGG when    where-to-COP-QUE-TOP  
               mwut-ci malko.  
               ask-CONN not  
               Well, let’s leave! Don’t ask when and for where.’

The examples in (27) – (30) then suggest that embedded sluicing construction cases with a single *wh*-remnant and those with multiple *wh*-remnants behave differently in terms of case marker drop possibilities and that in the latter all the remnants must keep their grammatical and semantic case markers.

Notice then that all the embedded multiple embedded sluicing construction examples we have looked at so far show that they have the desired interpretations only when all the remnants retain their grammatical and semantic case markers. Now the question is why this is the case. Interestingly, when the grammatical or semantic case marker on the second *wh*-remnant is not present in each of the examples, they either become ungrammatical or

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<sup>17</sup><http://m.blog.naver.com/wlals1214/150147956717>

<sup>18</sup><http://khism.tistory.com/104>

have a different interpretation and the presence of the copula plays a crucial role here. Consider the examples in (31):

- (31) a.   nwukwunka-ka nwukwunka-lopwuthe senmwul-ul  
           someone-NOM someone-from           present-ACC  
           pat-ass-nuntey, nwuka   nwukwu-(lopwuthe)-i-nci  
           receive-PST-but who.NOM who-from-COP-QUE  
           molu-keyss-ta.  
           not.know-FUT-DECL  
           with *-lopwuthe* ‘from’: ‘Someone received a present from someone,  
           but I don’t know who (received a present) from whom.’  
           without *-lopwuthe* ‘from’: ‘Someone received a present from some-  
           one, but I don’t know who is who.’
- b.   nwukwunka-ka Mary-lopwuthe mwuenka-lul   pat-ass-nuntey,  
           someone-NOM Mary-from       something-ACC receive-PST-but  
           nwuka   mwues-(ul)-i-nci   molu-keyss-ta.  
           who.NOM what-ACC-COP-QUE not.know-FUT-DECL  
           with *-ul* ‘ACC’: ‘Someone received something from Mary, but I  
           don’t know who (received) what (from Mary).’  
           without *-ul* ‘ACC’: ‘Someone received something from Mary, but I  
           don’t know who is what.’

The second clauses in (31a) and (31b) without the semantic case marker denoting a source and the accusative case marker respectively on the second remnant can be acceptable with an interpretation where the copula links the two *wh*-phrases, namely, “I don’t know who is who” and “I don’t know who is what”, regardless of the antecedent clause. These possible interpretations have nothing to do with the multiple sluicing construction and they are available just as a copula construction, where the two *wh*-phrases are linked by a copula and the first one serves as the subject and the second one serves as the complement.

Next, observe the examples in (32):

- (32) a.    *nwukwunka-ka nwukwunka-lopwuthe senmwul-ul*  
           someone-NOM someone-from                    present-ACC  
           *pat-ass-nuntey, {nwuku/nwuka} nwukwu-lopwuthe-i-nci*  
           receive-PST-but who/who.NOM    who-from-COP-QUE  
           *molu-keyss-ta.*  
           not.know-FUT-DECL  
           with *nwuka* ‘who-NOM’: ‘Someone received a present from someone,  
           but I don’t know who (received a present) from whom.’  
           with *nwukwu* ‘who’: ‘Someone received a present from someone, but  
           I don’t know from [whom and whom] (someone received a present)
- b.    *nwukwunka-ka Mary-lopwuthe mwuenka-lul pat-ass-nuntey,*  
           someone-NOM Mary-from            something-ACC receive-PST-but  
           *{\*nwukwu/nwuka} mwues-ul-i-nci molu-keyss-ta.*  
           who/who.NOM            what-ACC-COP-QUE not.know-FUT-DECL  
           ‘Someone received something from Mary, but I don’t know who  
           (received) what (from Mary).’
- c.    *John-i nwukwunka-lopwuthe mwuenka-lul pat-ass-nuntey,*  
           John-NOM someone-from            something-ACC receive-PST-but  
           *nwukwu-\*(lopwuthe) mwues-ul-i-nci molu-keyss-ta.*  
           who-from            what-ACC-COP-QUE not.know-FUT-DECL  
           ‘John received something from someone, but I don’t know what  
           (John received) from whom.’

Here, the intended multiple *wh*-sluicing interpretations are available only when all the *wh*-remnants retain their grammatical and semantic case marker. However, in (32a) when the first *wh*-remnant does not have its grammatical case marker, it is interpreted as if the semantic case marker on the second *wh*-remnant is shared and thus the first and the second *wh*-phrases are conjoined together in a single constituent. This then would give rise to the meaning, “... I don’t know from [whom and whom] (someone received a present)” and

this interpretation has nothing to do with the multiple sluicing construction. This also explains why the examples in (32b) and (32c) are ruled out without the nominative case marker and the source-denoting semantic case marker respectively on the first *wh*-remnant. In other words, the possible interpretation for each of them may be, “... I don’t know [who and what]”, where [who and what] as a whole only refers back to the object of *receive* in the antecedent. The combination of a *wh*-phrase with [+animate] and another with [-animate] leads to a semantic anomaly and it is not relevant to multiple sluicing. Furthermore, these examples are not just semantically odd, but are actually ungrammatical, because of the presence of an accusative case marker in the pre-copula position. This kind of case marker sharing is not just observed in the embedded multiple sluicing construction but can also be seen in fragment answers and even simple sentences like the following (Park, B. 2013; Yoon and Kitagawa 2013; Ku and Cho 2014; Park and Shin 2014; Park and Kim 2015):

- (33) a. A: John-i nwukwu-lopwuthe senmwul-ul pat-ass-ni? B:  
 John-NOM who-from present-ACC receive-PST-QUE  
 Mary, Sue-lopwuthe.  
 Mary Sue-from  
 ‘A: Who did John receive presents from? B: From Mary and Sue.’
- b. John, Mary-ka Sue-lopwuthe senmwul-ul pat-ass-ta.  
 John Mary-NOM Sue-from present-ACC receive-PST-DECL  
 ‘John and Mary received a present from Sue.’

The only way to get the multiple sluicing interpretation is to keep all the grammatical and semantic case markers on all the *wh*-remnants.

## 2.2.5 Sluices with the Subject Pronoun *Kukey* ‘it.NOM’

We have seen above that the Korean embedded sluicing construction can optionally have *kukey* ‘it.NOM’ as a subject of the embedded sluicing clause. Note first that in canonical sentences, *kukes* ‘it’/*kukey* ‘it.NOM’ cannot refer to an animate entity (Kim, S. 2012: 223-224).<sup>19</sup>

- (34) a. \*John-i nwukwunka-lul manna-ass-nuntay, kukey Kim  
 John-NOM someone-ACC meet-PST-but it.NOM Kim  
 kyoswu-nim-ul al-ko iss-ess-ta.  
 professor-HON-ACC know-CONN be-PST-DECL  
 ‘\*John met someone and it knew Prof. Kim.’
- b. achim-ey phica-lul mek-ess-nuntay, kukey acwu  
 morning-in pizza-ACC eat-PST-but it.NOM very  
 masiss-ess-ta.  
 delicious-PST-DECL  
 ‘I ate pizza in the morning and it was very delicious.’
- c. John-i yecachinkwu-lang heyeci-ess-nuntay kukey  
 John-NOM girlfriend-with break.up-PST-but it.NOM  
 mit-e-ci-ci anh-nun-ta.  
 believe-CONN-PASS-CONN not-PRES-DECL  
 ‘John broke up with his girlfriend, but it is unbelievable.’

However, as can be seen in (35), *kukey* ‘it.NOM’ can appear as a subject of the embedded sluicing clause when the overt correlate is either an animate or an inanimate entity in the merger type and even when there is no overt correlate in the sprouting type (Sohn 2000; Park 2001; Kim, J.-B. 2015; Nakao 2003: 201-202, Nakao and Yoshida 2005 for Japanese):

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<sup>19</sup> *Kukey* ‘it.NOM’ is a short form for *kukes-i* ‘it-NOM’.

- (35) a. John-i mwuenka-lul mek-ess-nuntay, na-nun (kukey)  
 John-NOM something-ACC eat-PST-but I-TOP it.NOM  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what (it was).’
- b. John-i nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
 John-NOM someone-ACC meet-PST-but I-TOP it.NOM  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘John met someone, but I don’t know who (it was).’
- c. John-i senmwul-ul pat-ass-nuntay, na-nun (kukey)  
 John-NOM present-ACC receive-PST-but I-TOP it.NOM  
 nwukwu-hantheyse-i-nci molu-keyss-ta.  
 who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present, but I don’t know from whom (it was).’
- d. John-i Austin-ey ka-ass-nuntay, na-nun (kukey)  
 John-NOM Austin-to go-PST-but I-TOP it.NOM  
 {encey/ettehkey/way/eti-eyse/nkwukwu-wa}-i-nci  
 when/how/why/where-LOC/who-with-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John went to Austin, but I don’t know {when/how/why/from  
 where/with whom} (it was).’

In order to account for the property of the pronominal subject *kukey* ‘it.NOM’ in the embedded sluicing clause, three analyses have been proposed: 1) an expletive analysis; 2) a *pro* analysis (Sohn 2000; Park 2001); and 3) an inverted predicate analysis (Kim, S. 2012). The expletive analysis runs into problems when you consider the fact that *kukey* can be replaced with a personal pronominal expression or a common noun phrase as shown in (36)



(Kim, J.-B. 2015: 263):<sup>20</sup>

- (36)      nwukwnka sayngkakna-nuntey {kukey/ku-ka/ku    salam-i}  
             someone    come.to.mind-but    it.NOM/he-NOM/the person-NOM  
             nwukwu-i-nci    molu-keyss-ta.  
             who-COP-QUE not.know-FUT-DECL  
             ‘Someone comes to mind now, but I don’t know who it/he/the  
             person is.’

This substitution possibility is also problematic for the inverted predicate analysis. According to the inverted predicate analysis by Kim S. (2012), *kukes* ‘it’ is a predicate of a small clause underlyingly but it moves to the subject position in the sluicing clause by means of predicate inversion (Moro 1997; den Dikken 2006a, 2008). Kim S. (2012) further argues that *kukes* ‘it’ may have a referential function and the referential predicate function comes from the specificational cleft structure introduced by *kes*. As was noted, in some cases of the embedded Korean sluicing construction, we can have the presuppositional part of the pseudo-cleft structure as the subject of the sluicing clause. However, not only are there other cases where we cannot have the presuppositional part of the pseudo-cleft structure as the subject of the sluicing clause in place of *kukey* ‘it.NOM’, but as in (36) *kukey* ‘it.NOM’ can also be replaced with a personal pronoun like *ku-ka* ‘he-NOM’ or a common noun phrase *ku salam-i* ‘the person-NOM’, both of which are fully referential expressions. Therefore, as pointed out by Kim (2015: 263), it is hard to assume that *kukey* ‘it.NOM’ is a predicative expression.

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<sup>20</sup><https://twitter.com/bk1776/status/67654456027783168>

Instead, as discussed in Sohn (2000) and Park (2001), it is more tenable to assume that *kukey* ‘it.NOM’ is a pronominal expression with a referential property whose referent is contextually determined (Kim, J.-B. 2015: 263). For instance, *kukey* ‘it.NOM’ in (36) can be replaced with various different noun phrases to produce the sentences in (37).

- (37) a. ... ku-ka    nwukwu-i-nci    molu-keyss-ta.  
           he-NOM who-COP-QUE not.know-FUT-DECL  
           ‘I don’t know who he is.’
- b. ... {ku salam-i/ku            nwukwunka-ka} nwukwu-i-nci  
           the person-NOM/the someone-NOM    who-COP-QUE  
           molu-keyss-ta.  
           not.know-FUT-DECL  
           ‘I don’t know who {the person/that someone} is.’
- c. ... sayngkakna-nun    {key/salam-i}            nwukwu-i-nci  
           ... come.to.mind-MOD KES.NOM/person-NOM who-COP-QUE  
           molu-keyss-ta.  
           not.know-FUT-DECL  
           ‘I don’t know who the person that comes to mind is.’

As can be seen from (37), the pronominal subject *kukey* ‘it.NOM’ can be replaced by a personal pronoun like *ku-ka* ‘he-NOM’, a common noun phrase like *ku salam-i* ‘the person’, an expression consisting of a definite determiner + the indefinite expression in the antecedent clause like *ku nwukwunka-ka* ‘that someone’, or the presuppositional clause in the pseudo-cleft structure introduced by either a semantically incomplete noun *kes* or a common noun. What is obvious here is that it is a referential pronoun whose referential property is determined based on context. The real question then is what the role of

the context is here to provide a referential property for the pronoun *kukey* ‘it.NOM’. As will be discussed in more detail in Chapter 3, *kukey* ‘it.NOM’ in the embedded sluicing construction refers back to a variable (or a bundle of variables for multiple remnants) provided by the correlate(s) in the antecedent clause.

## 2.3 Sluices Without a Copula

Previous studies on the Korean embedded sluicing construction have claimed that the copula is obligatory (Sohn 2000; Kim, L. 2011: 132; Choi 2012; Ok and Kim 2012; Yoo 2013: 28; Kim, J.-B. 2013, 2015: 262; Saito and An 2014: 7). We have also seen that the merger type of the Korean embedded sluicing construction does not exhibit island effects. Now consider the following Korean embedded sluicing construction example, where the embedded sluicing clause cannot have a copula (Ok and Kim 2012; Park, M.-K. 2012b: 223-225; Park 2014a; Park and Li 2014: 428).

- (38)      John-i      cwumal-ey yeppu-n      yeca-lul  
             John-NOM weekend-on pretty-MOD girl-ACC  
             manna-ass-ta-ko      tul-ess-nuntey, elmana yeppu-(\*i)-nci  
             meet-PST-DECL-COMP hear-PST-but how pretty-COP-QUE  
             kwungkumha-ta.  
             wonder-DECL  
             ‘I heard that John met a pretty woman on the weekend and I wonder how pretty.’

In this embedded sluicing construction example, the remnant is an AdjP and it disallows a copula.

Note then that when an AdjP occurs as a remnant in these embedded sluicing construction, it needs to be predicative. Consider the examples below:

- (39) a. {olayn/say} chinkwu  
 longtime/new friend  
 ‘a {longtime/new} friend’
- b. \*ku chinkwu-nun {olay/say}-ta  
 the friend-TOP longtime/new-DECL  
 ‘\*The friend is {longtime/new}.’
- (40) a. \*John-i olayn chinkwu-lul manna-ass-nuntay, na-nun  
 John-NOM longtime friend-ACC meet-PST-but I-TOP  
 elmana olayn-ci molu-n-ta.  
 how old-QUE not.know-PRES-DECL  
 ‘\*John met a long-time friend, but I don’t know how long-time.’
- b. \*John-i say chinkwu-lul sakwui-ess-nuntay, na-nun elemana  
 John-NOM new friend-ACC make-PST-but I-TOP how  
 say-nci molu-n-ta.  
 new-QUE not.know-PRES-DECL  
 ‘John made a new friend, but I don’t know how new.’

As shown in (39), adjectival expressions like *olayn* ‘longtime’ and *say* ‘new’ in Korean can only be used attributively and not as predicates. In (40) such adjectival expressions are used as correlates attributively in the antecedent clauses but they cannot serve as the remnants in the embedded sluicing constructions. The fact that these examples are ungrammatical tells us that the AdjP remnant in the embedded sluicing construction must be a predicative one.

Interestingly, the embedded sluicing construction examples with an AdjP remnant and those with a non-AdjP remnant show different behavior

in terms of the occurrence of *kukey* ‘it.NOM’ as an overt pronominal subject. The examples with an AdjP remnant cannot have *kukey* ‘it.NOM’ when it refers to an animate entity. Observe the contrast in grammaticality between (41a) and (41b):

- (41) a. John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD girl-ACC  
 mamma-ass-ta-ko tul-ess-nuntey, (\*kukey) elmana  
 meet-PST-DECL-COMP hear-PST-but it.NOM how  
 yeppu-nci molu-keyss-ta.  
 pretty-QUE not.know-FUT-DECL  
 ‘(int.) I heard that John met a pretty woman on the weekend, but I don’t know how pretty (she is).’
- b. John-i cwumal-ey yeppu-n cha-lul sa-ass-ta-ko  
 John-NOM weekend-on pretty-MOD car-ACC buy-PST-DECL-COMP  
 tul-ess-nuntey, (kukey) elmana yeppu-nci molu-keyss-ta.  
 hear-PST-but it.NOM how pretty-QUE not.know-FUT-DECL  
 ‘I heard that John bought a pretty car on the weekend, but I don’t know how pretty (it is).’

In these examples, *kukey* ‘it.NOM’ is a subject of the AdjP remnant and its referent is determined by the antecedent clause. For instance, in (41a) it should refer back to *(yeppu-n) yeca* ‘(pretty) girl’. As we noted earlier, the pronominal expression *kukey* ‘it.NOM’ cannot refer to an animate entity. This accounts for why the example with *kukey* ‘it.NOM’ in (41a) is ungrammatical. In contrast, in (41b), *kukey* ‘it.NOM’ refers back to an inanimate entity like *(yeppu-n) cha* ‘(pretty) car’ and the example with *kukey* ‘it.NOM’ is grammatical.

The examples in this section show that the remnant in the Korean embedded sluicing construction can be an AdjP. The properties of the embedded

sluicing construction with an AdjP remnant can be summarized as follows:

Table 2.4: Properties of the Korean embedded sluicing construction with an AdjP remnant

Property	
1. Copula	No
2. Predicative use of the remnant	Obligatory
3. Overt subject <i>kukey</i> ‘it.NOM’	Only when it refers to an inanimate entity

## 2.4 Previous Analyses of the Korean Embedded Sluicing Construction

In this section, I discuss previous analyses of the Korean embedded sluicing construction. In doing so, I show that although each of them accounts for some properties of the construction, none of them is satisfactory and that they all have problems with the embedded sluicing construction examples that cannot appear with a copula.

### 2.4.1 Movement + Deletion Analysis

As was mentioned in Chapter 1, to account for the indirect question clausal interpretation of the *wh*-remnant in the English sluicing construction, a lot of literature has proposed some kind of *wh*-movement + PF deletion analysis (Ross 1969; Merchant 2001 *inter alia*). In this type of *wh*-movement + PF deletion analysis of the English embedded sluicing construction, the underlying structure of the embedded sluicing clause is nothing but an embedded indirect *wh*-question sentence and its derivation can thus be simply

represented as in (42):

- (42) a. John ate something, but I don't know what.  
 b. ... I don't know [<sub>CP</sub> what<sub>i</sub> [~~John ate t<sub>i</sub>~~]].

Here, as shown in (42b), the *wh*-expression first moves to [Spec, CP] and then the deletion of the remaining material takes place at PF, resulting in the desirable surface form in (42a).

Takahashi (1994) extends this *wh*-movement + TP deletion analysis of the English embedded sluicing construction to the Japanese counterpart. However, this *wh*-movement + TP deletion analysis of the Japanese embedded sluicing construction raises questions as to why overt *wh*-movement takes place in this Japanese embedded sluicing construction in a *wh*-in-situ language.

Similarly but a bit differently, Kim (1997, 2000) proposes that the Korean embedded sluicing construction is derived by focus movement followed VP deletion, as represented in (43):

- (43) a. John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 'John ate something, but I don't know what.'  
 b. ... [<sub>FocP</sub> mwues<sub>i</sub>-ul [<sub>TP</sub> [<sub>VP</sub> ~~John-i t<sub>i</sub> mek~~]-ess]nunci] molu-keyss-ta

Kim (1997, 2000) assumes that the *wh*-phrase moves to [Spec, FocP], followed by the deletion of VP. Kim's focus movement + PF deletion analysis may be

better than Takahashi's (1994) *wh*-movement + TP deletion analysis, since it captures the fact that Korean is a *wh*-in-situ language. However, it cannot account for quite a few properties of the Korean embedded sluicing construction.

Note, first, that his focus movement + PF deletion analysis basically assumes that the interrogative marker *(-nu)nci* is situated in the head of FocP. However, we have seen earlier that the Korean embedded sluicing construction does not necessarily have to be embedded by an interrogative-selecting predicate, meaning that the interrogative marker is not obligatory. Therefore, it is hard to explain how his analysis accounts for the embedded sluicing construction examples in which there is no such interrogative marker in the embedded sluicing clause from the beginning.

In addition, it cannot explain the presence of a copula, since the putative source does not have it, as demonstrated in (44) (Park 2011: 720; Kim, L. 2011: 133; Kim, J.-B. 2013: 109, 2015: 268; Saito and An 2014: 7; Kizu 1997: 234 for Japanese; Adams 2004: 4 for Chinese):

- (44)      ... mwues-ul John-i      mek-(\*i)-ess-nunci molu-keyss-ta.  
           ... what-ACC John-NOM eat-COP-PST-QUE not.know-FUT-DECL  
           '... I don't know what John ate.'

One may claim that the copula is inserted in the Korean embedded sluicing construction to save the stranded tense (Kim, J.-S. 2000: 279-281). However, it is still questionable why it is a copula, not a dummy auxiliary *ha-* 'do' verb. Additionally, if it is inserted to save a stranded tense, it is hard to explain



why the bare form copula can appear without an overt tense morpheme (Sohn 2000: 282; Park 2001: 720; Lee 2012; Park S. 2015: 115).

Another problem with this focus movement + PF deletion analysis concerns case markers on a single remnant. This analysis cannot account for why grammatical case markers cannot appear on a single remnant and why semantic case markers are optional on a single remnant in the merger type (Sohn 2000: 282; Ok and Kim 2012: 170-171; Kizu 1997: 236). Consider the examples in (45):

- (45) a. ... nwuka/\*nwukwu phica-lul mek-ess-nunci  
 ... who.NOM/who pizza-ACC eat-PST-QUE  
 molu-keyess-ta.  
 not.know-FUT-DECL  
 ‘... I don’t know who ate pizza.’
- b. ... nwukwu-\*(hantheyse) John-i senmwul-ul pat-ass-nun-ci  
 ... who-from John-NOM present-ACC receive-PST-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘... I don’t know \*(from) whom you received a present.’

As shown in these examples, in a canonical embedded question sentence the moved *wh*-expression should take its grammatical and semantic case marker. If the Korean embedded sluicing construction is derived from the embedded question sentence, they should show the same pattern in terms of the presence and absence of the grammatical/semantic case marker on the *wh*-expression/remnant. As they show different behavior about it, it is problematic for Kim’s focus movement + PF deletion analysis.

This analysis does not explain the the possible presence of the pronominal subject *kukey* ‘it.NOM’ in the embedded sluicing clause (Nishiyama et al. 1995: 342-343; Choi 2012: 341; Park S. 2015: 115). Even worse, the analysis predicts that when the pronominal subject is overt, it should appear after the remnant, contrary to fact. That is, since under this analysis the focused phrase moves to [Spec, FocP], which is higher than TP, on the general assumption that the pronominal subject occupies [Spec, TP], the prediction is that the pronominal subject must follow the focused phrase, which is not the case.

Moreover, this analysis also needs a mechanism to account for island insensitivity in the merger type of the Korean embedded sluicing construction. Consider the following examples:

- (46) a.    na-nun nwukwunka-hantheyse panci-lul pat-un        chinkwu-lul  
           I-TOP someone-from                            ring-ACC receive-MOD friend-ACC  
           manna-ass-nuntey, nwukwu-(hanthese)-i-nci kiekna-ci  
           meet-PST-but            who-from-COP-QUE            recall-CONN  
           anh-nun-ta.  
           not-PRES-DECL  
           ‘I met a friend who received a ring from someone, I don’t remember  
           (from) whom.’ (Relative clause island; merger)
- b.    \*nwukwu-hanthese na-nun panci-lul pat-un        chinwu-lul  
           who-from                            I-TOP ring-ACC receive-MOD friend-ACC  
           manna-ass-nunci kiekna-ci    anh-nun-ta.  
           meet-PST-QUE    recall-CONN not-PRES-DECL  
           ‘\*I don’t remember from whom I met a friend who received a ring.’  
           (Relative clause island; full embedded interrogative clause)

If the focused phrase moves in the Korean embedded sluicing construction, the example in (46a) should be ungrammatical as its putative source in (46b). As

they show different behavior in grammaticality, this analysis needs to explain this dichotomy.

In a similar vein, this analysis cannot capture the fact that the embedded sluicing construction with an AdjP remnant repairs an Left Branch Extraction (LBC) island.

- (47) a. John-i pissa-n cha-lul sa-ass-nuntey, ne-nun  
 John-NOM expensive-MOD car-ACC buy-PST-but you-TOP  
 elmana pissa-nci al-ni?  
 how expensive-QUE know-QUE  
 ‘John bought an expensive car, but do you know how expensive?’  
 (LBC)
- b. \*ne-nun elmana pissa-n John-i cha-lul  
 you-TOP how expensive-MOD John-NOM car-ACC  
 sa-ass-nunci al-ni?  
 buy-PST-QUE know-QUE  
 ‘\*Do you know how expensive John bought a car?’ (LBC; full  
 embedded interrogative clause)

The putative source sentence in (47b) is ungrammatical; however, the embedded sluicing construction example in (47a) is grammatical. Therefore, the examples in (46) and (47) that involve islands further undermine the focus movement + PF deletion analysis.

### 2.4.2 Pseudo-cleft Analysis

Korean is a *wh*-in-situ language, meaning that *wh*-movement is not obligatory. This kind of property has led many linguists to doubt that sluicing constructions in *wh*-in-situ languages are derived from *wh*-movement + PF

deletion. Encountering some problems with the movement + PF deletion analysis and observing similarities between sluicing and (pseudo)-cleft, some previous studies have claimed that sluicing constructions in such languages have the (pseudo)-cleft structure as their source (Nishiyama et al. 1995; Nakao and Yoshida 2005; Hasegawa 2008; Hiraiwa and Ishihara 2012; Kuwabara 1996; Kizu 1997, 2000; Takahashi and Lin 2012; Merchant 2001). In fact, adopting this idea, some scholars have argued that the Korean embedded sluicing construction is derived from the pseudo-cleft structure (Park, M.-K. 2001, 2007, 2009; Kim, J.-E. 2012). Note first that the pseudo-cleft structure is composed of a presuppositional clause and a focused pivot, which are linked by a copula. One simple Korean sentence and its pseudo-cleft counterpart are given in (48):

- (48) a. John-i phica-lul mek-ess-ta.  
 John-NOM pizza-ACC eat-PST-DECL  
 ‘John ate pizza.’
- b. John-i mek-un kes-un phica-i-ta.  
 ‘John-NOM eat-MOD KES-TOP pizza-COP-DECL  
 ‘What John ate was pizza.’

The Korean pseudo-cleft construction has two parts: a presuppositional clause introduced by a bound pronoun *kes* and a focused expression, called a pivot, followed by a copula. According to the pseudo-cleft analysis, the embedded sluicing construction is then derived as follows:

- (49) ... [[<sub>CP</sub> John-i ~~mek-un~~ kes-i] mwues-i-nci]  
 ... John-NOM eat-MOD KES-NOM what-COP-QUE

molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘I don’t know what ~~<it was that John ate>~~.’

Here, the underlying structure for the embedded sluicing construction is a pseudo-cleft and the deletion of the presuppositional clause gives rise to the surface output.

Compared to the movement + PF deletion analysis, this pseudo-cleft analysis has more merits. First, this analysis naturally captures the obligatory presence of a copula in the Korean embedded sluicing construction with a non-AdjP remnant and the obligatory drop of the grammatical case marker on the single remnant (Sohn 2000: 282-238; Kim, S. 2010: 150-153; Kim, L. 2011: 134; Kim, J.-B. 2013, 2015: 268-269; Park, S. 2015: 116; Kizu 1997: 234-236, 2000: 146-149 for Japanese).

- (50) a. John-i mwuenka-lul mek-ess-nuntay, na-nun  
           John-NOM something-ACC eat-PST-but I-TOP  
           mwues-(\*ul)-\*(i)-nci molu-keyss-ta.  
           what-ACC-COP-QUE not.know-FUT-DECL  
           ‘John ate something, but I don’t know what.’
- b. John-i mwuenka-lul mek-ess-nuntay, na-nun [John-i  
           John-NOM something-ACC eat-PST-but I-TOP John-NOM  
           mek-un kes-i] mwues-(\*ul)-\*(i)-nci molu-keyss-ta.  
           eat-MOD KES-NOM what-ACC-COP-QUE not.know-FUT-DECL  
           ‘John ate something, but I don’t know what it was that John ate.’
- (51) a. nwukunka-ka phica-lul mek-ess-nuntay, na-nun  
           someone-NOM pizza-ACC eat-PST-but I-TOP  
           {nwukwu/\*nwuka}-\*(i)-nci molu-keyss-ta.  
           who/who.NOM-COP-QUE not.know-FUT-DECL  
           ‘Someone ate pizza, but I don’t know who.’

- b.    nwukunka-ka   phica-lul   mek-ess-nuntay, na-nun [phica-lul  
          someone-NOM pizza-ACC eat-PST-but        I-TOP   pizza-ACC  
          mek-un   kes-i]        {nwukwu/\*nwuka}-(i)-nci  
          eat-MOD KES-NOM who/who.NOM-COP-QUE  
          molu-keyss-ta.  
          not.know-FUT-DECL  
          ‘Someone ate pizza, but I don’t know who it was that ate pizza.’

As shown here, the presence of a copula is obligatory and the grammatical case marker on the pivot is disallowed in the pseudo-cleft construction and the same constraints hold in the embedded sluicing construction.

Another advantage of the pseudo-cleft analysis has to do with the optional pronominal subject *kukey* ‘it.NOM’ (Park, S. 2015: 116; Nishiyama et al. 1995 for Japanese). That is, once we assume that the presuppositional clause can be replaced with a pronominal subject *kukey* ‘it.NOM’ rather than just undergoing PF deletion, the optional presence of the pronominal subject in the embedded sluicing construction naturally follows.

In addition, the pseudo-cleft analysis can capture the possible tense mismatches between the copula in the embedded sluicing clause and the predicate in the antecedent clause. Consider the examples in (52):

- (52) a.    John-i        ecey        manna-n   kes-un    Mary-i-(ess)-ta.  
          John-NOM yesterday meet-MOD KES-TOP Mary-COP-PST-DECL  
          ‘It is/was Mary that John met yesterday.’  
       b.    John-i        ecey        nwukwunka-lul manna-ass-nuntay,  
          John-NOM yesterday someone-ACC   meet-PST-but

nwukwu-i-(ess)-nunci molu-keyss-ta.  
 who-COP-PST-QUE not.know-FUT-DECL  
 ‘John met someone yesterday, but I don’t know who.’

As demonstrated in (52a), in the pseudo-cleft construction the tense information of the copula does not have to match with that of the predicate in the presuppositional clause and can be in its bare form with no overt tense morpheme. In a similar manner, as we noted earlier and as is shown in (52b) again, in the embedded sluicing construction the tense information of the bare form copula does not have to match with that of the predicate in the antecedent clause (Sohn 2000; Kim, J.-B. 2013: 111-112; Kizu 1997: 234-236 for Japanese).

However, the pseudo-cleft analysis faces some problems. Needless to say, those problems mainly have to do with the differences between pseudo-cleft and sluicing. First, it cannot account for the optionality of the semantic case marker on a single remnant in the merger type of the Korean embedded sluicing construction as in (53) (Sohn 2000: 284; Park 2007; Kim, S. 2010: 150; Kim, J.-B. 2013: 112-113; Park, S. 2015: 117-118):<sup>21</sup>

- (53) a. John-i Mary-hantheyse senmwul-ul pat-ass-ta.  
           John-NOM someone-from present-ACC receive-PST-DECL  
           ‘John received a present from Mary.’

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<sup>21</sup>Interestingly, the opposite is the case in Turkish. Ince (2006: 115) shows that post-position pied-piping is obligatory in the Turkish sluicing construction, whereas it is barred in the cleft construction, and thus argues against the cleft analysis of the Turkish sluicing construction.

- b. John-i      senmwul-ul pat-un      kes-un  
 John-NOM present-ACC receive-MOD KES-TOP  
 Mary-\*(hantheyse)-i-ta.  
 Mary-from-COP-DECL  
 ‘It was \*(from) Mary that John received a present.’
- c. John-i      nwukwunka-hantheyse senmwul-ul pat-ass-nuntey,  
 John-NOM someone-from      present-ACC receive-PST-but  
 nwukwu-(hantheyse)-i-nci molu-keyss-ta.  
 who-from-COP-QUE      not.know-FUT-DECL  
 ‘John received a present from someone, but I don’t know (from)  
 whom.’

As shown here, the semantic case marker on the single pivot in the Korean pseudo-cleft construction is obligatory; however, the semantic case marker on the single remnant is optional in the merger type. Therefore, this fact is problematic for the pseudo-cleft analysis.

In addition, as shown below, some expressions like floating numeral quantifiers, parts in the inalienable possession construction, manner adverbs, secondary predicates, and comparative expressions cannot occur in the pivot position in the pseudo-cleft construction but they can appear as a remnant in the embedded sluicing construction (Sohn 2000: 284-285; Kim, L. 2011: 136-137; Kim, J.-B. 2013: 113-114, 2015: 269-270; Park, S. 2015: 132-133).<sup>22</sup>

(54) Numeral floating quantifier

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<sup>22</sup>Similar problems with categorial differences between the remnant in sluicing and the pivot in pseudo-cleft have been observed in other languages. See Song (2016: 267), and Takahashi and Lin (2012: 139-140) for Chinese, Sakamoto (2011: 286) for Mongolian, and Ince (2012) for Turkish for a similar line of reasoning.



- a. John-i chayk-ul sey kwuen sa-ass-ta.  
John-NOM book-ACC three CL buy-PST-DECL  
'John bought three books.'
- b. \*John-i chayk-ul sa-n kes-un sey kwuen-i-ta.  
John-NOM book-ACC buy-MOD KES-TOP three CL-COP-DECL  
'\*It was three that John bought books.'
- c. John-i chayk-ul myes kwuen sa-ass-nuntay, myes  
John-NOM book-ACC some CL buy-PST-but how.many  
kwuen-i-nci molu-keyss-ta  
CL-COP-QUE not.know-FUT-DECL  
'John bought a certain number of books, but I don't know how many.'

(55) Inalienable possession

- a. John-i Mary-lul oluncok son-ul ttayli-ess-ta.  
John-NOM Mary-ACC right.side hand-ACC hit-PST-DECL  
'John hit Mary's right hand.'
- b. \*John-i Mary-lul ttayli-n kes-un oluncok  
John-NOM Mary-ACC hit-MOD KES-TOP right.side  
son-i-ta.  
hand-COP-DECL  
'\*It was her right hand that John hit Mary.'
- c. John-i Mary-lul hancok son-ul ttayli-ess-nuntay  
John-NOM Mary-ACC one.side hand-ACC hit-PST-but  
enuccok son-i-nci molu-keyss-ta.  
which.side hand-COP-QUE not.know-FUT-DECL  
'John hit Mary's one hand, but I don't know which hand.'

(56) Manner adverb

- a. John-i nongkwu-lul cal ha-n-ta.  
John-NOM basketball-ACC well do-PRES-DECL  
'John plays basketball well.'

- b. \*John-i nongkwu-lul ha-nun kes-un cal-i-ta.  
 John-NOM basketball-ACC do-MOD KES-TOP well-COP-DECL  
 ‘\*It is well John plays basketball.’
- c. John-i nongkwu-lul cal ha-n-ta-ko  
 John-NOM basketball-ACC well do-PRES-DECL-COMP  
 tul-ess-nuntey, elmana cal-i-nci molu-keyss-ta.  
 hear-PST-but how well-COP-QUE not.know-FUT-DECL  
 ‘I heard that John plays basketball well, but I don’t know how well.’

(57) Secondary predicate

- a. salam-tul-i Mary-lul mi-uy yesin-ulo  
 person-PL-NOM Mary-ACC beauty-GEN goddess-as  
 yeki-n-ta.  
 consider-PRES-DECL  
 ‘People consider Mary a goddess of beauty.’
- b. \*salam-tul-i Mary-lul yeki-nun kes-un mi-uy  
 person-PL-NOM Mary-ACC consider-MOD KES-TOP beauty-GEN  
 yesin-(ulo)-i-ta.  
 goddess-COP-DECL  
 ‘It is a goddess of beauty that people consider Mary.’
- c. salam-tul-i Mary-lul etten yesin-ulo yeki-nuntey, etten  
 person-PL-NOM Mary-ACC some goddess-as consider-but what  
 yesin-(ulo)-i-nci kiekna-ci anh-nun-ta.  
 goddess-as-COP-QUE recall-CONN not-PRES-DECL  
 ‘People consider Mary some goddess, but I don’t remember what goddess.’

(58) Comparative expression

- a. John-i Mary-pota khi-ka khu-ta.  
 John-NOM Mary-than height-NOM tall-DECL  
 ‘John is taller than Mary.’

- b. \*John-i khi-ka khu-n kes-un Mary-pota-i-ta.  
 John-NOM height-NOM tall-MOD KES-TOP Mary-than-COP-DECL  
 ‘\*It is than Mary that John is taller.’
- c. John-i nwuku-pota khi-ka khu-ntey,  
 John-NOM someone-than height-NOM tall-but  
 nwukwu-(pota)-i-nci kiekna-ci anh-nun-ta.  
 who-than-COP-QUE recall-CONN not-PRES-DECL  
 ‘John is taller than someone, but I don’t remember (than) whom.’

This difference between the pseudo-cleft structure and the sluicing construction here further weakens the validity of the pseudo-cleft analysis.

Furthermore, the pseudo-cleft analysis cannot account for the possibility of multiple remnants in the Korean embedded sluicing construction (Kim, J.-S. 1997b; Sohn 2000: 278-279; Jo 2005: 147-148; Kim, L. 2011: 137; Kim, J.-B. 2013: 112, 2015: 269; Park, S. 2015: 131-132; contra Saito and An 2014: 10-11; Sakamoto 2011: 286-289 for Mongolian). As we have observed above, multiple remnants in the embedded sluicing construction are possible in Korean; however, multiple pivots in the pseudo-cleft construction are not, as shown by the contrast in (59):

- (59) a. \*John-i ecey cwu-n kes-un panci-lul  
 John-NOM yesterday give-MOD KES-TOP ring-ACC  
 Mary-hanthey-i-ta.  
 Mary-DAT-COP-DECL  
 ‘\*It was a ring to Mary that John gave yesterday.’
- b. John-i ecey mwuenka-lul nwukwunka-hanthey  
 John-NOM yesterday something-ACC someone-DAT  
 cwu-ess-nuntey, na-nun (kukey) mwues-ul nwukwu-hanthey-i-nci  
 give-PST-but I-TOP it.NOM what-ACC who-DAT-COP-QUE

molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John gave something to someone yesterday, but I don’t know what  
 to whom (it was).’

The pseudo-cleft analysis also fails to explain the island insensitivity  
 facts in the merger type of the Korean embedded sluicing construction (Sohn  
 2000: 288; Park 2001; Kim, S. 2010: 150-151; Kim, L. 2011: 137-138; Park,  
 S. 2015: 118-120). As an illustration, consider the following examples which  
 involve a relative clause island.

- (60) a.    na-nun nwukwunka-hantheyse panci-lul pat-un        chinkwu-lul  
              I-TOP    someone-from                            ring-ACC receive-MOD friend-ACC  
              manna-ass-nuntey, nwukwu-(hanthese)-i-nci kiekna-ci  
              meet-PST-but                who-from-COP-QUE                recall-CONN  
              anh-nun-ta.  
              not-PRES-DECL  
              ‘I met a friend who received a ring from someone, I don’t remember  
              (from) whom.’ (Relative clause island; merger)
- b.    \*na-nun [panci-lul pat-un                chinkwu]-lul manna-n    kes-un  
              I-TOP    ring-ACC receive-MOD friend-ACC    meet-MOD KES-TOP  
              Bill-hantheyse-i-ta.  
              Bill-from-COP-DECL  
              ‘\*It was from Bill that I met a friend who received a ring.’ (Relative  
              clause island; pseudo-cleft source)

The example in (60a) shows that the merger type of the Korean embedded  
 sluicing construction repairs a relative clause island violation; on the other  
 hand, the example in (60b) shows that the pseudo-cleft construction does  
 not repair the island violation. The discrepancy here further supports the

view that the Korean embedded sluicing construction is not derived from the pseudo-cleft source.

This analysis is also problematic with the Korean embedded sluicing construction examples with an AdjP remnant as demonstrated in (61):

- (61) a. John-i pissa-n cha-lul sa-ass-nuntey, ne-nun  
 John-NOM expensive-MOD car-ACC buy-PST-but you-TOP  
 elmana pissa-nci al-ni?  
 how expensive-QUE know-QUE  
 ‘John bought an expensive car, but do you know how expensive?’  
 (LBC; merger)
- b. \*ne-nun John-i cha-lul sa-n kes-un elmana  
 you-TOP John-NOM car-ACC buy-MOD KES-TOP how  
 pissa-nci al-ni?  
 expensive-QUE know-QUE  
 ‘\*Do you know how expensive it was that John bought a car?’  
 (LBC; pseudo-cleft source)

The embedded sluicing construction is grammatical with an AdjP remnant; on the other hand, their putative pseudo-cleft source example in (61b) is ungrammatical. This contrast is not expected under the pseudo-cleft analysis as well.

### 2.4.3 Copula-accompanying Full *Kes*-clause Analysis

Observing the problems with the movement + PF deletion analysis on the one hand and discrepancies between the sluicing and the pseudo-cleft construction, some linguists have proposed that the underlying structure of the embedded sluicing construction is a copula-accompanying full *kes*-clause (Jo

2005; Park, S. 2015; Hiraiwa and Ishihara 2002 for Japanese). This copula-accompanying full *kes*-clause analysis is a hybrid one in the sense that the underlying structure involves a copula and the surface form is derived from some kind of overt movement and PF deletion. Under this analysis, the underlying sentence for the embedded sluicing clause in (62a) is the one in (62b):

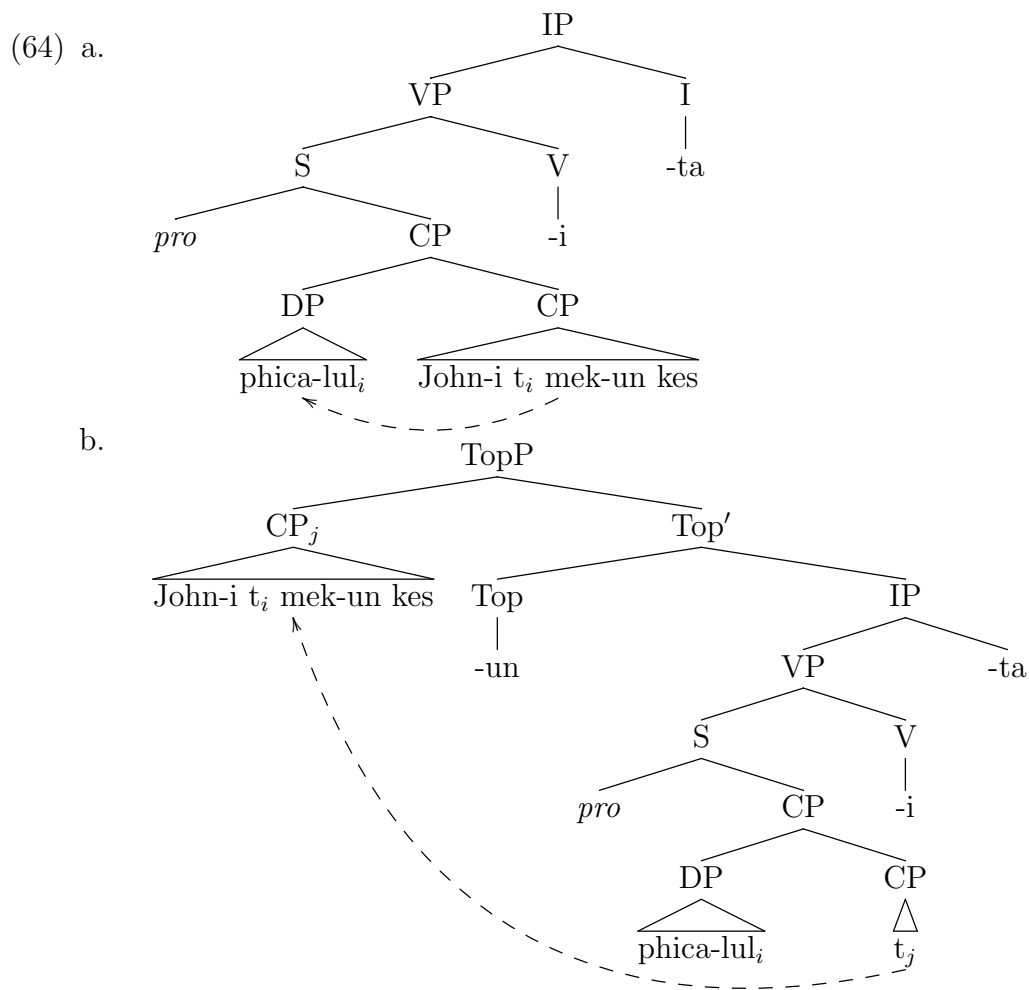
- (62) a. John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what.’
- b. [John-i mwues-ul mek-un kes]-i-nci...  
 John-NOM what-ACC eat-MOD KES-COP-DECL  
 ‘(lit.) It is that John ate what?’

Noting the similarities and differences between the pseudo-cleft construction and the sluicing construction, Jo (2005) argues that they are not directly related to each other but they are only indirectly related to each other in that they are derived from the same underlying copula-accompanying full *kes*-clause construction.<sup>23</sup> Jo (2005) claims that in deriving the pseudo-cleft construction from the copula-accompanying full *kes*-clause construction, two independent movement operations are involved. According to Jo’s (2005) copula-accompanying full *kes*-clause analysis, the pseudo-cleft construction example in (63a) has the copula-accompanying full *kes*-clause in (63b) as its source and its derivational processes are represented in (64):

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<sup>23</sup>See Hiraiwa and Ishihara (2002) for the same kind of analysis for the Japanese cleft construction and sluicing construction.

- (63) a. John-i mek-un kes-un phica-i-ta.  
 John-NOM eat-MOD KES-TOP pizza-COP-DECL  
 ‘What John ate was pizza.’ (Pseudo-cleft)
- b. John-i phica-lul mek-un-kes-i-ta.  
 John-NOM pizza-ACC eat-MOD-KES-COP-DECL  
 ‘It is that John ate pizza.’ (Copula-accompanying full *kes*-clause)



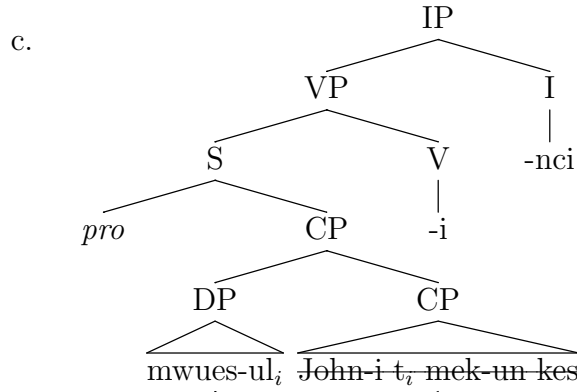
As in (64a), the first movement operation involves local scrambling of an element and the scrambled element adjoins to the CP. Then, as shown in (64b),

the remaining gap-containing CP *kes*-clause undergoes topicalization to [Spec, TopP], whose head is morphologically realized as a topic marker *-(n)un*. The focus information of the scrambled element follows as a consequence of the topicalization of the gap-containing *kes*-clause. Given an inherent semantic property of copula constructions involving a Topic/Comment structure, once the gap-containing *kes*-clause is construed as Topic, the scrambled element is construed as Comment. Since focus information is part of Comment, the focus information of the scrambled element is naturally accounted for.

Jo (2005) argues that the sluicing construction differs from the pseudo-cleft construction only in that it involves PF-deletion rather than the topicalization of the remaining gap-containing *kes*-clause CP. Thus, according to Jo (2005), the embedded sluicing clause in (65a) is derived from the copula-accompanying full *kes*-clause in (65b) and its derivational processes are illustrated in (65c).

- (65) a. John-i      mwuenka-lul    mek-ess-nuntay, na-nun  
           John-NOM something-ACC eat-PST-but      I-TOP  
           mwues-i-nci      molu-keyss-ta.  
           what-COP-QUE not.know-FUT-DECL  
           ‘John ate something, but I don’t know what.’
- b.    na-nun [John-i mwues-ul mek-un kes-i-nci] molu-keyss-ta





This analysis can account for some important properties of the Korean embedded construction. First, the obligatory presence of the copula in the embedded sluicing construction with a non-AdjP remnant is naturally explained under this kind of copula-accompanying full *kes*-clause analysis, since the underlying structure contains it.

This analysis also captures the fact that the negative copula does not occur in the sluicing construction, although the antecedent clause has a negative predicate (Jo 2005: 163). Consider the following examples:

- (66) a. John-i mwuenka-lul mek-ci anh-ass-nuntey, na-nun  
 John-NOM something-ACC eat-CONN not-PST-but I-TOP  
 {\*mwues-i ani-nci/mwues-i-nci} molu-keyss-ta.  
 what-NOM NEG.COP-QUE/what-COP-QUE not.know-FUT-DECL  
 ‘John didn’t eat something, but I don’t know what.’
- b. ... [mwues-ul<sub>i</sub> [~~John-i t<sub>i</sub> mek-ci anh-un kes~~]-i-nci] ...
- c. ... [mwues-ul<sub>i</sub> [[~~John-i t<sub>i</sub> mek-un kes~~]-i ani-nci]] ...

Under this analysis, the structure for the grammatical embedded sluicing clause in (66a) is the one in (66b), not the one in (66c), accounting for the

contrast between the grammatical version with a positive copula and the ungrammatical version with a negative copula in (66a).

Another property of the Korean embedded sluicing construction that this analysis can explain has to do with the optional tense information on the copula. As we have noted earlier, the copula in the embedded sluicing clause can be its bare form with no overt tense morpheme or it can take a tense morpheme whose tense information matches with that of the predicate in the antecedent clause. The same can be seen in the copula-accompanying full *kes*-clause, as demonstrated in (67):

- (67)      John-i      mwuenka-lul      mek-un      kes-i-(ess)-ta.  
             John-NOM something-ACC eat-MOD KES-COP-PST-DECL  
             ‘It is/was that John ate something.’

Here, the copula can optionally have a past tense morpheme whose tense information is identical to that of the predicate in the *kes*-clause. So, this optionality of the tense morpheme on the copula in the embedded sluicing clause and in the copula-accompanying full *kes*-clause lends further support to this analysis.

In addition, under this analysis the *pro* can be replaced with an overt pronominal subject *kukey* ‘it.NOM’. Thus, it captures the optional presence of the pronominal subject in the embedded sluicing clause in the embedded sluicing construction.<sup>24</sup>

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<sup>24</sup>However, it is unclear what the *pro* refers to in this structure.

Moreover, this analysis can account for the fact that multiple remnants are possible in the Korean embedded sluicing construction and the fact that they all must retain their grammatical/semantic case markers. Consider the following:

- (68) a. John-i ecey mwuenka-lul nwukwunka-hanthey  
 John-NOM yesterday something-ACC someone-DAT  
 cwu-ess-nuntay, na-nun mwues-ul nwukwu-hanthey-i-nci  
 give-PST-but I-TOP what-ACC who-DAT-COP-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘John gave something to someone yesterday, but I don’t know what to whom.’  
 b. [[mwues-\*(ul) nwukwu-\*(hanthey) [~~John-i ecey cwu-n kes~~]-i]-nci] ...

The embedded sluicing clause in (68a) has an underlying representation in (68b) according to the copula-accompanying full *kes*-clause analysis and as represented there. Scrambling of multiple constituents is permitted and in such cases all the remnants must keep their grammatical/semantic case marker in the same way as in multiple remnants in the embedded sluicing construction.

However, some problems still remain with this analysis. First, like the movement + PF deletion analysis, this analysis cannot explain why the grammatical case marker on the single remnant cannot appear, while the semantic case marker on the single remnant is optional in the merger type.

- (69) a. nwukwunka-ka phica-lul mek-ess-nuntay, na-nun  
 someone-NOM pizza-ACC eat-PST-but I-TOP

{nwuku/\*nwuka}-i-nci molu-keyss-ta.  
 who/who.NOM-COP-QUE not.know-FUT-DECL  
 ‘Someone ate pizza, but I don’t know who.’

- b. [[{\*nwuku/nwuka} [~~phica-lul mek-un kes~~]-i]-nci] ...
- c. John-i nwukwunka-hantheyse senmwul-ul pat-ass-nuntay,  
 John-NOM someone-from present-ACC receive-PST-but  
 na-nun nwukwu-(hantheyse)-i-nci molu-keyss-ta.  
 I-TOP who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present from someone, but I don’t know from whom.’
- d. [[nwukwu-\*(hantheyse) [~~John-i senmwul-ul pat-un kes~~]-i]-nci] ...

As shown in (69b) and (69d), scrambling out of the copula-accompanying full *kes*-clause requires the scrambled element to take its grammatical/semantic case marker. Thus, the lack of the grammatical case marker on the single remnant in (69a) and the optionality of the semantic case marker on the single remnant in the merger type pose a problem for the copula-accompanying full *kes*-clause analysis.

An additional problem comes from island insensitivity. Observe the examples in (70):

- (70) a. na-nun nwukwunka-hantheyse panci-lul pat-un chinkwu-lul  
 I-TOP someone-from ring-ACC receive-MOD friend-ACC  
 manna-ass-nuntay, nwukwu-(hanthese)-i-nci kiekna-ci  
 meet-PST-but who-from-COP-QUE recall-CONN  
 anh-nun-ta.  
 not-PRES-DECL  
 ‘I met a friend who received a ring from someone, I don’t remember (from) whom.’ (Relative clause island; merger)

- b. \*[[nwukwu-hantheyse [na-nun [panci-lul pat-un chinlwu-lul] manna-n kes]-i]-nci] ...

As can be seen in (70b), the source example in which the correlate is scrambled out of an island to adjoin to the next higher CP is ungrammatical; on the other hand, the corresponding merger type sluicing example is grammatical. This difference is not predicted under the copula-accompanying full *kes*-clause analysis.

Furthermore, the analysis cannot explain the Korean embedded sluicing construction examples with an AdjP remnant as illustrated below:

- (71) a. John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD girl-ACC  
 manna-ass-ta-ko tul-ess-nuntey, na-nun elmana yeppu-nci  
 meet-PST-DECL-COMP hear-PST-but I-TOP how pretty-QUE  
 molu-keyss-ta.  
 not.know-FUT-DECL  
 ‘I heard that John met a pretty woman on the weekend, but I don’t know how pretty.’  
 b. \*[[yeppu-n [John-i cwumal-ey yeca-lul manna-n kes-i-nci]]

When the embedded sluicing construction has an AdjP *wh*-remnant, its derivation from the copula-accompanying full *kes*-clause predicts the ungrammaticality of the example and the appearance of a copula, contrary to fact. Thus, this is also a problem for the analysis.

#### 2.4.4 Constructional Analysis

Adopting Ginzburg and Sag’s (2000) idea for the English sluicing construction discussed in Section 2.3 in Chapter 1, Kim (2015: 286) proposes the following embedded sluicing construction in Korean:

$$(72) \left[ \begin{array}{ll} \text{FORM} & \boxed{3} + \boxed{4} \\ \text{SYN} & \text{CAT } \boxed{6} \\ \text{SEM} & \lambda\Sigma\Phi \\ \text{DGB} & \left[ \begin{array}{ll} \text{SAL-UTT} & \left[ \begin{array}{ll} \text{CAT} & \boxed{1} \\ \text{SEM} & \boxed{2} \end{array} \right] \\ \text{MAX-QUD} & \lambda\{\}\Phi \end{array} \right] \end{array} \right] \\ \rightarrow \boxed{5}\text{XP} \left[ \begin{array}{ll} \text{FORM} & \boxed{3} \\ \text{CAT} & \boxed{1} \\ \text{SEM} & \boxed{2} \\ \text{PARAMS} & \text{neset} \\ \text{WH} & \Sigma \end{array} \right] \quad \mathbf{H} \left[ \begin{array}{ll} \text{FORM} & \boxed{4} \\ \text{SYN} & \left[ \begin{array}{ll} \text{CAT} & \boxed{6} \left[ \begin{array}{ll} \text{POS} & \text{copula} \\ \text{MOOD} & \text{que} \\ \text{IC} & - \end{array} \right] \\ \text{SUBJ} & \langle (\text{NP}[\text{pro}]) \rangle \\ \text{COMPS} & \langle \boxed{5}\text{XP} \rangle \end{array} \right] \end{array} \right] \end{array} \right]$$

According to (72), the Korean embedded sluicing construction consists of two expressions: a *wh*-expression and a copula with a embedded question marker *-nci*. In representing interrogative expressions, Kim (2015) follows Ginzburg and Sag’s (2000) view that questions are basic semantic entities such as individuals and propositions. As in the analysis of the English sluicing construction proposed by Ginzburg and Sag (200), in (72) DGB provides information

for the interpretation of the Korean embedded sluicing construction, making use of the context/discourse information, and the resulting constituent has a meaning that the *wh*-expression takes place in the correlate in the antecedent.

Although this construction captures diverse properties of the Korean embedded sluicing construction, including the presence of a copula in the embedded sluicing clause, case matching effects between the *wh*-remnant and its correlate, it runs into a few problems. Among them, (72) predicts the co-occurrence of an AdjP *wh*-remnant and a copula in the embedded sluicing clause; however, the prediction is false, as we have observed earlier.

#### 2.4.5 Simple Copula Analysis

Sohn (2000) proposes that the Korean embedded sluicing construction is simply derived from a copula structure. In Sohn's copula analysis, the embedded sluicing clause consists of a copula taking two arguments with a *pro* as its first argument and a remnant as its second argument. Under this analysis, the embedded sluicing construction is simply represented as in (73):

- (73) ... [CP *pro* mwues-i-nci] molu-keyss-ta.  
       ... what-COP-QUE not.know-FUT-DECL  
       ‘(lit.) I don’t know what *pro* is.’

This simple copula analysis of course captures the obligatory presence of a copula in the embedded sluicing construction examples with a non-AdjP remnant. In addition, assuming that the *pro* can be lexically realized as *kukey* ‘it.NOM’, this simple copula analysis can also account for its overt presence.

The obligatory absence of the grammatical case marker on a single remnant naturally follows as well in this analysis.

However, the Korean embedded sluicing construction has different properties from the canonical copula construction. For one thing, multiple remnants need to be explained, as the canonical copula construction only takes two arguments (cf. Kim 2013: 113).

Under the simple copula analysis, it is not obvious why the negative copula cannot be used in the embedded sluicing construction and why the semantic case marker on the single remnant is optional in the merger type, while it is obligatory in the sprouting type, since the second argument in the positive copula construction usually takes the bare case NP (Kim 2013: 113-114).

Most importantly, however, this analysis needs to explain what the *pro* refers to and what the function of the copula. Without a proper explanation about them, it cannot account for why the embedded sluicing construction shows different behavior from the canonical copula construction in some respects.

Lastly, this analysis cannot be extended to the cases with an AdjP remnant which cannot contain a copula, simply because this analysis predicts that a copula appears in the Korean embedded sluicing construction regardless of the syntactic category of the remnant.

In fact, I do not disagree with the simple copula analysis *per se*. In the



next chapter, I will show that the Korean embedded sluicing construction with a copula is a kind of subject-predicate construction, where a (possibly phonologically null) pronominal subject is linked to the *wh*-expression by means of a specificational copula. On the other hand, the Korean embedded sluicing construction that cannot appear with a copula is also a kind of subject-predicate construction, where the *wh*-expression denotes the property of the (possibly phonologically silent) pronominal subject.

## 2.5 Conclusion

In this chapter, I have first examined the grammatical properties of the merger type and the sprouting type of the Korean embedded sluicing construction. We have seen that although the two types share diverse grammatical properties, they differ in some respects. I have also shown that the Korean embedded sluicing construction needs to be subclassified based on the presence/absence of a copula, since they display different grammatical properties.

I then discussed what previous analyses of the Korean embedded sluicing construction can account for and what they cannot. Most importantly, they all share the basic idea that the presence of a copula is important. However, those previous analyses face problems in three main aspects. First, once they posit PF deletion and/or silent syntax and assume that the Korean embedded sluicing construction is derived from a source structure by means of syntactic operations, they need to explain the different behavior between the two constructions. This problem arises for the movement + PF deletion analy-

sis, the pseudo-cleft analysis, the copula-accompanying full *kes*-clause analysis. Another problem is that even though all the previous analyses assume that the presence of a copula is important to license the construction, they do not discuss what role the copula actually plays. Lastly, all the previous analyses cannot be extended to the cases that cannot appear with a copula, where the *wh*-remnant is an AdjP.

In the next chapter, I make a proposal that can cover the data explored in this chapter and I provide formal representations of some Korean embedded sluicing construction examples within the framework of HPSG (Head-Driven Phrase Structure Grammar).

## Chapter 3

# Proposal and Analysis of the Korean Embedded Sluicing Construction

### 3.1 Main Proposal

Noting the problems with the previous analyses, instead of relating the Korean embedded sluicing construction to its putative, non-elided source, I relate it to a kind of subject-predicate construction in Korean, claiming that each type (copula and copulaless) consists of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate. The [VERBAL +/-] is a categorial distinction, as shown below:<sup>1</sup>

- (1) a. [VERBAL +]: The categories headed by an adjective, verb or copula
- b. [VERBAL -]: All the other categories

The Korean sluicing construction can then be simply schematized as follows:

- (2)      [(pronoun)      [VERBAL +]]  
             Subject          *Wh*-predicate

---

<sup>1</sup>I follow Kim's (2004) idea for this distinction. According to Kim (2004), adjectives and verbs including copulas are distinguished from the rest categories and the former categories are subsumed under *verbal*.

According to the structure proposed in (2), the sluice in Korean is an ordinary clause in both the cases that occur with a copula and the cases that cannot occur with a copula. That is, the *wh*-expression in the Korean embedded sluicing construction serves as a predicate; it is not an (extracted) argument of an elided clause. More specifically, when a *wh*-expression occurs with a copula, it forms a [VERBAL +] predicate with the copula; on the other hand, when a *wh*-expression does not occur with a copula, the *wh*-expression by itself forms a [VERBAL +] predicate.

In addition, I argue that the subject in the Korean embedded sluicing construction is anaphoric. In other words, the subject in the construction is a pronoun that has to do with the ‘salient utterance’, an item made salient in the immediately preceding discourse.

In the next two sections, I discuss the clausal status of the two types (copula and copulaless) of the Korean embedded sluicing construction.

## **3.2 Copula Sluicing Clause**

In this section, I demonstrate the clausal status of the Korean embedded sluicing construction with a copula and show that the copula in the construction has a specificational use.

### **3.2.1 Copula Constructions in Korean**

Before going into details about the specificational use of the copula in the Korean embedded sluicing construction, let us first examine Korean copula

constructions in general. Similarly to English copula constructions (Higgins 1979; Heycock 1994; Heycock and Kroch 2002; den Dikken 2005; Mikkelsen 2005, among others), Korean copula constructions can be classified into three different types, as shown in (3) (Kim, J.-B. 2016: 91):<sup>2</sup>

- (3) a. Predicational:
- John-un enehakca-i-ta.  
John-TOP linguist-COP-DECL  
'John is a linguist.'
- b. Equative:
- Kim-i John-i-ta.  
Kim-NOM John-COP-DECL  
'Kim is John.'
- c. Specificational:
- ku kyengki-uy sungca-nun John-i-ta.  
the game-GEN winner-TOP John-COP-DECL  
'The winner of the game is John.'

---

<sup>2</sup>Higgins (1979) distinguishes four different types of English copula constructions, as illustrated below:

- (i) a. John is a student. (Predicational)  
 b. Cicero is Tully. (Equative)  
 c. The director of *Anatomy of a Murder* is Otto Preminger. (Specificational)  
 d. That (woman) is Mary. (Identificational)

Note that the identificational type is the least clear type of copula construction out of the four. It is characterized as typically involving a demonstrative subject with a deictic, not anaphoric, referent and being typically used for teaching names of people or of things (Higgins 1979: 237). I leave this type out in discussing the Korean copula constructions, rather focusing on the three main types (Kim, J.-B. 2016: 91).

Observe first here that regardless of the types, the Korean copula construction consists of a subject XP1 and a pre-copula XP2 to which a positive copula is attached. Now let us briefly consider their defining properties. In the predicative copula construction in Korean, the pre-copula XP2 denotes (predicates) a property of the referent of the subject XP1. For instance, in (3a) *being a linguist* denotes a property of the subject *John*. This means that the predicative use of the copula functions to link the subject XP1 and the predicative XP2 and its meaning can be simply represented as follows (Higgins 1973; Mikkelsen 2005; Kim, J.-B. 2016: 92):

$$(4) \quad \text{be}_{pred}: \lambda P \lambda x [P(x)]$$

This representation shows that the predicative copula has the meaning, where the property P denoted by its complement (i.e., XP2) holds for the external argument (i.e., subject XP1). The non-referential property of the pre-copula XP2 in the predicative copula construction can be seen in comparison with the referential property of the pre-copula XP2 in the equative copula construction, in particular, in terms of *who/what* questions. As was noted in Higgins (1973), *what* can ask for a property, unlike *who*. Consider the examples below from Kim, J.-B. (2016: 92).

- (5) a. John-un cikepsang mwues-i-ni?  
 John-TOP as.profession what-COP-QUE  
 ‘John is what (by profession)?’

- b. John-un nwukwu-i-ni?  
 John-TOP who-COP-QUE  
 ‘John is who?’

The example in (3a) can be a legitimate answer to the predication *what*-question in (5a); however, it cannot serve as a good answer to the *who*-question in (5b). This indicates that the pre-copula XP2 in the predicative copula construction is non-referential (i.e.,  $\langle e, t \rangle$ ). Needless to say, the subject XP1 in the predicative copula construction, for example, *John*, in (3a), is referential (i.e.,  $\langle e \rangle$ ), on the other hand. Given the semantic representation of the predicative copula in (4), the example in (3a) would then have the meaning composition as in (6) (see Partee 1987; Geist 2007):

- (6) a. a linguist:  $\lambda y[\text{linguist}(y)]$   
 b. is a linguist:  $\lambda P \lambda x[P(x)(\lambda y[\text{linguist}(y)])] \equiv \lambda x[\text{linguist}(x)]$   
 c. John is a linguist:  $\lambda x[\text{linguist}(x)](j) \equiv [\text{linguist}(j)]$

The resulting sentence can thus be paraphrased as “John has the property of being a linguist”.

As opposed to the predication use of the copula as in (3a), the copula in (3b) equates the two referents denoted by the subject XP1 and the pre-copula XP2. That is, the equative copula ensures that the subject XP1 and the pre-copula XP2 refer to the same entity. Since the pre-copula XP2 in the equative copula construction is referential, we can predict that the example in

(3b) can serve a legitimate answer to the *who*-question in (5b), but not to the *what*-question in (5a). This prediction is indeed borne out, as shown in the following:

- (7) a. A: Kim-un nwukwu-i-ni? B: Kim-un John-i-ta.  
           Kim-TOP who-COP-QUE Kim-TOP John-COP-DECL  
           ‘A: Who is Kim? B: Kim is John.’
- b. A: Kim-un mwues-i-ni? \*B: Kim-un John-i-ta.  
           Kim-TOP what-COP-QUE Kim-TOP John-COP-DECL  
           ‘A: What is Kim? \*B: Kim is John.’

The predicative copula construction and the equative copula construction also show different behavior with regard to the inversion possibility of the XP1 and the XP2. Consider the following examples:

- (8) a. \*enehakca-ka John-i-ta.  
           linguist-NOM John-COP-DECL  
           ‘A linguist is John.’
- b. John-i Kim-i-ta.  
           John-NOM Kim-COP-DECL  
           ‘John is Kim.’

The examples in (8a) and (8b) are the inverted versions of (3a) and (3b), respectively. The difference in grammaticality of these examples tells us that the non-referential XP2 in the predicative copula construction cannot be inverted with the subject XP1, while the referential XP2 in the equative copula construction can. Since the subject XP1 and the pre-copula XP2 are both referential in the equative copula construction, the subject of the inverted



equative copula construction example in (8b) can also be *wh*-questioned with *who*, as demonstrated in (9):

- (9)        nwu-ka    Kim-i-ni?  
               who-NOM Kim-COP-QUE?  
               ‘Who is Kim?’

The meaning of the equative use of the copula can then be represented as in (10):

- (10)         $\text{be}_{ident}: \lambda x \lambda y [y = x]$

This representation simply indicates that the equative copula ensures the identity relation between the two arguments of type  $\langle e \rangle$ .

With the meaning of the equative copula in hand, the equative copula construction example in (3b) would have the meaning composition as follows:

- (11) a.    is John:  $\lambda x \lambda y [y = x](j) \equiv \lambda y [y = j]$   
           b.    Kim is John:  $\lambda y [y = j](k) \equiv [k = j]$

Lastly, in the specificational copula construction example in (3c) the subject expression *the winner of the game* sets up a variable and the pre-copula XP2 *John* provides the value for the variable. That is, the specificational copula sentence in (3c) indicates that there is a winner (variable *x*) of the game and the pre-copula XP *John* specifies the variable introduced by the subject XP1.

One crucial difference between the predicative copula construction and the specificational copula construction in English can be seen in pronominalization facts, as pointed out by Mikkelsen (2002, 2005). It is well-known that the pronoun in the tag question always anaphorically refers back to the subject of the clause (Geist 2007: 99-100). Observe the contrast between (12a) and (12b):

- (12) a. John is a linguist, isn't he/\*it?  
 b. The winner of the game is John, isn't it/\*he?

These examples show that the personal pronoun *he* in (12a) is anaphorically related to the animate subject *John* of the clause, whereas the neuter pronoun *it* in (12b) is anaphorically related to the variable set up by the subject *the winner of the game* of the clause.

A similar observation is seen in Korean. In the specificational copula construction, the neuter singular pronominal subject *kukey* 'it.NOM' can appear to refer back to the variable introduced by the subject of the specificational copula clause (Kim, J.-B. 2016: 94).

- (13) A: ku kyengki-uy sungca-nun John-i-ta. B: kukey  
           the game-GEN winner-TOP John-COP-DECL it.NOM  
           John-i-lako?  
           John-COP-QUE?  
           'A: The winner of the game is John. B: Is it John?'

Note here that the subject of A's utterance has an animate referent. Nevertheless, the neuter singular pronominal subject *kukey* 'it.NOM' is used in B's utterance. The same does not apply to the predicative and equative copula constructions, as shown in (14):

- (14) a. A: John-un enehakca-i-ta. \*B: kukey enehakca-lako?  
           John-TOP linguist-COP-DECL it.NOM linguist-COP.QUE  
           'A: John is a linguist. \*B: Is it a linguist?'  
       b. A: Kim-i John-i-ta. \*B: kukey John-i-lako?  
           Kim-NOM John-COP-DECL it.NOM John-COP-QUE  
           'A: Kim is John. \*B: Is it John?'

The specificational copula also has the uniqueness presupposition effect. As an illustration, consider the English examples below:<sup>3</sup>

- (15) Who is defending their dissertation today?  
       a. John is.  
       b. It's John.  
       (16) a. Who is attending the defense today?  
           b. Mary is.  
           c. #It's Mary. [implies that Mary is the only person attending the defense]

---

<sup>3</sup>Stephen Wechsler helped me construct the examples.

As an answer to the question in (15), (15a) implies that John is one of those who are defending their dissertation, but (15b) implies that John is the only one who is defending his dissertation. Thus, both situations are plausible and the examples in (15a) and (15b) are acceptable. Now think about the situations denoted by the event in the question and answers in (16). Considering the general situation where more than one person attends a defense (i.e., a defender, more than one committee member, and some audience), as an answer to the question in (16), the example in (16a) is acceptable, but the one in (16b) sounds weird. Therefore, these examples show that the specificational copula triggers the uniqueness presupposition effect.

The same contrast is observed in Korean, as shown in (17):

- (17) a. A: onul nwuka tiphensu-lul ha-ni? B: kuken  
           today who.NOM defense-ACC do-QUE it.TOP  
           John-i-ya.  
           John-COP-DECL  
           ‘A: Who is defending their dissertation today? B: It is John.’
- b. A: onul nwuka tiphensu-ey chamsekha-ni? B: #kuken  
           today who.NOM defense-at attend-QUE it.TOP  
           John-i-ya.  
           John-COP-DECL  
           ‘A: Who is attending the defense today? B: #It is John.’

Adopting the view in Heycock and Kroch (1999), in order to capture the properties of the specificational copula I make use of the iota operator in representing the meaning of the definite subject in (3c).

- (18) the winner of the game:  $\iota x[\text{winner-of-the-game}(x)]$

The iota operator captures the uniqueness presupposition effect of the specificational copula with the following definition (Heycock and Kroch 1999; Kim, J.-B. 2013, 2016: 96):

$$(19) \quad \iota y[f(y)] \text{ denotes } \alpha \text{ iff } f(\alpha) \text{ AND } (\forall z)(f(z) \text{ iff } z \leq \alpha).$$

According to this,  $\iota x[\text{winner-of-the-game}(x)]$  denotes  $\alpha$  iff  $\alpha$  is a winner of the game and anyone who is a winner-of-the-game must be  $\alpha$  or part of  $\alpha$ . The iota operation interpretation enables us to regard the specificational copula in a similar way to the equative copula, as proposed by Heycock and Kroch (1999) and Kim, J.-B.(2016: 96). The main difference between them lies in the fact that in the specificational copula construction the subject XP1 introduces a variable and the pre-copula XP2 offers a value for it. Then, we would have the following meaning composition for (3c).

$$(20) \quad \text{is John: } \lambda x \lambda y[y = x](j) \equiv \lambda y[y = j]$$

$$\begin{aligned} &\text{The winner of the game is John: } \lambda y[y = j](\iota x[\text{winner-of-the-game}(x)]) \\ &\equiv [\iota x[\text{winner-of-the-game}(x)] = j] \end{aligned}$$

The resulting sentence would then have the meaning, “there is a unique/specific winner of the game and that winner of the game is John”.

### 3.2.2 Specificational Use of the Copula in the Korean Embedded Sluicing Construction

One of the most important claims that I make in this dissertation is that the copula in the Korean embedded sluicing construction has a specificational use and the idea can be extended to the other constructions dealt with in the dissertation. In this section, I show in what respects the canonical specificational copula construction and the Korean embedded sluicing construction with a copula behave the same and differently.

First, the canonical specificational copula construction and embedded sluicing construction with a copula in Korean behave the same in terms of the possibility to have a neuter singular pronoun *kukes* ‘it’ as their subject. As was noted above, the specificational copula construction in English and the one in Korean allow neuter singular pronouns ‘it’ and *kukey* ‘it.nom’, respectively, even when their antecedent is an animate entity.

- (21) a. A: The winner of the game is John. B: Is it John?
- b. A: ku kyengki-uy sungca-nun John-i-ta. B: kukey  
       the game-GEN winner-TOP John-COP-DECL it.NOM  
       John-i-lako?  
       John-COP-QUE  
       ‘A: The winner of the game is John. B: Is it John?’

In these English and Korean examples, the winner of the game in A’s utterances is an animate entity; however, a neuter pronoun is used in B’s utterances.

The same is observed in the Korean embedded sluicing construction, as shown below again:

- (22) John-i nwukwunka-lul manna-ass-nuntey, na-nun kukey  
 John-NOM someone-ACC meet-PST-but I-TOP it.NOM  
 nwukwu-i-nci molu-keyss-ta.  
 who-COP-QUE not.know-FUT-DECL  
 ‘John met someone, but I don’t know who it was.’

In this example, the correlate *nwukwunka-lul* ‘someone-ACC’ is an animate entity; nevertheless, the overt subject of the embedded sluicing clause is a neuter singular pronoun *kukey* ‘it-NOM’.

Next, the uniqueness presupposition effect is seen on the subject in both the constructions. For instance, A’s utterance in the canonical specificational copula construction example in (21b) implies that there is a unique/specific winner of the game and it is John. Similarly, the embedded sluicing construction example in (22) even without the neuter singular pronominal subject *kukey* ‘it.NOM’ implies that there is a specific/unique person John met and the speaker does not know who it was.

In addition, as demonstrated in (23), the canonical specificational copula can be used in its bare form or with the relevant tense information on it and the same holds true for the copula in the Korean embedded sluicing construction.

- (23) a. ecey kyengki-uy sungca-nun John-i-(ess)-ta.  
 yesterday game-GEN winner-TOP John-COP-PST-DECL  
 ‘The winner of yesterday’s game is/was John.’  
 b. John-i ecey nwukwunka-lul manna-ass-nuntey, na-nun  
 John-NOM yesterday someone-ACC meet-PST-but I-TOP

nwukwu-i-(ess)-nunci molu-keyss-ta.  
 who-COP-PST-QUE not.know-FUT-DECL  
 ‘John met someone yesterday, but I don’t know who.’

In the canonical specificational copula construction example in (23a), the copula can be used in its bare form with no specific tense information, although the event described by the subject NP happened in the past ‘yesterday’. The copula in the example can also be overtly marked with a past tense morpheme *-ess* to match the tense information described by the event denoted by the subject NP. In the same vein, in the Korean embedded sluicing construction example in (23b) the copula can appear in its bare form or with an overt past tense morpheme to match the tense information of the event depicted by the antecedent clause ‘John met someone yesterday’.

We can also see the same behavior between the canonical specificational copula construction and the Korean embedded sluicing construction in terms of the lack of a grammatical case marker on the pre-copula XP2, as in (24):

- (24) a. ku kyengki-uy sungca-nun Mary-{\*ka/\*lul}-i-ta.  
           the game-GEN winner-TOP Mary-NOM/ACC-COP-DECL  
           ‘The winner of the game is Mary.’
- b. John-i ecey nwukwunka-lul manna-ass-nuntay, na-nun  
           John-NOM yesterday someone-ACC meet-PST-but I-TOP  
           nwukwu-(\*lul)-i-nci molu-keyss-ta.  
           who-ACC-COP-QUE not.know-FUT-DECL  
           ‘John met someone yesterday, but I don’t know who.’
- c. nwukwunka-ka nay phica-lul mek-ess-nuntay, na-nun  
           someone-NOM my pizza-ACC eat-PST-but I-TOP



{nwukwu/\*nwuka}-i-nci kwungkumha-ta.  
 who/who.NOM-COP-QUE wonder-DECL  
 ‘Someone ate my pizza, and I wonder who.’

The example in (24a) shows that the canonical specificational copula construction does not allow its pre-copula XP2 to take a nominative or accusative case marker. Similarly, the examples in (24b) and (24c) show that the pre-copula XP in the Korean embedded sluicing construction cannot have a nominative or accusative case marker, although its correlate has a grammatical case marker.

Note, however, that this restriction is a general constraint on copula constructions. As illustrated below, the other types of copula constructions exhibit the same behavior.

- (25) a. John-un haksayng-(\*ka/\*ul)-i-ta.  
           John-TOP student-NOM/ACC-COP-DECL  
           ‘John is a student.’  
       b. Kim-i John-(\*ka/\*ul)-i-ta.  
           Kim-NOM John-NOM/ACC-COP-DECL  
           ‘Kim is John.’

Therefore, the lack of the grammatical case marker on the *wh*-expression in the Korean embedded sluicing construction is due to the fact that it serves as the XP2 in a copula construction.

Thus far, we have seen that the Korean embedded sluicing construction with a copula is similar to the canonical specificational copula construction in some respects such as the possible neuter singular pronominal subject *kukey* ‘it.NOM’, the uniqueness presupposition effect, the optional tense morpheme

on the copula, and the lack of a grammatical case marker on the pre-copula XP2. Once we assume that the copula is the embedded sluicing clause has a specificational use, the properties that they share are then easily explained.

However, there are some differences between the Korean embedded sluicing construction with a copula and the canonical specificational copula construction. For instance, the canonical specificational copula construction does not allow a semantic case marker to appear on the pre-copula XP2; on the other hand, the *wh*-expression in the pre-copula position can have a semantic case marker in the embedded sluicing construction.

- (26) a. \*John-i senmwul-ul pat-un salam-hantheyse-nun  
 John-NOM present-ACC receive-MOD person-from-TOP  
 Mary-hantheyse-i-ta.  
 Mary-from-COP-DECL  
 ‘(lit.) \*From the person who John received a present is from Mary.’
- b. John-i nwukwunka-hantheyse senmwul-ul pat-ass-nuntey,  
 John-NOM someone-from present-ACC receive-PST-but  
 na-nun (kukey) nwukwu-hantheyse-i-nci molu-keyss-ta.  
 I-TOP it.NOM who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present from someone, but I don’t know from whom (it was).’

The presumed specificational copula construction example in (26a) is ill-formed, even though the specificational copula attempts to link a semantic case marked NP subject and a pre-copula NP with the same semantic case marker. On the other hand, in the embedded sluicing construction example in (26b), the *wh*-expression in the pre-copula XP2 position takes the same semantic case marker as its correlate in the antecedent clause. I assume that this difference

arises because the embedded sluicing construction has a correlate in the antecedent clause that the (possibly phonologically silent) pronominal subject can be anaphoric to, while in the canonical specificational copula construction such an anaphoric relation does not exist and the strict categorial restriction holds. With this in mind, consider the following example:<sup>4</sup>

- (27)      A: John-i      nwukwu-hantheyse senmwul-ul pat-ass-ni?  
                  John-NOM who-from                   present-ACC receive-PST-QUE  
             B: kuken Mary-hantheyse-ya.  
                  it.TOP Mary-from-COP.DECL  
             ‘A: From whom did John receive a present? B: It was from Mary.’

In this mini question-answer dialogue, B’s response involves a specificational copula and we can assume that the pronominal subject *kuken* ‘it.TOP’ anaphorically refers back to the variable introduced by the correlate with a semantic case marker in A’s question and the specificational copula links the variable to the value denoted by the pre-copula XP2 with the same semantic case marker. The same is seen in the embedded sluicing clause in (26b).

We have also noted that in the merger type, the semantic case marker is optional, so examples like the following are possible.

- (28)      John-i      nwukwunka-hantheyse senmwul-ul pat-ass-nuntay,  
                  John-NOM someone-from                   present-ACC receive-PST-but  
             na-nun (kukey) nwukwu-i-nci molu-keyss-ta.  
             I-TOP it.NOM who-COP-QUE not.know-FUT-DECL  
             ‘John received a present from someone, but I don’t know who (it was).’

---

<sup>4</sup> *Ya* is a combination of a positive copula *-i-* and an informal declarative ending *-a*. I use this form to make casual conversation cases sound more natural.

In this example, the correlate has a semantic case marker, but the pre-copula *wh*-expression in the embedded sluicing clause does not. This is not explained by the canonical specificational construction, as the ungrammaticality of the presumed example (29) shows:

- (29) \*John-i senmwul-ul pat-un salam-hantheyse-nun  
 John-NOM present-ACC receive-MOD person-from-TOP  
 Mary-i-ta.  
 Mary-from-COP-DECL  
 ‘(lit.) From the person who John received a present is Mary.’

However, as shown in the following mini question-answer pair, once we have a proper antecedent clause, this becomes possible.

- (30) A: John-i nwukwunka-hantheyse senmwul-ul  
 John-NOM who-from present-ACC  
 pat-ass-ni? B: kuken Mary-ya.  
 receive-PST-QUE it.TOP Mary-COP.DECL  
 ‘A: From whom did John receive a present? B: It was Mary.’

In this example, A’s question has a source-denoting NP. In B’s response, however, the pronominal subject *kuken* ‘it.TOP’ anaphorically refers back to the complement of the source case marker, namely, *nwukwunka*, which sets up a variable. The specificational copula in B’s response links the pronominal subject and the pre-copula XP, *Mary*, which provides a value for it. The same specificational relation is seen in the embedded sluicing construction example in (28). Therefore, the optionality of the semantic case marker on the *wh*-expression in the merger type of the Korean embedded sluicing construction is

due to the flexibility of the entity in the antecedent clause that the pronominal subject of the specificational copula construction can anaphorically refer back to.

Something similar can be seen with an AdvP in the pre-copula XP2 position. Observe the contrast in grammaticality between (31a) and (31b):

- (31) a. \*John-i talli-nun cengto-nun ppalli-i-ta.  
 John-NOM run-MOD degree-TOP fast-COP-DECL  
 ‘\*The degree that John runs is fast.’
- b. John-i ppalli talli-n-ta-ko tul-ess-nuntey, na-nun  
 John-NOM fast run-PRES-DECL-COMP hear-PST-but I-TOP  
 (kukey) elmana ppalli-i-nci kwungkumha-ta.  
 it.NOM how fast-COP-QUE wonder-DECL  
 ‘(lit.) I heard that John runs fast, and I wonder how fast (it is).’

As in (31a), an AdvP cannot serve as a pre-copula XP2. This is due to the fact that there is no subject that is anaphoric to the variable and the category of the variable introduced by the subject XP1 (i.e., NP) is different from that of the value in the pre-copula XP2 position (i.e., AdvP). However, an AdvP can serve as a *wh*-expression in the pre-copula position in the embedded sluicing construction example in (31b). Here, the pronominal subject is anaphoric to the variable introduced by the AdvP correlate in the antecedent clause and the specificational copula links the pronominal subject and the pre-copula AdvP. Again, this idea is supported by a question-answer pair as in the following:

- (32) A: John-i elmana ppali talli-ni? B: kuken acwu  
 John-NOM how fast run-QUE it.TOP very

ppali-ya.  
 fast-COP.DECL  
 ‘A: How fast does John run? B: It is very fast.’

In this example, the neuter singular pronominal subject *kuken* ‘it.TOP’ in B’s response is anaphoric to the variable introduced by the AdvP in A’s question and the specificational copula links the pronominal subject to the AdvP value in the pre-copula XP2 position.

Another difference between the canonical specificational copula construction and the Korean embedded sluicing construction concerns multiple phrases in the pre-copula XP2 position. Consider the examples in (33) and (34):

- (33) a. \*ttayli-n salam-un John-i Mary-lul-i-ta.  
 hit-MOD person-TOP John-NOM Mary-ACC-COP-DECL  
 ‘(int.) There were people x and y such that x hit y and it was John for x and Mary for y.’
- b. senmwul-ul pat-un salam-un John-i  
 present-ACC receive-MOD person-TOP John-NOM  
 Mary-hantheyse-i-ta.  
 Mary-from-COP-DECL  
 ‘(int.) There were people x and y such that x received a present from y and it was John for x and y for Mary.’
- (34) a. nwukuwnka-ka nwukwunka-lul ttayli-ess-ta-ko  
 someone-NOM someone-ACC hit-PST-DECL-COMP  
 tul-ess-nuntay, na-nun (kukey) nwuka nwukwu-lul-i-nci  
 hear-PST-but I-TOP it.NOM who.NOM who-ACC-COP-QUE  
 kwungkumha-ta.  
 wonder-DECL  
 ‘(lit.) I heard that someone hit someone, and I wonder who who (it was).’

- b.    nwukwunka-ka nwukwunka-hantheyse senmwul-ul  
       someone-NOM someone-from                    present-ACC  
       pat-ass-ta-ko                    tul-ess-nuntey, na-nun (kukey) nwuka  
       receive-PST-DECL-COMP hear-PST-but I-TOP it.NOM who.NOM  
       nwukwu-hantheyse-i-nci kwungkumha-ta.  
       who-from-COP-QUE            wonder-DECL  
       ‘(lit.) I heard that someone received a present from someone, and  
       I wonder who from whom (it was).’

The canonical specificational copula construction examples in (33) are ungrammatical, although the two variables are introduced by the subject XP1 and the XP2 consisting of two phrases provides their values. On the other hand, the Korean embedded sluicing construction examples in (34) are grammatical even with two *wh*-expressions in the pre-copula position. This difference is also attributed to the the difference between the absence of the subject that is anaphoric to the bundle of variables and the presence of the subject that is anaphoric to the bundle of variables. In the presumptive canonical specificational copula construction examples in (33), the subject XP1 introduces two variables on its own but there is no subject that refers back to those variables; in contrast, in the embedded sluicing construction examples in (34), a pronominal subject which can be overtly realized as *kukey* ‘it.NOM’ anaphorically refers back to the bundle of variables set by the correlates in the antecedent clause and the specificational use of the copula links it to the *wh*-expressions in the pre-copula position which provide values for the variables. Again, it is not really special for the sluicing construction *per se*. The same is seen in the following mini question-answer pair.

- (35) A: *nwuka nwukwu-hantheyse senmwul-ul pat-ass-ni?* B:  
 who-NOM who-from present-ACC receive-PST-QUE  
*kuken John-i Mary-hantheyse-ya.*  
 it.TOP John-NOM Mary-from-COP.DECL  
 ‘A: Who received a present from whom? B: It was John from Mary.’

In A’s question two variables are introduced. In B’s response the neuter singular pronominal subject *kuken* ‘it.TOP’ anaphorically refers back to this bundle of variables and the specificational copula links the pronominal subject and the two phrases in the pre-copula position that provide the values for the variables introduced by the *wh*-phrases in A’s question.

Notice also that the pronominal subject in the embedded sluicing construction can be overtly realized as the singular, neuter singular pronominal expression *kukey* ‘it.NOM’, but not as its plural counterpart *kukes-tul-i* ‘they-NOM’, as demonstrated in (36):

- (36) *nwukwunka-ka nwukwunka-hantheyse senmwul-ul*  
 someone-NOM someone-from present-ACC  
*pat-ass-ta-ko tul-ess-nuntay, na-nun*  
 receive-PST-DECL-COMP hear-PST-but I-TOP  
 {*kukey*/\**kukes-tul-i*} *nwuka nwukwu-hantheyse-i-nci*  
 it.NOM/it-PL-NOM who.NOM who-from-COP-QUE  
*kwungkumha-ta.*  
 wonder-DECL  
 ‘I heard that someone received a present from someone, and I wonder {it/\*they} are who from whom.’

This further confirms the idea that the copula in this construction has a specificational use; otherwise, the plural subject should be used. In addition, as was



discussed in Section 2.4 of Chapter 2, all the multiple *wh*-expressions in the embedded sluicing construction must have the same grammatical and semantic case markers as their correlates. I assume that a specificational relation holds only for the cases where all the *wh*-expressions retain their grammatical and semantic case markers for semantic and pragmatic reasons; otherwise, they give rise to irrelevant interpretations or simply become ungrammatical.

Lastly, the canonical specificational copula construction can have a negative copula form; however, the negative copula form cannot appear in the embedded sluicing construction in Korean.

- (37) a. ku kyengki-uy sungca-nun Mary-ka ani-ta.  
           the game-GEN winner-TOP Mary-NOM NEG.COP-DECL  
           ‘The winner of the game is not Mary.’
- b. \*nwukwunka-ka swuep-ey o-ci anh-ass-nuntey, na-nun  
      someone-NOM class-to come-CONN not-PST-but I-TOP  
      nwuka ani-nci molu-keyss-ta.  
      who.NOM NEG.COP-QUE not.know-FUT-DECL  
      ‘(int.) Someone didn’t come to class, but I don’t know who.’
- c. nwukwunka-ka swuep-ey o-ci anh-ass-nuntey, na-nun  
      someone-NOM class-to come-CONN not-PST-but I-TOP  
      nwukwu-i-nci molu-keyss-ta.  
      who-COP-QUE not.know-FUT-DECL  
      ‘(int.) Someone didn’t come to class, but I don’t know who.’

The canonical specificational copula construction is possible with a negative copula form as in (37a) and the negative copula requires its complement to take the nominative marker unlike the positive copula. On the other hand, even when the antecedent clause has a negative predicate, the embedded sluicing

construction cannot have a negative copula and it still needs to have a positive copula as shown in (37b) and (37c). To figure out the contrast here, let us think about the intended meanings for these examples. The canonical copula construction example in (37a) implies that there is a specific/unique winner of the game and that winner of the game is not Mary. Nothing is odd about this meaning composition. On the other hand, the grammatical example in (37c) implies that there is a specific/unique person who didn't come to class and the speaker does not know who that person was. It does not imply that the speaker does not know who that person was not. This explains why only a positive copula is used, but not a negative one, even when the antecedent clause has a negative predicate in the embedded sluicing construction. Therefore, given the semantics, the non-use of the negative copula in the embedded sluicing construction is not surprising, as can be further supported by the ungrammaticality of the example below, which contains an overt subject *kukey* 'it.NOM', and the oddness of its English translation.

- (38)        \*nwukwunka-ka swuep-ey o-ci                    anh-ass-nuntey, na-nun  
               someone-NOM class-to come-CONN not-PST-but    I-TOP  
               kukey nwuka    ani-nci                    molu-keyss-ta.  
               it.NOM who.NOM NEG.COP-QUE not.know-FUT-DECL  
               '#Someone didn't come to class, but I don't know who it wasn't.'

I have thus far discussed the clausal status of the embedded sluicing construction and similarities and differences between the canonical specificational copula construction and the embedded sluicing construction with a copula in Korean. Some properties of the embedded sluicing construction

such as the possibility to have a neuter singular pronominal subject *kukey* ‘it.NOM’, the uniqueness presupposition effect, the optional tense morpheme on the copula, and the lack of a grammatical case marker on the *wh*-expression in the pre-copula position naturally follow, once we assume that the construction is a type of subject-predicate construction that involves a specificational copula. Other properties of the embedded sluicing construction that are different from those of the canonical specificational copula construction can also be explained, as the (possibly phonologically null) pronominal subject in the embedded sluicing construction anaphorically refers back to a variable or a bundle of variables introduced in the antecedent clause and the specificational copula links the pronominal subject and the *wh*-expression(s). They include the optionality of the semantic case marker on the pre-copula XP2 and an AdvP and multiple phrases in the pre-copula XP2 position. I have shown this in comparison with mini question-answer pair examples. Furthermore, given the semantics of the sluicing construction, unlike the canonical specificational copula construction, the impossibility to use a negative copula in the embedded sluicing construction is accounted for. Thus, all these indicate that the embedded sluicing construction with a copula in Korean is a type of subject-predicate construction, where the (possibly phonologically silent) pronominal subject that is anaphoric to a variable or a bundle of variables introduced by the correlate(s) in the antecedent clause is linked to the *wh*-expression(s) by means of a specificational use of the copula.

### 3.3 Copulaless Sluicing Clause

In this section, I discuss the clausal status of the Korean embedded sluicing construction that cannot occur with a copula. First, as background information note that in Korean adjectival expressions can serve as predicates on their own, just like verbs. Consider the examples in (39):

- (39) a. Mary-nun yeppu-(\*i)-ess-ta.  
Mary-TOP pretty-COP-PST-DECL  
'Mary was pretty.'
- b. Mary-ka phica-lul mek-ess-ta.  
Mary-NOM pizza-ACC eat-PST-DECL  
'Mary ate pizza.'

As opposed to English, Korean adjectival expressions function as predicates on their own without a linking verb like *be* and their co-occurrence with a copula actually renders them ungrammatical, as illustrated in (39a). As can be seen above, in Korean adjectival expressions like *yeppu* 'pretty' and typical verbs like *mek*- 'eat' behave the same in that they both can have an overt past tense morpheme *-ess* and a mood marker, when they are used as predicates (Kim, J.-B. 2016).

However, the two exhibit different behavior when they are used in their present tense forms. Compare the examples below (Kim, J.-B. 2004: 41, 2016):

- (40) a. Mary-nun yeppu-(\*n)-ta.  
Mary-TOP pretty-PRES-DECL  
'Mary was pretty.'

- b. Mary-nun enehak-i coh-(\*nun)-ta.  
 Mary-TOP linguistics-NOM fond-PRES-DECL  
 ‘Mary is fond of linguistics.’
- (41) a. Mary-nun cacwu wus-\*(nun)-ta.  
 Mary-TOP often smile-PRES-DECL  
 ‘Mary smiles often.’
- b. Mary-ka phica-lul mek-\*(nun)-ta.  
 Mary-NOM pizza-ACC eat-PRES-DECL  
 ‘Mary eats pizza.’

The present tense morpheme *-(nu)n* can be used with typical verbs as in (41), but not with adjectival expressions as in (40), irrespective of whether they are used intransitively or transitively. Kim (2004) assumes the supertype category *verbal* for adjectival expressions and typical verbs and distinguishes between them with the feature [STATIVITY].

Let us now turn back to the embedded sluicing construction. As was seen in the previous chapter, when the *wh*-expression is an AdjP, a copula cannot appear. Consider the example below again:

- (42) John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD girl-ACC  
 manna-ass-ta-ko tul-ess-nuntay, elmana yeppu-(\*i)-nci  
 meet-PST-DECL-COMP hear-PST-but how pretty-COP-QUE  
 kwungkumha-ta.  
 wonder-DECL  
 ‘I heard that John met a pretty woman on the weekend and I wonder how pretty.’

The Korean grammar predicts that if the AdjP *wh*-expression is used as a predicate on its own in this construction, it cannot co-occur with a copula. This is indeed what we see here.

The clausal status of the sluice here is not hard to prove. First, the sluice can have an overt subject. Observe the following example again:

- (43) John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD girl-ACC  
 manna-ass-ta-ko tul-ess-nuntey, (\*kukey/kunye-ka) elmana  
 meet-PST-DECL-COMP hear-PST-but it.NOM/she-NOM how  
 yeppu-nci molu-keyss-ta.  
 pretty-QUE not.know-FUT-DECL  
 ‘(int.) I heard that John met a pretty woman on the weekend, but  
 I don’t know how pretty (\*it is/she is).’

In this example, we can have an overt subject, *kunye-ka* ‘she-NOM’, in the embedded sluicing construction, but not a neuter one *kukey* ‘it.NOM’. This then tells us that the pronominal subject must be anaphoric to “the woman” by itself and there is no specification relation between the pronominal subject and the AdjP *wh*-expression. This is simply an instance of a subject-predicate construction, where the *wh*-AdjP denotes a property of the (possibly phonologically null) pronominal subject.

Since the AdjP *wh*-expression serves as a predicate on its own in the construction under discussion, the fact that only a predicative AdjP can occur in this position is naturally accounted for, even when the correlate is used attributively in the antecedent clause, blocking examples like the following:

- (44) \*John-i olayn chinkwu-lul manna-ass-nuntey, na-nun  
 John-NOM longtime friend-ACC meet-PST-but I-TOP  
 elmana olayn-ci molu-n-ta.  
 how longtime-QUE not.know-PRES-DECL  
 ‘\*John met a long-time friend, but I don’t know how long-time.’

The adjectival expression *olayn* ‘longtime’ only has an attributive use, as was discussed in the previous chapter. This adjectival expression is used within an NP in the antecedent clause here but the *wh*-AdjP sluice with it is not possible. The ungrammaticality of examples like this then further supports the claim that the Korean embedded sluice is indeed a subject-predicate clause.

The Korean embedded sluicing construction examples with an AdjP *wh*-expression that we have looked at in this section suggest that they are instances of a subject-predicate construction, where the (possibly phonologically null) pronominal subject should find an expression that it can be anaphoric to from the antecedent clause and the *wh*-expression denotes a property of the subject.

Thus far, I have shown that the sluice in Korean involves some kind of subject-predicate construction with a (possibly phonologically silent) pronominal subject, regardless of whether a copula occurs or not. More specifically, when the copula occurs with one *wh*-expression or more, they form a [VERBAL +] predicate and the subject is linked to the *wh*-expression(s) by means of a specificational copula. Here, the pronominal subject is anaphoric to a variable or a bundle of variables introduced by the indefinite correlate(s) in the antecedent clause and it needs to be the neuter singular pronoun *kukey*

‘it.NOM’ when it is overtly realized. On the other hand, an adjectival expression can serve as a [VERBAL +] category on its own and the addition of a copula is disallowed. In this case, the pronominal subject should find a nominal expression in the antecedent clause to which it is anaphoric and the AdjP *wh*-expression denotes a property of the pronominal subject.

The proposal that I made does not posit any syntactically elided structure from the antecedent clause to license the embedded sluicing construction in Korean, unlike the previous analyses that resort to movement operations such as the movement + PF deletion analysis, the pseudo-cleft analysis, and the copula-accompanying full *kes*-clause analysis. In addition, it does not assume that a copula is always necessary in the construction. The analysis provided here fares better than all the previous analyses of the Korean embedded sluicing construction, accounting for more of its grammatical properties with a simpler and uniform explanation.

### 3.4 Formal Representations

In this section, I offer formal representations of some representative Korean embedded sluicing construction examples, adopting the framework of HPSG (Head-Driven Phrase Structure Grammar), which makes the most of discourse/context information along with appropriate feature specifications, to account for its grammatical properties.



### 3.4.1 Basics and Merger Type with a Single *Wh*-phrase

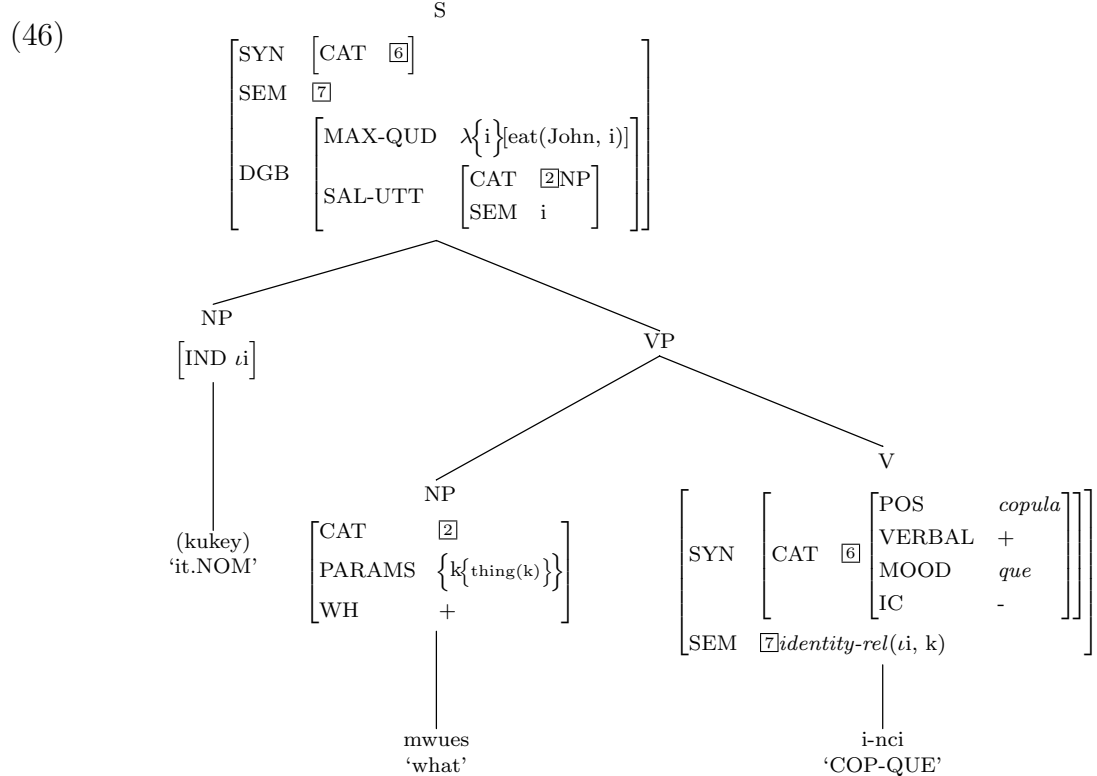
Here, I first discuss the merger type examples with a single *wh*-expression. Consider first a simple embedded sluicing construction example in (45a) and the DGB information of the antecedent clause in (45b).

- (45) a. John-i mwuenka-lul mek-ess-nuntey, na-nun (kukey)  
 John-NOM something-ACC eat-PST-but, I-TOP it.NOM  
 mwues-i-nci molu-keyss-ta.  
 what-COP-QUE not.know-FUT-DECL  
 ‘John ate something, but I don’t know what (it was).’

- b. Uttering ‘John ate something’:

$$\left[ \begin{array}{c} \text{DGB} \\ \left[ \begin{array}{c} \text{MAX-QUD} \quad \lambda\{i\}[\text{eat}(\text{John}, i)] \\ \text{SAL-UTT} \quad \left[ \begin{array}{c} \text{CAT} \quad \text{NP}[\text{acc}] \\ \text{SEM} \quad i \end{array} \right] \end{array} \right] \end{array} \right]$$

In this example, the antecedent clause “John ate something” adds to the Dialogue GameBoard (DGB). The indefinite expression “something” is the ‘Salient Utterance’ that contributes to the NP and the referential index *i* which is bound in the MAX-QUD. The main point here is that the (possibly phonologically null) pronominal subject *kukey* ‘it.NOM’ is anaphoric to the variable introduced by the indefinite ‘Salient Utterance’ of the discourse. Now all we need is a rule of Korean grammar that states that there is a kind of specificational copula clause, where the subject is a pronoun that is anaphoric to the variable introduced by the ‘Salient Utterance’. The embedded sluicing clause would then be represented as a tree structure in the following:



In this structure, the sluice is a kind of subject-predicate construction, where the (possibly phonologically null) pronominal subject is an iota one and the predicate property comes from the [VERBAL +] feature of the copula. Here, [IC −] in the copula indicates that it is not an independent clause and the *que* value in the MOOD feature shows that it is in the question mood due to the embedded interrogative complementizer *-nci*. The specificational copula functions to link/identify the iota subject (i.e., *kukey* ‘it.NOM’ when overtly realized) with the pre-copula expression and ensures an identity relation between the two. The iota subject anaphorically refers back to the variable introduced by the SAL-UTT (i.e., *something*) in the DGB information for *John ate some-*

*thing*. The pre-copula expression is *what*, whose index is *k*, and it denotes a thing. Given the sluice is embedded by the predicate ‘not.know’, the second clause in (45a) will then be interpreted as “the speaker does not know what the unique/specific *x* is such that John ate *x*”.

Let us now consider the examples with a semantic case marked correlate in the antecedent clause. In those examples, the *wh*-expression can optionally have a semantic case marker.

- (47) John-i nwukwunka-hantheyse senmwul-ul pat-ass-nuntay,  
 John-NOM someone-from present-ACC receive-PST-but,  
 na-nun (kukey) nwukwu-(hantheyse)-i-nci molu-keyss-ta.  
 I-TOP it.NOM who-from-COP-QUE not.know-FUT-DECL  
 ‘John received a present from someone, but I don’t know (from)  
 whom (it was).’

I showed that in examples like this, the pronominal subject can anaphorically refer back to the variable introduced by the source phrase with a semantic case marker (e.g., *nwukwunka-hantheyse* ‘someone-from’) or the variable introduced by the complement of the source case marker (e.g., *nwukunka* ‘someone’). This means that it can have different DGB representations, as shown in the following:

- (48) Uttering ‘John received a present from someone’:

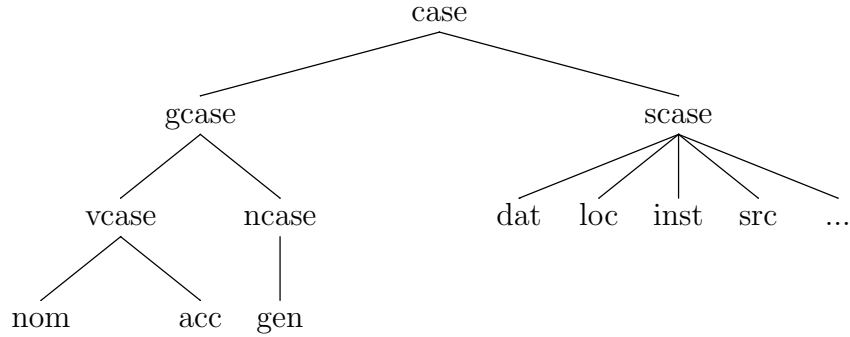
$$\text{a. } \left[ \begin{array}{c} \text{DGB} \\ \left[ \begin{array}{cc} \text{MAX-QUD} & \lambda \{i_{\{\text{source}(i)\}}\} [\text{receive}(\text{John}, \text{present}, i)] \\ \text{SAL-UTT} & \left[ \begin{array}{cc} \text{CAT} & \text{NP}[\text{src}] \\ \text{SEM} & i \end{array} \right] \end{array} \right] \end{array} \right]$$

$$\text{b. } \left[ \begin{array}{c} \text{DGB} \left[ \begin{array}{cc} \text{MAX-QUD} & \lambda\{i_{\{\text{person}(i)\}}\}[\text{receive-from}(\text{John}, \text{present}, i)] \\ \text{SAL-UTT} & \left[ \begin{array}{cc} \text{CAT} & \text{NP} \\ \text{SEM} & i \end{array} \right] \end{array} \right] \end{array} \right]$$

In the DGB information in (48a), the SAL-UTT is the source-denoting NP with the relevant MAX-QUD; on the other hand in the DGB information in (48b), the SAL-UTT is the complement NP of the source case marker. When the pronominal subject in the sluice anaphorically refers back to variable introduced by the SAL-UTT in (48a), the *wh*-expression also must have the source semantic case marker. In contrast, when it refers back to variable introduced by the SAL-UTT in (48b), the *wh*-expression must lack the semantic case marker.

At this point, let me make some notes about the case facts about Korean embedded sluicing construction examples. In (45a), the *wh*-expression in the pre-copula position cannot have an accusative case marker, even though its correlate has one. This is due to the general constraint of copula constructions, as was noted above. This is not a problem in the present system, once we assume the Korean case system hierarchy (Kim and Choi 2004: 886):

(49)



Here, *gcase* stands for grammatical case while *scase* stands for semantic case. The grammatical case (*gcase*) is further distinguished into *vcase* (verbal case) and *ncase* (nominal case), where the former has NOM and ACC and the latter has GEN. On the other hand, the subtypes of *scase* differ, depending on the semantic/thematic role that a nominal takes. One crucial property of this kind of hierarchical case system in Korean is that a supertype subsumes all its subtypes. This means that *gcase* subsumes all its subtypes NOM, ACC, and GEN, while *scase* subsumes all its subtypes including DAT, LOC, INST, and SRC. For instance, a bare form *wh*-expression *mwues* ‘what’ in the embedded sluicing clause and its correlate with an accusative case marker *mwuenka-lul* ‘something-ACC’ can be represented in terms of simple feature structures as in (50):

$$(50) \text{ a. } \left[ \begin{array}{ll} \text{FORM} & \langle mwues \rangle \\ \text{SYN} & \left[ \text{CAT} \left[ \begin{array}{ll} \text{POS} & nominal \\ \text{GCASE} & gcase \end{array} \right] \right] \end{array} \right]$$

$$\text{b. } \left[ \begin{array}{cc} \text{FORM} & <mwuenka-lul> \\ \text{SYN} & \left[ \begin{array}{cc} \text{CAT} & \left[ \begin{array}{cc} \text{POS} & \textit{nominal} \\ \text{GCASE} & \textit{acc} \end{array} \end{array} \right] \end{array} \right] \end{array} \right]$$

Since there is a subsumption relation between the GCASE value (i.e., ACC) and that of the *wh*-expression (i.e., GCASE), they can be unified with no case feature conflict (Kim, J.-B. 2015: 280-281).

There is no case feature conflict between the correlate and the *wh*-expression in the example with the DGB information in (48a), since both the correlate and the *wh*-expression have the identical source case value. The example in (48b) is fine as well in terms of case subsumption relation between the correlate and the *wh*-expression, since both have the *gcase* and *scase*.

The Korean case system hierarchy along with the analysis proposed here further enables us to explain why the embedded sluicing construction disallows voice mismatches and case/argument alternations. Consider the examples below again:

- (51) a. \*nwukwunka-ka ku pemin-ul cap-ass-nuntay, na-nun  
 someone-NOM the criminal-ACC catch-PST-but I-TOP  
 (kukey) nwukwu-eykey-i-nci molu-keyss-ta.  
 it.NOM who-DAT-COP-QUE not.know-FUT-DECL  
 ‘\*Someone caught the criminal, but I don’t know by whom (it was).’
- b. \*John-i pyeng-ey mwuenka-lul chaywu-ess-nuntay, na-nun  
 John-NOM bottle-LOC something-ACC fill-PST-but I-TOP  
 (kukey) mwues-ulo-i-nci molu-keyss-ta.  
 it.NOM what-with-COP-QUE not.know-FUT-DECL  
 ‘\*John filled something into the bottle, but I don’t know with what (it was).’

In (51a) the *wh*-expression has a semantic case marker *-eykey* ‘by/to’ and it corresponds to an oblique complement in a passive voice sentence. Then, the pronominal subject must refer back to the variable introduced by the correlate with the semantic case marker in order for a specificational relation to hold. However, its overt correlate in the antecedent clause has a nominative case marker *-ka* and it functions as a subject in an active voice sentence. Therefore, a specificational relation cannot hold. Similarly, in (51b) the *wh*-expression has an instrumental case marker *-ulo* ‘with’ and it corresponds to an oblique complement. The pronominal subject then must refer back to the variable introduced by the correlate with the semantic case marker but its overt correlate in the antecedent clause has an accusative case marker *-lul* and it serves as a direct object. Thus, a specificational relation does not hold. Now consider the grammatical information of those nominal expressions represented in (52):

- (52) a. 
$$\left[ \begin{array}{cc} \text{FORM} & \langle \textit{nwukwu-eykey} \rangle \\ \text{SYN} & \left[ \text{CAT} \left[ \begin{array}{cc} \text{POS} & \textit{nominal} \\ \text{SCASE} & \textit{dat} \end{array} \right] \right] \end{array} \right] \left[ \begin{array}{cc} \text{FORM} & \langle \textit{nwukwunka-ka} \rangle \\ \text{SYN} & \left[ \text{CAT} \left[ \begin{array}{cc} \text{POS} & \textit{nominal} \\ \text{GCASE} & \textit{nom} \end{array} \right] \right] \end{array} \right]$$
- b. 
$$\left[ \begin{array}{cc} \text{FORM} & \langle \textit{mwues-ulo} \rangle \\ \text{SYN} & \left[ \text{CAT} \left[ \begin{array}{cc} \text{POS} & \textit{nominal} \\ \text{SCASE} & \textit{ins} \end{array} \right] \right] \end{array} \right] \left[ \begin{array}{cc} \text{FORM} & \langle \textit{mwuenka-lul} \rangle \\ \text{SYN} & \left[ \text{CAT} \left[ \begin{array}{cc} \text{POS} & \textit{nominal} \\ \text{GCASE} & \textit{acc} \end{array} \right] \right] \end{array} \right]$$

In these examples, the case values of the *wh*-expression and its correlate are different and they are not in the subsumption relation. Therefore, these voice

mismatching cases and case/argument alternation cases are ruled out, because no specificational relation holds between the pronominal subject and the *wh*-expression and no case value subsumption relation holds between the *wh*-expression and its correlate as well.

Let us then consider an example of the Korean embedded sluicing construction without a copula. Uttering the antecedent clause of the example in (53a) would invoke the DGB information as in (53b):

- (53) a. John-i yeppu-n yeca-lul manna-ass-ta-ko  
 John-NOM pretty-MOD woman-ACC meet-PST-DECL-COMP  
 tul-ess-nuntey, na-nun (kunye-ka) elmana yeppu-nci  
 hear-PST-but I-TOP she-NOM how pretty-QUE  
 kwungkumha-ta.  
 wonder-DECL  
 ‘I heard that John met a pretty woman but I don’t know how pretty (she is).’

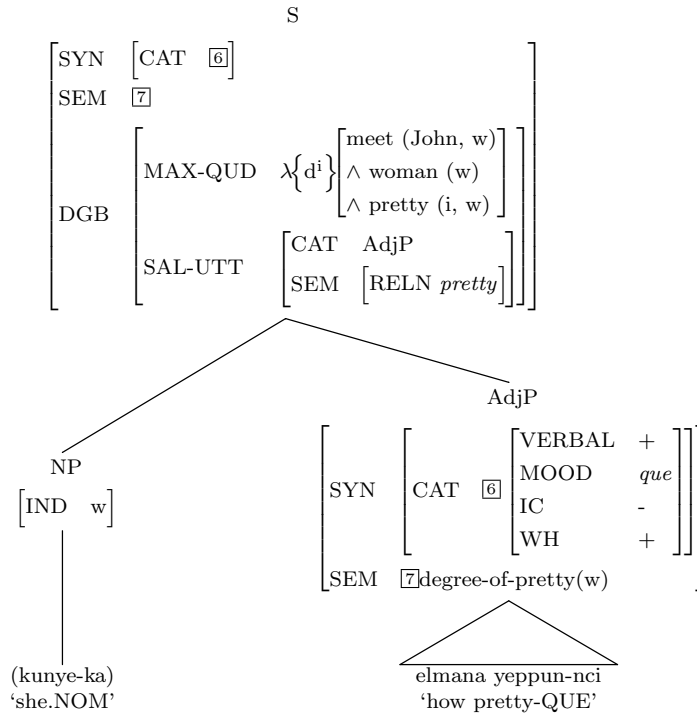
- b. Uttering ‘John met a pretty woman’:

$$\left[ \text{DGB} \left[ \begin{array}{ll} \text{MAX-QUD} & \lambda \{d^i\} [\text{meet} (\text{John}, w) \wedge \text{woman} (w) \wedge \text{pretty} (i, w)] \\ \text{SAL-UTT} & \left[ \begin{array}{ll} \text{CAT} & \text{AdjP} \\ \text{SEM} & [\text{RELN } \textit{pretty}] \end{array} \right] \end{array} \right] \right]$$

Here, the MAX-QUD is about the degree of prettiness of the woman John met and the SAL-UTT is an AdjP in terms of category and whose semantics denotes a *pretty*-relation. Given this DGB information at hand, we can have the following structure for the sluice in (53a).



(54)



In this structure, with the [VERBAL +] feature the AdjP *wh*-expression denotes the property of the pronominal subject *kunye-ka* ‘she-NOM’, which anaphorically refers back to a nominal entity ‘the woman’ in the antecedent clause. As the *wh*-expression is introduced by the degree *how* and the sluice is embedded by the predicate ‘not.know’, the second clause in (53a) will be interpreted as “the speaker does not know how pretty the woman that John met was”.

### 3.4.2 Sprouting Type with a Single *Wh*-phrase

Thus far, we have mainly discussed the merger type examples with a single *wh*-expression and now let us examine the sprouting type examples with

a single *wh*-expression and their different properties in more detail. Note first that null elements have two subtypes: instances of definite null instantiation (DNI) and those of indefinite null instantiation (INI) (Fillmore et al. 2003; Nykiel and Sag 2009; Ruppenhofer and Michaelis 2014). Consider the contrast in the English examples below:

(55) a. I object!

b. We arrived at 8 pm.

(56) a. She ate.

b. John left Paris.

The example in (55a) cannot be uttered unless both the speaker and the addressee are aware of the proposition currently being opposed. In a similar vein, in the example in (55b) the unexpressed goal argument is known to the speaker and the addressee. In these examples, the omission of an expression is possible under the agreement that it is understood in the given linguistic or discourse context. For this reason, they have the definite/anaphoric nature and they are instances of DNI. On the other hand, the object argument of the verb *eat* in (56a) is not specific and is not known to the interlocutors. Likewise, the interlocutors can claim ignorance of the exact identity of the referent denoted by the goal argument of the verb *leave* in (56b). In this respect, the examples in (56) induce indefinite/existential interpretations and

they are instances of INI. Given the difference between definite/anaphoric and indefinite/existential omissions in these two types of null instantiations, one clear distinction between them can be seen when we reconstruct the null element with a definite expression like *it*, *her*, and *there* or an indefinite one like *someone* or *something* (Ruppenhofer and Michaelis 2014; Kim, J.-B. 2015).

To differentiate between these two types null elements, we can use two different signs *overt* and *ini* in the type feature system (Nykiel and Sag 2009; Ruppenhofer and Michaelis 2014; Kim, J.-B. 2015). Given this difference, the lexical entry for *ate* in (56a) can be represented like the following:

- (57) Lexical entry for *ate* in (56a):
- |        |  |   |
|--------|--|---|
| FORM   | < <i>ate</i> >   | ] |
| ARG-ST | <NP <sub>i</sub> [ <i>overt</i> ], NP <sub>x</sub> [ <i>ini</i> ]> |   |
| SEM    | <i>eat</i> (i, x)  |   |

The lexical entry here shows that the first argument of the verb *ate* is a syntactically overtly realized expression, while the second one is an instance of INI.

Korean works similarly in that null elements have two different subtypes, as shown in (58):

- (58) a. na-nun pantayha-y.  
I-TOP object-DECL  
'I object.'

- b. John-i        senmwul-ul pat-ass-e.  
       John-NOM present-ACC receive-PST-DECL  
       ‘John received a present.’

The example in (58a) involves an instance of DNI, whereas the one in (58b) involves an instance of INI. That is, the example in (58a) can only be uttered when the interlocutors are aware of the proposition currently opposed and the null element can be overtly realized with a definite expression like *kukes-ey* ‘it-to’ to give rise to the intended meaning; on the other hand, in (58b) the source argument of the verb *pat-* ‘receive’ is not known to the interlocutors, and thus the null element can be overtly realized with an indefinite expression like *nwukwunka-hantheyse* ‘someone-from’ to convey the desired meaning.

Sprouting type examples need instances of INI in the antecedent clause. As shown in the following, the sluicing examples are not possible when the implicit correlate is replaced with a definite expression.

- (59) John-i        (\*kunye-hantheyse) senmwul-ul pat-ass-nuntey,  
       John-NOM she-from                                present-ACC receive-PST-but  
       na-nun (kukey) nwukwu-hantheyse-i-nci kwungkumha-ta.  
       I-TOP it.NOM who-from-COP-QUE        wonder-DECL  
       ‘John received a present (\*from her), and I wonder from whom (it was).’

This indicates that the verb *pat-* ‘receive’ in (58b) and the antecedent clause of the grammatical sprouting type example in (59) contain an instance of INI, as demonstrated in the following lexical information:

$$(60) \quad \text{Lexical entry for } pat\text{- 'receive' in (58b) and (59):}$$

$$\left[ \begin{array}{ll} \text{FORM} & <pat-> \\ \text{ARG-ST} & <NP_i[overt], NP_x \left[ \begin{array}{l} ini \\ \text{SCASE } src \end{array} \right], NP_j[overt]> \\ \text{SEM} & receive(i, x, j) \end{array} \right]$$

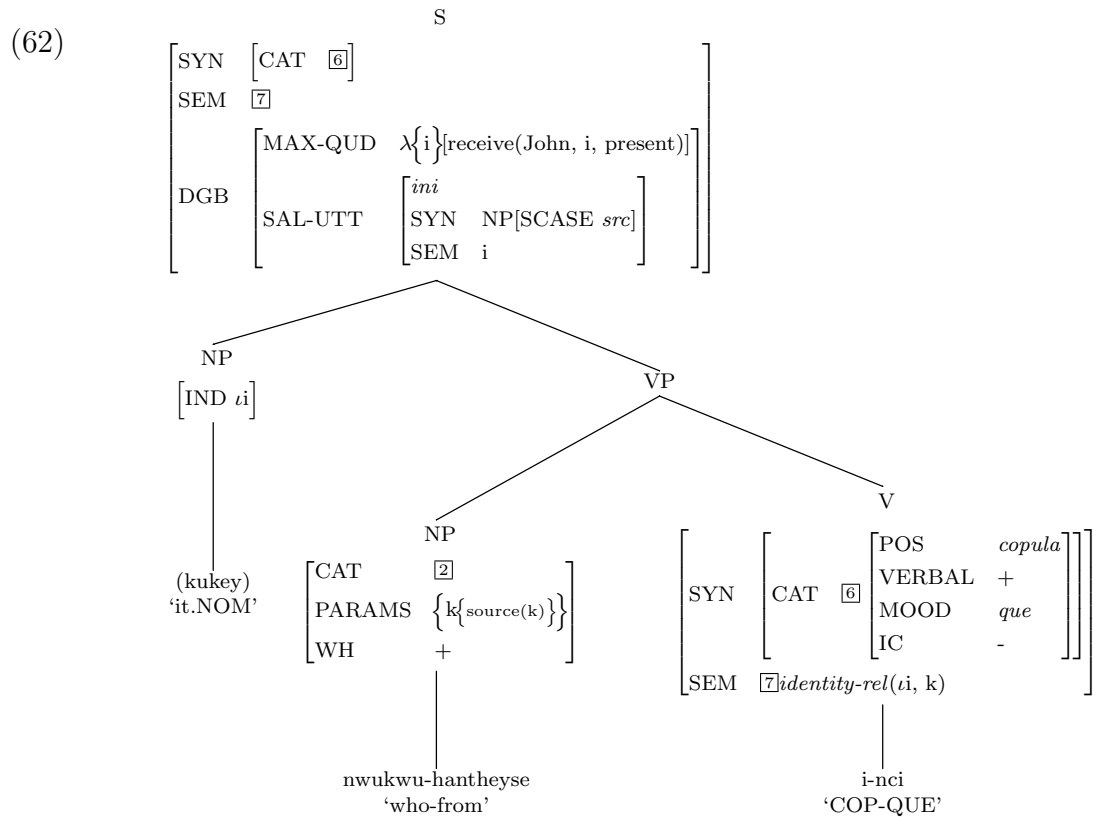
The verb *pat-* ‘receive’ here takes three arguments with one subject and two complements. The first argument would be realized as the overt subject and the third argument is realized as the overt theme complement. In the meantime, the second argument which gets a source thematic role would not be overtly realized; rather, it is an instance of INI.

Given the lexical information of the verb *pat-* ‘receive’ in (60), uttering the antecedent clause of the grammatical embedded sluicing construction in (59) would produce the updated DGB information as follows:

$$(61) \quad \text{Uttering ‘John received a present’:}$$

$$\left[ \begin{array}{l} \text{DGB} \left[ \begin{array}{ll} \text{MAX-QUD} & \lambda \left\{ i_{\{\text{source}(i)\}} \right\} [\text{receive}(\text{John}, i, \text{present})] \\ \text{SAL-UTT} & \left[ \begin{array}{l} ini \\ \text{SYN } NP[\text{SCASE } src] \\ \text{SEM } i \end{array} \right] \end{array} \right] \end{array} \right]$$

This would then generate the following structure for the sluice in (59):



Notice that the antecedent clause in the grammatical version of (59) does not yield the following DGB information:

$$(63) \quad \left[ \begin{array}{c} \text{DGB} \left[ \begin{array}{cc} \text{MAX-QUD} & \lambda\{i_{\{\text{person}(i)\}}\}[\text{receive-from}(\text{John}, \text{present}, i)] \\ \text{SAL-UTT} & \left[ \begin{array}{cc} \text{CAT} & \text{NP} \\ \text{SEM} & i \end{array} \end{array} \right] \end{array} \right] \right]$$

If this were possible, the specificational relation would hold between the pronominal subject that anaphorically refers back to the variable introduced by the complement of the source case marker and the *wh*-expression with no semantic case marker, licensing the following example.

- (64) \*John-i senmwul-ul pat-ass-nuntay, na-nun (kukey)  
 John-NOM present-ACC receive-PST-but I-TOP it.NOM  
 nwukwu-i-nci kwungkumha-ta.  
 who-COP-QUE wonder-DECL  
 ‘\*John received a present, and I wonder whom (it was).’

In accounting for this, I follow Kim’s (2015: 284) notion of Full Instantiation Constraint (FIC) as stated below:

- (65) Full Instantiation Constraint (FIC):  
 The syntactic information (e.g., case features) not available at surface but updated in the DGB needs to be fully specified in the subsequent syntax.

In the merger type with an overt correlate in the antecedent, it is easy to introduce an issue into the discourse (DGB); on the other hand, in the sprouting type with no overt correlate in the antecedent, it is difficult to pick out the issue. Thus, the FIC requires that the semantic case marker on the single *wh*-expression in the sprouting type be obligatorily present, unlike the one in the merger type. To put it another way, since the *wh*-expression only has an implicit correlate in the antecedent clause of the sprouting type, the specification relation only holds between the pronominal subject that refers back to the implicit argument/adjunct which can be understood only with a relevant semantic case marker depending on the context and the *wh*-expression with the same semantic case marker.

Sprouting type examples whose single *wh*-expression corresponds to an implicit adjunct work similarly. In other words, they involve an instance of INI, not an instance of DNI (Nykiel and Sag 2009).

- (66) a. John-i Austin-ul ttena-ass-nuntay, na-nun (kukey)  
 John-NOM Austin-ACC leave-PST-but I-TOP it.NOM  
 encey-i-nci molu-keyss-ta.  
 when-COP-QUE not.know-FUT-DECL  
 ‘John left Austin, but I don’t know when (it was).’
- b. John-i na-uy cha-lul kochi-ess-nuntay, na-nun (kukey)  
 John-NOM me-GEN car-ACC fix-PST-but I-TOP it.NOM  
 ettehkey-i-nci kwungkumha-ta.  
 how-COP-QUE wonder-DECL  
 ‘(lit.) John fixed my car and I wonder how (it was).’

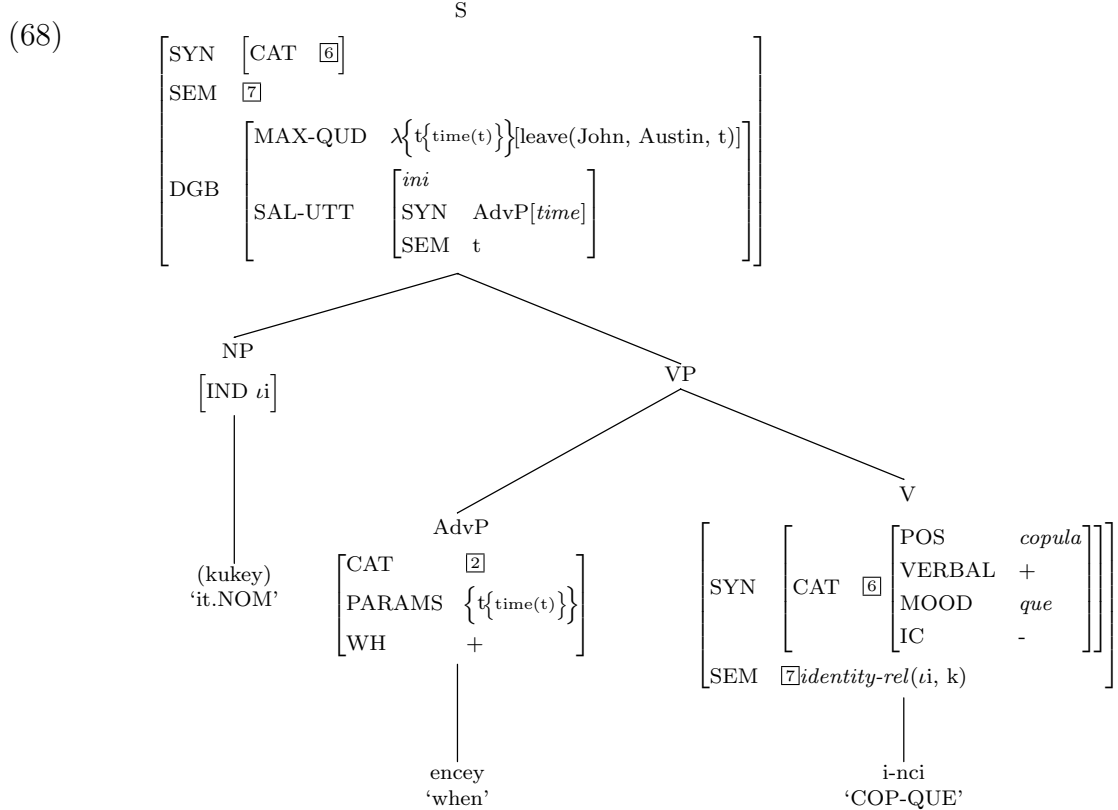
In these sprouting type examples, the unrealized adjunct in the antecedent is



an instance of an INI and the lexical information of *ttena-* ‘leave’ in (66a) and that of *kochi-* ‘fix’ in (66b) can thus be represented as in (67):

- (67) a. 
$$\left[ \begin{array}{ll} \text{FORM} & ttena- \\ \text{ARG-ST} & \langle \text{NP}_i[\textit{overt}], \text{NP}_j[\textit{overt}], \text{AdvP}_t[\textit{ini}] \rangle \\ \text{SEM} & \text{leave}(i, j, t) \end{array} \right]$$
- b. 
$$\left[ \begin{array}{ll} \text{FORM} & kochi- \\ \text{ARG-ST} & \langle \text{NP}_i[\textit{overt}], \text{NP}_j[\textit{overt}], \text{AdvP}_m[\textit{ini}] \rangle \\ \text{SEM} & \text{fix}(i, j, m) \end{array} \right]$$

Along with the lexical information for *ttena-* as in (66a), we can have the following structure for the sluice in (66a):



In this structure, the implicit time adjunct of the verb *ttena-* ‘leave’ is an instance of INI. The unexpressed time adjunct is introduced in discourse when the antecedent clause is uttered and the sluicing clause uses this as the SAL-UTT. The specificational copula then links the pronominal subject that anaphorically refers back to the variable introduced by the the implicit time adjunct in the SAL-UTT to the time *wh*-expression *encey* ‘when’. Since the sluice is embedded by the predicate ‘wonder’, the second clause of the example in (66a) would have the meaning, “the speaker wonders when it was that John left Austin”.

The sprouting type examples that we have observed thus far show that

regardless of whether an implicit correlate serves as an argument or an adjunct, as long as it is an instance of an INI, it provides a context for the sluicing construction to be licensed. Within the feature system that I adopt here, the sprouting type examples can also be formally represented along with the *ini* feature for the covert INI and the lexical information of the verb that takes it in the DGB. Of course, this is made possible, in so far as a proper specificational relation holds between the pronominal subject that anaphorically refers back to the variable introduced by the INI and the *wh*-expression in the pre-copula position in the sluicing clause.

### 3.4.3 Multiple Sluicing

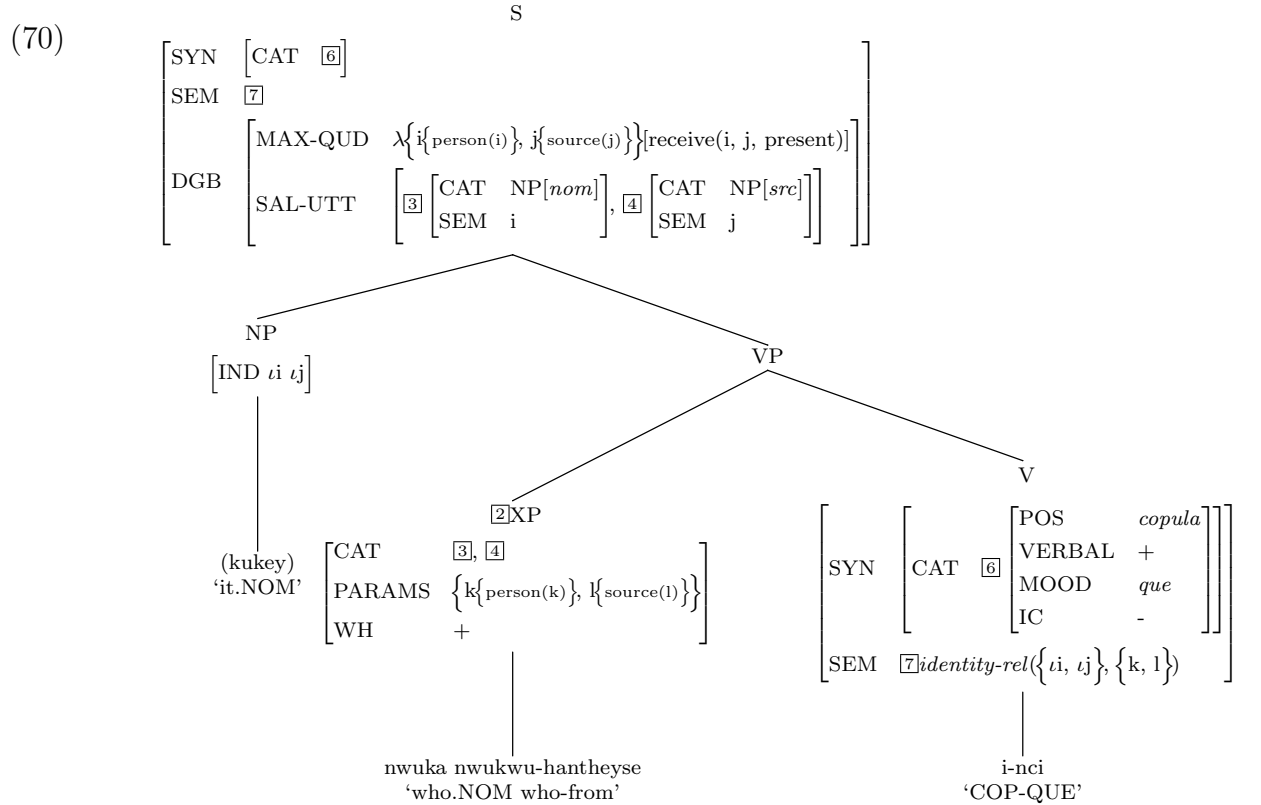
As for multiple sluicing in Korean, we have seen that a neuter singular pronominal subject *kukey* ‘it.NOM’ can appear and this means that the pronominal subject anaphorically refers back to a bundle of variables introduced by the correlates in the antecedent clause. With this general idea about multiple sluicing, let us consider the multiple sluicing example in (69a) and the DGB information updated by uttering the antecedent clause in it.

- (69) a.   nwukwunka-ka nwukwunka-hantheyse senmwul-ul  
           someone-NOM someone-from                   present-ACC  
           pat-ass-nuntey, na-nun (kukey) nwuka  
           receive-PST-but I-TOP it.NOM who.NOM  
           nwukwu-hantheyse-i-nci molu-keyss-ta.  
           who-from-COP-QUE       not.know-FUT-DECL  
           ‘(int.) Someone received a present from someone, but I don’t know  
           who from whom (it was).’

- b. Uttering ‘Someone received a present from someone’:

$$\left[ \begin{array}{c} \text{DGB} \left[ \begin{array}{c} \text{MAX-QUD} \quad \lambda\{i_{\{\text{person}(i)\}}, j_{\{\text{source}(j)\}}\}[\text{receive}(i, j, \text{present})] \\ \text{SAL-UTT} \quad \left[ \begin{array}{c} \left[ \begin{array}{c} \text{CAT} \quad \text{NP}[\textit{nom}] \\ \text{SEM} \quad i \end{array} \right], \left[ \begin{array}{c} \text{CAT} \quad \text{NP}[\textit{src}] \\ \text{SEM} \quad j \end{array} \right] \end{array} \right] \end{array} \right] \end{array} \right]$$

In the DGB information in (69b), there are two constituents in the SAL-UTT with one corresponding to the nominative subject NP whose index is *i* and the other corresponding to the source-denoting NP whose index is *j*. Then, we can have the following structure for the sluice part in (69a):



In this structure, the two *wh*-phrases combine together, forming a non-standard

constituent XP, and the neuter singular pronominal subject *kukey* ‘it.NOM’ refers anaphorically back to the two variables introduced by the correlates in the antecedent clause at the same time. The specificational copula links them. Note that in the SEM of the specificational copula the subject is a set and the complement is another set and it identifies the former set with the latter set. This way, a specificational relation holds between the subject and the multiple *wh*-phrases. In order for a legitimate specificational relation to hold, all the *wh*-phrases must retain their grammatical and semantic case markers for semantic/pragmatic reasons, as was discussed earlier.

#### 3.4.4 More Evidence for No PF deletion and/or Silent Syntax

We have not discussed some Korean embedded sluicing construction examples that we looked at in Chapter 2. This section is devoted to examining those examples. In doing so, we will see why the analysis that does not posit PF deletion and/or silent syntax proposed here fares better than those analyses that do.

First, the retrieval of a deictic expression based on syntactic/form identity may induce a wrong interpretation, as repeated in (71):

- (71) A:    *nwukwunka-ka na-lul    ttayli-ess-ta.*  
           someone-NOM   me-ACC hit-PST-DECL  
           ‘Someone hit me.’
- B:    *na-nun nwukwu-i-nci   molu-keyss-ta.*  
           I-TOP   who-COP-QUE not.know-FUT-DECL  
           ‘I don’t know who (hit you) ≠ who (hit me).’

Here, A's utterance would generate the following DGB information (Kim, J.-B. 2015: 288):

$$(72) \quad \left[ \text{DGB} \left[ \begin{array}{l} \text{MAX-QUD} \quad \lambda\{i\}[\text{hit}(i, \text{spkr})] \\ \text{SAL-UTT} \quad \left[ \begin{array}{l} \text{SYN} \quad [\text{CAT} \quad \text{NP}[\textit{nom}]] \\ \text{SEM} \quad i \end{array} \right] \end{array} \right] \right]$$

In the DGB information here *spkr* refers to speaker A, not speaker B, and speaker B's utterance is about his not knowing who hit speaker A, not speaker B himself. The DGB information thus provides a basis for the intended interpretation of the embedded sluicing clause in B's utterance, blocking the undesired interpretation. In contrast, under the analyses resorting to PF deletion and/or silent syntax like the focus movement + PF deletion analysis and the pseudo-cleft analysis, it is not clear how this kind of deictic meaning change is captured.

Next, as was discussed in the previous chapter, it has been pointed out in the literature in general that the merger type repairs island violations but the sprouting type does not. Island violation repairs in the embedded sluicing construction are problematic for the movement analysis and the pseudo-cleft analysis, since the putative source is ungrammatical, irrespective of whether it is a merger type or a sprouting type example. Therefore, on those analyses, mainly the merger type examples where island violations are repaired are troublesome. On the other hand, under the anaphoric analysis of the

Korean embedded sluicing construction here, island violation repairs are expected, since it does not posit an underlying putative source structure. Since the analysis here does not resort to any syntactic operations and it does not posit PF deletion and/or silent syntax, however, it faces the other side of the problem when it comes to island repairs. In other words, it needs to account for why the sprouting type does not repair island violations unlike the merger type.

Interestingly, there are counterexamples to the generalization that only the merger type, but not the sprouting type, repairs island violations (Kim and Kuno 2012; Ok and Kim 2012 among others). Consider first the following English examples from Kim and Kuno (2012):

- (73) a. Mary met a man who claimed he could turn copper into gold, but she couldn't find out from him with what kind of technique.
- b. I've heard about a mathematician who has proved Fermat's Last Theorem. I want to find out from him how.

In these examples, the covert correlate is assumed to be within an island and yet they are still acceptable. Kim and Kuno (2012) claim that these examples are acceptable, since the correlate can be easily activated in the awareness of the hearer. For instance, in (73a) a claim of success in alchemy naturally evokes a curiosity about the technique used in the hearer's awareness and in (73b) proving an unsolved theorem naturally evokes the method of proof in

the hearer’s awareness. I assume that the sluicing parts can be rather easily interpreted as “... she couldn’t find out from him with what kind of technique he could turn copper into gold” and “... I want to find out from him how he has proved Fermat’s Last Theorem”, respectively. Under these interpretations, the examples here do not involve island violations and in each of these the phrase *from him* helps to evoke these interpretations. These then indicate that we cannot say that all the sprouting examples, in which the correlate is within an island, are necessarily ungrammatical. They suggest that we should look at the discourse/interpretive properties.

Similarly, Ok and Kim (2012) provide Korean sprouting type examples like the following, where a *wh*-remnant whose implicit correlate is within an island.

- (74) a.   salam-tul-i      Usain Bolt-ka   yesen-eyse           tteleci-n  
           person-PL-NOM Usain Bolt-NOM preliminary-from fall-MOD  
           kyengki-ey tayhay iyakiha-nuntey, na-nun way-i-nci      yecenhi  
           game-to   about talk-but            I-TOP   why-COP-QUE still  
           molu-keyss-ta.  
           not.know-FUT-DECL  
           ‘(int.) People talk about the game in which Usain Bolt was eliminated in the preliminary round, I still don’t know why (he was eliminated in the preliminary round).’
- b.   SM-i      sosok      kaswu-tul-i      censeykye tour-lul  
           SM-NOM affiliated singer-PL-NOM world      tour-ACC  
           sicakha-n-ta-nun      news-lul   palphyoha-yess-nuntey, etten  
           start-PRES-DECL-MOD news-ACC announce-PST-but      which



nara-lopwhthe-i-nci      molu-keyss-ta.  
country-from-COP-QUE not.know-FUT-DECL  
‘(int.) SM announced the news that their affiliated singers will start  
world tour concerts, but I don’t know from which country (they will  
start world tour concerts).’

In these examples, the *wh*-expression corresponds to an implicit correlate within a complex noun phrase. However, as the translations show, their interpretations do not involve island violations. Thus, as long as the subject-predicate relation can hold naturally, this construction is possible in Korean.

Furthermore, some naturally-occurring corpus examples as in (75) are found.<sup>5,6</sup>

- (75) a. Jerry-uy    kyengwu Super Jerry-ka  
Jerry-GEN case      Super Jerry-NOM  
palmay-toy-n-ta-nun      sosik-ul    tul-ess-nuntay  
sell-become-PRES-DECL-MOD news-ACC hear-PST-but  
encey-i-l-ci-nun      molu-keyss-supnita.  
when-COP-FUT-QUE-TOP not.know-FUT-DECL  
‘(int.) In case of Jerry, I heard the news that Super Jerry will be  
put on sale, but I don’t know when (it will be put on sale).’
- b. Notre Dame de Paris-lul    Mwuhwakacwungkye-eyse kot  
Notre Dame de Paris-ACC Mwunhwakacwungkye-LOC soon  
pangyengha-n-ta-nun    yaeki-lul    tul-ess-nuntay,  
televise-PRES-DECL-MOD story-ACC hear-PST-but

<sup>5</sup><http://sf3d.egloos.com/v/4063558>

<sup>6</sup><http://program.sbs.co.kr/builder/programCommBoard.dopgm>

encey-i-nci      al-ko      siph-supnita.  
 when-COP-QUE know-CONN want.to-DECL  
 ‘(int.) I heard a story that Mwunhwakacwungkye will televise Notre  
 Dame de Paris soon, and I want to know when (they will televise  
 it).’

These examples further show that it seems that the relevant factors are more related to interpretive/discourse properties of the implicit correlate than strict syntactic properties involved in the sprouting type.

### 3.5 Conclusion

In this chapter, I made a proposal that states that regardless of whether or not it occurs with a copula, the Korean embedded sluicing construction is some type of subject-predicate construction, which is comprised of a (possibly phonologically null) pronominal subject that is anaphoric to the the element that has to do with the ‘salient utterance’ in the antecedent clause and a [VERBAL +] predicate.

To support my claim, I showed that the copula sluicing clause makes use of a specificational copula and it links the pronominal subject and the *wh*-expression(s); however, in the copulaless sluicing clause the *wh*-expression denotes the property of the pronominal subject. This implies that the analysis proposed here does posit PF deletion and/or silent syntax and it does not resort to syntactic movement operations to license the construction unlike the movement + PF deletion analysis, the pseudo-cleft analysis, and the copula-accompanying full *kes*-clause analysis, allowing us to capture more diverse

grammatical properties of the construction.

I then provided formal representations for some representative Korean embedded sluicing construction examples, adopting the HSPG framework, which makes good use of discourse/context information with features like DGB, MAX-QU, and SAL-UTT, *ini* for covert correlates, the semantics of the specificational copula, and the hierarchical case system in Korean.

Furthermore, the analysis proposed here can be extended to explain examples like the following:

- (76) a. John-i mwuenka-lul mek-ess-nuntey, ne-nun (kukey)  
 John-NOM something-ACC eat-PST-but you-TOP it.NOM  
 mwues-i-la-ko sayngkakha-ni?  
 what-COP-DECL-COMP think-QUE  
 ‘John ate something, and what do you think it is?’
- b. A: nwukwunka-ka nay phica-lul mek-ess-e. B: (kukey)  
 someone-NOM my pizza-ACC eat-PST-DECL it.NOM  
 nwukwu-i-ni?  
 who-COP-QUE  
 ‘A: Someone ate my pizza. B: Who is it?’

Under the present analysis, the examples as in (76) are just subject-predicate construction examples of some kind, where the pronominal subject is linked to the *wh*-expression by means of a specificational copula. The analysis does not require the interrogative complementizer in the sluicing clause and it does not require the construction to appear only in an embedded environment either. Therefore, the analysis can successfully account for the grammaticality of examples like (76).

## Chapter 4

# Two Variants of the Korean Embedded Sluicing Construction

### 4.1 Introduction

In the last two chapters, I discussed the Korean embedded sluicing construction, where the antecedent clause has an overt or covert indefinite correlate that the *wh*-expression corresponds to and we observed how the anaphoric subject-predicate analysis can account for its intriguing diverse grammatical properties. In this chapter, I investigate two constructions that look similar to the embedded sluicing construction, which I would call the embedded sluicing-like construction and the embedded confirmative/contrastive construction.

Note first that in English, ellipsis of an embedded clause is not licensed when it is introduced by a lexical complementizer like *that* and *whether/if* (cf. Ross 1969: 272; Merchant 2001: 55-56).

- (1) a. \*Mary said that John ate something/pizza, but I don't think that  
<John ate something/pizza>.
- b. \*Mary said that John ate something/pizza, but I don't know whether/if  
<John ate something/pizza>.

Korean works the same as English in this respect. As shown below, a complementizer itself does not license ellipsis of an embedded clause.<sup>1</sup>

- (2) a. \*Mary-nun John-i {mwuenka/phica}-lul mek-ess-ta-ko  
 Mary-TOP John-NOM something/pizza-ACC eat-PST-DECL-COMP  
 malha-yess-nuntey, na-nun ko sayngkakha-ci anh-nun-ta.  
 say-PST-but I-TOP COMP think-CONN not-PRES-DECL  
 ‘\*Mary said that John ate something/pizza but I don’t think that.’
- b. \*Mary-nun John-i {mwuenka/phica}-lul mek-ess-ta-ko  
 Mary-TOP John-NOM something/pizza-ACC eat-PST-DECL-COMP  
 malha-yess-nuntey, na-nun nunci molu-keyss-ta.  
 say-PST-but I-TOP QUE not.know-FUT-DECL  
 ‘\*Mary said that John ate something/pizza but I don’t know whether.’

As opposed to the English complementizers like *that* and *whether/if*, complementizers in Korean like *-ko* and *-nunci* are bound morphemes; therefore, they cannot stand on their own. The ungrammaticality of examples like (2) is then understood from this property of the Korean complementizers.

However, English and Korean behave differently as to whether they allow a non-*wh*-expression in their embedded sluicing construction. In the English embedded sluicing construction it is not possible but in the Korean counterpart it is possible (Kim, L. 2011: 139-140; Kim, J.-E. 2012: 102; Kim, J.-B. 2013: 109). This contrast is shown in (3) and (4):

- (3) a. \*John ate something, but I am not sure whether/if pizza.

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<sup>1</sup>The same is observed in Japanese (Takahashi 1994: 274-275; Kizu 1998: 233).

- b. \*John ate something, and I think that pizza.

- (4) a. John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 phica-i-nci kwungkumha-ta.  
 pizza-COP-QUE wonder-DECL  
 ‘John ate something and I wonder whether it was pizza.’
- b. John-i mwuenka-lul mek-ess-nuntay, na-nun  
 John-NOM something-ACC eat-PST-but I-TOP  
 phica-la-ko sayngkakha-n-ta.  
 pizza-COP-COMP think-PRES-DECL  
 ‘John ate something and I think that it was pizza.’

The English examples in (3) show that the addition of a non-*wh*-expression remnant does not help to improve grammaticality when there is a lexical complementizer like *whether/if* or *that*. In contrast, the Korean examples in (4) show that such a combination is possible and such examples have been discussed in sluicing literature in *wh*-in-situ languages (Kim, J.-B. 2013: 109; Kuwabara 1996: 102-103; Nakao 2003: 198; Hiraiwa and Ishihara 2012: 169-170 for Japanese; Hoyt and Teodorescu 2012: 87 for Romanian; van Craenenbroeck and Lipták 2013: 513). These Korean examples differ mainly from the canonical Korean embedded sluicing construction examples that I examined in Chapters 2 and 3 in that the former have a non-*wh*-expression. Due to the similarities to and differences from the canonical Korean embedded sluicing construction, throughout the dissertation I will use the term, Korean embedded sluicing-like construction, to refer to examples like (4), which involve a non-*wh*-expression in an embedded environment.

There is another similar construction to the embedded sluicing and sluicing-like constructions. As an illustration, consider the following examples in (5):

- (5) a. John-un khephi-lul masi-ess-ta-ko malha-yess-ciman,  
 John-TOP coffee-ACC drink-PST-DECL-COMP say-PST-but  
 na-nun nokcha-la-ko sayngkakha-n-ta.  
 I-TOP green.tea-COP.DECL-COMP think-PRES-DECL  
 ‘John said that he drank coffee but I think that it was green tea.’
- b. John-i khephi-lul masi-ess-ta-ko tul-ess-nuntay,  
 John-NOM coffee-ACC drink-PST-DECL-COMP hear-PST-but  
 na-nun cincca khephi-i-nci kwungkumha-ta.  
 I-TOP indeed coffee-COP-QUE wonder-DECL  
 ‘(int.) I heard that John drank coffee but I wonder whether it was indeed coffee.’

Examples like these have been also discussed in the sluicing/fragment literature in *wh*-in-situ languages (Sohn 2000: 279-280; Yoo 2013: 42-46; Fukuya and Hoji 1999, Kizu 1997: 238-239, 2000: 152 for Japanese; Chiu et al. 2008: 43-44, Takahashi and Lin 2012: 141-142 for Japanese and Chinese). This construction is characterized as having a non-*wh*-expression in an embedded environment with an obligatory overt correlate in the antecedent clause and the construction induces a confirmative or contrastive meaning. Given the meaning of this construction and its position in an embedded environment, I will call it the embedded confirmative/contrastive construction throughout the dissertation.

In this chapter, I argue that the embedded sluicing-like construction and the embedded confirmative/contrastive construction are two variants of

the embedded sluicing construction so that they are also some kinds of subject-predicate constructions in Korean, where the (possibly phonologically silent) pronominal subject is anaphoric to the element that has to do with the SAL-UTT in the antecedent clause. In particular, in one type there is a specificational relation between the pronominal subject and the non-*wh*-expression by means of a specificational copula, whereas in the other type the non-*wh*-expression denotes the property of the pronominal subject, in a very similar way to the embedded sluicing construction.

The rest of the chapter is organized in the following way. Section 2 extends the anaphoric subject-predicate analysis proposed in Chapter 3 to account for the embedded sluicing-like construction and the embedded confirmative/contrastive construction in Korean. This section discusses two types of clauses, with one that occurs with a copula and the other that cannot occur with a copula, just like I did to the embedded sluicing construction. This section also shows that the grammatical differences of these two constructions from the embedded sluicing construction follow if we understand the [WH] feature and the correlate type.

Next, Section 3 briefly mentions the problems for the focus movement + PF deletion analysis and the pseudo-cleft analysis, both of which posit putative sources and syntactic operations to derive the constructions under discussion from their sources. In particular, based on the same grammatical properties of the embedded sluicing construction, embedded sluicing-like construction, and the embedded confirmative/contrastive construction in many respects, this



section points out that these analyses encounter the same problems discussed in the previous chapters about the embedded sluicing construction in dealing with the other two constructions.

Section 4 then provides formal representations of some representative examples of the constructions. In doing so, I employ some other features like [FOCUS +] and *substitution* in the B(A)CKGR(OUN)D to explain their different properties from the embedded sluicing construction.

Section 5 sums up and concludes the chapter. It also points out that the subject-predicate analysis of the embedded sluicing-like construction and the embedded confirmative/contrastive construction can be easily extended to accounting for their main clause counterparts.

## **4.2 Extension of the Anaphoric Subject-Predicate Analysis: Two Variants of the Korean Embedded Sluicing Construction**

In this section, I attempt to expand the anaphoric subject-predicate analysis proposed in Chapter 3 to the embedded sluicing-like construction and embedded confirmative/contrastive construction in Korean. I first discuss their defining grammatical properties in comparison with the embedded sluicing construction discussed in Chapters 2 and 3. Then, I account for the grammatical properties of the constructions with a copula and those of the constructions without a copula.

### 4.2.1 Defining Properties

The embedded sluicing-like construction and the embedded confirmative/contrastive construction both have a non-*wh*-expression unlike the embedded sluicing construction. However, there are some defining properties that differentiate among them. First, as for the antecedent clause, the embedded sluicing-like construction has an overt or covert indefinite correlate like the embedded sluicing construction; on the other hand, the correlate of the non-*wh*-expression in the embedded confirmative/contrastive construction does not have to be an indefinite expression.

- (6) a. John-i      nwukwunka-lul manna-ass-nuntay, na-nun  
          John-NOM someone-ACC meet-PST-but      I-TOP  
          Mary-i-nci      kwungkumha-ta.  
          Mary-COP-QUE wonder-DECL  
          ‘John met someone and I wonder whether it was Mary.’
- b. John-i      Chomsky-lul manna-ass-ta-ko      tul-ess-nuntay,  
          John-NOM Chomsky-ACC meet-PST-DECL-COMP hear-PST-but  
          na-nun cincca Chomsky-i-nci      kwungkumha-ta.  
          I-TOP indeed Chomsky-COP-QUE wonder-DECL  
          ‘(int.) I heard that John met Chomsky but I wonder whether it  
          was indeed Chomsky.’

In (6a) the antecedent clause of the embedded sluicing-like construction has a indefinite correlate *nwukwunka-lul* ‘someone-ACC’, whereas in (6b) the antecedent clause of the embedded confirmative/contrastive construction has a non-indefinite correlate, *Chomsky-lul* ‘Chomsky-ACC’.

Next, in terms of meaning, the embedded sluicing-like construction induces an interpretation that identifies the indefinite correlate with the non-

*wh*-expression. In contrast, the embedded confirmative/contrastive construction gives rise to a confirmative/contrastive interpretation between the non-*wh*-expression and its correlate.

In addition, the embedded sluicing-like construction has both the merger and sprouting types, while the embedded confirmative/contrastive construction only has the merger type. Consider the sprouting type examples of the embedded sluicing-like construction in (7):

- (7) a. John-i      senmwul-ul pat-ass-nuntay, na-nun  
          John-NOM present-ACC receive-PST-but I-TOP  
          Mary-hantheyse-la-ko sayngkakha-n-ta.  
          Mary-from-COP-COMP think-PRES-DECL  
          ‘John received a present and I think that it was from Mary.’
- b. John-i      Austin-ey ka-ass-nuntay, na-nun  
          John-NOM Austin-to go-PST-but I-TOP  
          {ilyoil-ey/pihayngki-lo/yecachinkwu-lul manna-le}-la-ko  
          Sunday-on/plane-by/girl.friend-ACC meet-to-COP.DECL-COMP  
          sayngkakha-n-ta.  
          think-PRES-DECL  
          John went to Austin and I think that it was {on Sunday/by  
          plane/to meet his girlfriend}.

In (7a) the non-*wh*-expression in the construction corresponds to an INI instance of a source argument of the verb *pat*- ‘receive’ in the antecedent. In (7b) it corresponds to an implicit adjunct in the antecedent. This behavior of the embedded sluicing-like construction patterns with the embedded sluicing construction. By contrast, we cannot construct sprouting type examples of the embedded confirmative/contrastive construction, as the non-*wh*-

expression and its correlate must be in a confirmative/contrastive relation in this construction.

Thus, the defining properties that distinguish among the three constructions can be summarized as in the following table:

Table 4.1: Defining properties of the embedded sluicing and sluicing-like constructions and the embedded confirmative/contrastive construction in Korean

Property	Embedded sluicing	Embedded sluicing-like	Embedded confirmative /contrastive
1. <i>Wh</i> -expression	Yes	No	No
2. Correlate	Indefinite	Indefinite	Non-indefinite
3. Meaning	Identifying indefinite correlate with <i>wh</i> -expression	Identifying indefinite correlate with non- <i>wh</i> -expression	Confirming/contrasting correlate with non- <i>wh</i> -expression
4. Subtypes	Merger and sprouting	Merger and sprouting	Only merger

#### 4.2.2 Copula Clause

In this section, I show how the anaphoric subject-predicate analysis proposed for the embedded sluicing construction with a copula can be expanded to the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a copula. In particular, I claim that all these three constructions are some kinds of subject + [VERBAL +] predicate constructions, where the (possibly phonologically null) subject is linked to the expression in the pre-copula position by means of a specificational copula. This claim makes predictions and it indeed allows us to explain their similar grammatical properties in many respects.

First, as shown in (8), in these two constructions the neuter singular

pronominal subject *kukey* ‘it.NOM’ can appear when the correlate is an animate entity.<sup>2</sup>

- (8) a. John-i      nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
 John-NOM someone-ACC meet-PST-but      I-TOP it.NOM  
 Mary-i-nci      kwungkumha-ta.  
 Mary-COP-QUE wonder-DECL  
 ‘John met someone, and I wonder whether it was Mary.’
- b. Mary-ka      John-lul manna-ass-ta-ko      tul-ess-nuntay,  
 Mary-NOM John-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) Bill-i-la-ko      sayngkakha-n-ta.  
 I-TOP it.NOM Bill-COP-DECL-COMP think-PRES-DECL  
 ‘I heard that Mary met John, but I think that it was Bill.’

In each of these examples, the correlate is an animate entity but still we can optionally have the neuter singular pronominal subject *kukey* ‘it.NOM’. These examples then indicate that the constructions are clauses, each of which consists of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate with the specificational use of the copula.

Next, the uniqueness presupposition effect is also observed in these constructions. For example, the example in (8a) implies that there is a unique/specific person John met and the speaker does not know whether it was Mary. Similarly, the example in (8b) implies that there is a unique/specific person John met and the speaker thinks that it was Bill, as opposed to what he heard.

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<sup>2</sup>The example in (8b) is ambiguous in that *Bill* can have either *Mary* or *John* as its correlate.

In addition, the copula in these constructions can optionally have an overt tense morpheme, as demonstrated below:

- (9) a. John-i nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
 John-NOM someone-ACC meet-PST-but I-TOP it.NOM  
 Mary-i-(ess)-nunci kwungkumha-ta.  
 Mary-COP-PST-QUE wonder-DECL  
 ‘John met someone, and I wonder whether it was Mary.’
- b. Mary-ka John-lul manna-ass-ta-ko tul-ess-nuntay,  
 Mary-NOM John-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) Bill-i-(ess)-ta-ko sayngkakha-n-ta.  
 I-TOP it.NOM Bill-COP-PST-DECL-COMP think-PRES-DECL  
 ‘I heard that Mary met John, but I think that it was Bill.’

As was noted earlier, this optionality is a property of a specificational copula. This then further confirms the idea that these two constructions involve a copula clause, which consist of a (possibly phonologically silent) subject and a [VERBAL +] predicate, where the specificational copula links the subject and the pre-copula XP.

If they are specificational copula clauses, it is predicted that although the correlate has a grammatical case marker, the single non-*wh*-expression cannot have it and this prediction is borne out, as shown in (10):

- (10) a. John-i nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
 John-NOM someone-ACC meet-PST-but I-TOP it.NOM  
 Mary-(*\*lul*)-i-nci kwungkumha-ta.  
 Mary-ACC-COP-QUE wonder-DECL  
 ‘John met someone, and I wonder whether it was Mary.’

- b. Mary-ka John-lul manna-ass-ta-ko tul-ess-nuntay,  
 Mary-NOM John-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) Sue-(\*ka)-la-ko sayngkakha-n-ta.  
 I-TOP it.NOM Sue-NOM-COP.DECL-COMP think-PRES-DECL  
 ‘I heard that Mary met John, but I think that it was Sue.’

On the other hand, when the correlate has a semantic case marker, the prediction is that in the merger type it is optional on the single non-*wh*-expression but in the sprouting type it is obligatory. This is indeed true, as illustrated in the following:

- (11) a. John-i nwukwuka-hantheyse senmwul-ul pat-ass-nuntay,  
 John-NOM someone-from present-ACC receive-PST-but  
 na-nun (kukey) Mary-(hantheyse)-i-nci kwungkumha-ta.  
 I-NOM it.NOM Mary-from-COP-QUE wonder-DECL  
 ‘John received a present from someone, and I wonder whether it was (from) Mary.’
- b. John-i Mary-hantheyse senmwul-ul pat-ass-ta-ko  
 John-NOM Mary-from present-ACC receive-PST-DECL-COMP  
 tul-ess-ciman, na-nun (kukey) cincca Mary-(hantheyse)-i-nci  
 hear-PST-but I-TOP it.NOM indeed Mary-from-COP-QUE  
 kwungkumha-ta.  
 wonder-PRES-DECL  
 ‘I heard that John received a present from Mary, but I wonder whether it was indeed (from) Mary.’
- c. John-i senmwul-ul pat-ass-nuntay, na-nun (kukey)  
 John-NOM present-ACC receive-PST-but I-NOM it.NOM  
 Mary-\*(hantheyse)-i-nci kwungkumha-ta.  
 Mary-from-COP-QUE wonder-DECL  
 ‘John received a present, and I wonder whether it was \*(from) Mary.’

The [VERBAL –] categories like an AdvP can occur in the pre-copula

position in these constructions just as in the embedded sluicing construction, as shown in the following example:

- (12) John-i ppali talli-n-ta-ko tul-ess-ciman, na-nun  
 John-NOM fast run-PRES-DECL-COMP hear-PST-but I-TOP  
 (kukey) cincca ppali-i-nci kwungkumha-ta.  
 it.NOM indeed fast-COP-QUE wonder-DECL  
 ‘(int.) I heard that John runs fast and I wonder whether it is indeed fast.’

Multiple expressions are also possible in the pre-copula position in these constructions.

- (13) a. John-i ecey mwuenka-lul nwukwunka-hantheyse  
 John-NOM yesterday something-ACC someone-from  
 pat-ass-nuntay, na-nun (kukey) chokholleys-ul  
 receive-PST-but I-TOP it.NOM chocolate-ACC  
 Mary-hantheyse-i-nci kwungkumha-ta.  
 Mary-from-COP-QUE wonder-DECL  
 ‘John received something from someone yesterday, and I wonder whether it was chocolate from Mary.’
- b. John-i ecey chokholleys-ul Mary-hantheyse  
 John-NOM yesterday chocolate-ACC Mary-from  
 pat-ass-ta-ko tul-ess-nuntay, na-nun (kukey)  
 receive-PST-DECL-COMP hear-PST-but I-TOP it.NOM  
 kkoch-ul Sue-hantheyse-la-ko sayngkakha-n-ta.  
 flower-ACC Sue-from-COP-DECL-COMP think-PRES-DECL  
 ‘I heard that John received chocolate from Mary yesterday, but I think that it was flowers from Mary.’

The constructions under discussion do not exhibit island sensitivity, as shown below:



- (14) a. na-nun ecey nukwunka-hantheyse senmwul-ul pat-un  
 I-TOP yesterday someone-from present-ACC receive-MOD  
 chinkwu-lul manna-ass-nuntey, (kukey) Mary-hantheyse-i-nci  
 person-ACC meet-PST-but it.NOM Mary-from-COP-QUE  
 kwungkumha-ta.  
 wonder-DECL  
 ‘Yesterday I met a friend who received a present from someone, but  
 I wonder whether it was from Mary.’
- b. John-i thongsalon-ul cal ha-nun haksayng-ul  
 John-NOM syntax-ACC well do-MOD student-ACC  
 cohaha-n-ta-ko tul-ess-nuntey, na-nun (kukey) cincca  
 like-PRES-DECL-COMP hear-PST-but I-TOP it.NOM indeed  
 thongsalon-i-nci kwungkumha-ta.  
 syntax-COP-QUE wonder-DECL  
 ‘I heard that John likes the students who do well on syntax, but I  
 wonder if it is indeed syntax.’

In each of the examples in (14), the non-*wh*-expression in the pre-copula position corresponds to a constituent within an island in the antecedent.

As in the embedded sluicing construction, voice mismatches and case/argument alternations are prohibited in these two constructions, as demonstrated in (15) and (16):

- (15) a. \*nwukwunka-ka ku pemin-ul cap-ass-nuntey, na-nun  
 someone-NOM the criminal-ACC catch-PST-but I-TOP  
 (kukey) John-eykey-i-nci kwungkumha-ta.  
 it.NOM John-DAT-COP-QUE wonder-DECL  
 (int.) ‘\*Someone caught the criminal, and I wonder whether it was  
 by John (that the criminal was caught).’
- b. \*nwukwunka-ka ton-i philyoha-ntey, na-nun (kukey)  
 someone-NOM money-NOM necessary-but I-TOP it.NOM

Mary-hanthey-i-nci kiekna-ci anh-nun-ta.  
 Mary-DAT-COP-QUE recall-CONN not-PRES-DECL  
 ‘Someone needs money, but I don’t remember whether it is Mary.’

- c. \*John-i pyeng-ey mwuenka-lul chaywu-ess-nuntey, na-nun  
 John-NOM bottle-LOC something-ACC fill-PST-but I-TOP  
 (kukey) mwul-lo-i-nci kiekna-ci anh-nun-ta.  
 it.NOM water-with-COP-QUE recall-CONN not-PRES-DECL  
 ‘\*John filled something into the bottle, but I don’t remember  
 whether it was with water.’

- (16) a. \*John-i ku pemin-ul cap-ass-ta-ko  
 John-NOM the criminal-ACC catch-PST-DECL-COMP  
 tul-ess-nuntey, na-nun (kukey) Mary-eykey-la-ko  
 hear-PST-but I-TOP it.NOM Mary-DAT-COP-COMP  
 sayngkakha-n-ta.  
 think-PRES-DECL  
 (int.) ‘\*I heard that John caught the criminal, and I think that it  
 was by Mary (that the criminal was caught).’

- b. \*John-i ton-i philyoha-ta-ko tul-ess-nuntey,  
 John-NOM money-NOM necessary-Decl-COMP hear-PST-but  
 na-nun (kukey) cincca John-hanthey-i-nci al-ko  
 I-TOP it.NOM indeed John-DAT-COP-QUE know-CONN  
 siph-ta.  
 want.to-DECL  
 ‘I heard that John needs money, and I want to know whether it is  
 indeed John.’

- c. \*John-i pyeng-ey wuyu-lul chaywu-ess-ta-ko  
 John-NOM bottle-LOC milk-ACC fill-PST-DECL-COMP  
 malha-yess-ciman, na-nun (kukey) mwul-lo-la-ko  
 say-PST-but I-TOP it.NOM water-with-COP-COMP  
 sayngkakha-n-ta.  
 think-PRES-DECL  
 ‘\*John said that he filled milk into the bottle, but I think that it  
 was with water.’

The examples that I have discussed up to this point in this section show that the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a copula behave the same as the embedded sluicing construction with a copula in diverse respects. They then suggest that the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a copula are subject-predicate constructions with a specificational use of the copula like the embedded sluicing construction.

Despite all the similarities among the three constructions we have looked at thus far, however, the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a copula show different behavior from the embedded sluicing construction with a copula in one respect in addition to their differences in their defining properties. Unlike the embedded sluicing construction, the other two allow for a negative copula as well as a positive copula. Observe the following examples:

- (17) a. John-i      nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
           John-NOM someone-ACC meet-PST-but      I-TOP it.NOM  
           Mary-ka    ani-la-ko                            sayngkakha-n-ta.  
           Mary-NOM NEG.COP-DECL-COMP think-PRES-DECL  
           ‘John met someone and I think that it was not Mary.’
- b. John-i      nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
           John-NOM someone-ACC meet-PST-but      I-TOP it.NOM  
           Mary-ka    ani-nci                            kwungkumha-ta.  
           Mary-NOM NEG.COP-QUE wonder-DECL  
           ‘John met someone and I wonder whether it was Mary.’

- (18) a. Mary-ka John-ul manna-ass-ta-ko tul-ess-nuntay,  
 Mary-NOM John-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) John-i ani-la-ko  
 I-TOP it.NOM John-NOM NEG.COP-DECL-COMP  
 sayngkakha-n-ta.  
 think-PRES-DECL  
 ‘I heard that Mary met John, but I think that it was not John.’
- b. John-i Mary-lul manna-ass-ta-ko tul-ess-nuntay,  
 John-NOM Mary-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) Sue-ka ani-nci kwungkumha-ta.  
 I-TOP it.NOM Sue-NOM NEG.COP-QUE wonder-DECL  
 ‘(int.) I heard that John met Mary, but I wonder whether it was Sue.’

Note here that in (17a) and (18a) a negative interpretation arises, while in (17b) and (18b) it does not, although they all involve a negative copula. The reason that the examples in (17a) and (18b) induce a positive interpretation has to do with the identical answerhood conditions for some polar questions. As shown in Ginzburg and Sag (2000: 345-346), positive and negative polar questions specify identical answerhood conditions and this accounts for why negation is neutralized for a polar question embedded by a predicate like *know* and *discover* as in the following English examples:

- (19) a. John knows whether Mary likes Bo.
- b. John knows whether Mary does not like Bo.

As the meanings of the examples in (19) end up as equivalent, it is not surprising to see the same interpretation for the embedded sluicing-like construction

and the embedded confirmative/contrastive construction with a positive copula and those with a negative copula when they are embedded by a predicate like *wonder* as in (17b) and (18b).<sup>3</sup>

Thus, examples in (17) and (18) show that the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a non-*wh*-expression can involve both a positive copula and a negative copula and they induce appropriate interpretations. In the embedded sluicing-like construction cases, this is because the antecedent sets up a variable and the clause that contains an embedded sluicing-like construction either asserts that the non-*wh*-expression is or is not the value for the variable or questions whether or not the non-*wh*-expression is the value for the variable. In the embedded confirmative/contrastive construction cases, a confirmative/contrastive relation between the non-*wh*-expression and its correlate can be expressed with a negative copula as well as a positive copula. On the other hand, the embedded sluicing construction examples can only involve a positive copula, not a negative one with a *wh*-expression. This is because in these cases the antecedent clause sets up a variable and the clause that contains an embedded sluicing construction only questions who/what... the variable is and it is semantically weird to question who/what... the variable is not in the given antecedent clause, as pointed out in the previous chapter.

In this section, I examined the grammatical properties of the embed-

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<sup>3</sup>The preference for the one variant over the other depends on the context and pragmatic reasons and I leave it to future research.

ded sluicing-like construction and the embedded confirmative/contrastive construction with a copula in comparison with the embedded sluicing construction with a copula. In doing so, I showed that they are all subject-predicate constructions, where the (possibly phonologically null) pronominal subject is linked with the expression in the pre-copula position by means of a specificational copula. This means that the embedded sluicing construction and the embedded confirmative/contrastive constructions are two variants of the embedded sluicing construction. They are just different in terms of whether the expression that forms a [VERBAL +] predicate with a specificational copula is a *wh*-expression or not and whether the correlate is an indefinite expression or not. I also showed that this difference allows us to account for their different behavior in terms of the possibility to have a negative copula as well as a positive copula and their interpretations.

Lastly, let us think about what the (possibly phonologically null) pronominal subject anaphorically refers back to in these constructions. We observed in Chapter 3 that the neuter singular pronominal subject anaphorically refers back to a variable or a bundle of variables introduced by the indefinite correlate(s) in the antecedent clause in the embedded sluicing construction. The same is applicable to the embedded sluicing-like construction, since it also has an overt or covert indefinite correlate in the antecedent clause. However, the situation is different in the embedded confirmative/contrastive construction, because the overt correlate does not have to be an indefinite one, as was discussed at the beginning of this chapter. However, it also involves an anaphoric

subject-predicate clause of the same kind as the other two. This indicates that the correlate in the antecedent clause of this construction, namely, the SAL-UTT, somehow introduces a variable and the pronominal subject anaphorically refers back to it.

### 4.2.3 Copulaless Clause

In this section, I show how the anaphoric subject-predicate analysis proposed for the embedded sluicing construction without a copula can be extended to explain the embedded sluicing-like construction and the embedded confirmative/contrastive construction without a copula. Here, I argue that all these three constructions are some kinds of subject-predicate constructions, where the predicate denotes the property of the (possibly phonologically silent) pronominal subject.

First, like in the embedded sluicing construction, there are examples where the embedded sluicing-like construction and the embedded confirmative/contrastive construction cannot appear with a copula. In particular, they are the cases with an Adj or verb non-*wh*-expression, as shown below:

- (20) a. John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD woman-ACC  
 manna-ass-ta-ko tul-ess-nuntay, na-nun cincca  
 meet-PST-DECL-COMP hear-PST-but I-TOP indeed  
 yeppu-(\*i)-nci kwungkumha-ta.  
 pretty-COP-QUE wonder-DECL  
 ‘I heard that John met a pretty woman on the weekend, and I  
 wonder whether she is indeed pretty.

- b. John-i      nay phica-lul    mek-ess-ta-ko      tul-ess-nuntay,  
 John-NOM my   pizza-ACC eat-PST-DECL-COMP hear-PST-but  
 na-nun peli-(\*i)-ess-ta-ko      sayngkakha-n-ta.  
 I-TOP   throw.away-COP-PST-DECL think-PRES-DECL  
 ‘I heard that John ate my pizza, but I think that he threw (it)  
 away.’

The clausal status of these constructions can be clearly seen in examples like the following, which show that they can have an overt subject:

- (21) a. John-i      cwumal-ey yeppu-n      yeca-lul  
 John-NOM weekend-on pretty-MOD woman-ACC  
 manna-ass-ta-ko      tul-ess-nuntay, na-nun  
 meet-PST-DECL-COMP hear-PST-but    I-TOP  
 {(kunye-ka/\*kukey)} cincca yeppu-nci kwungkumha-ta.  
 she.NOM/it.NOM      indeed pretty-QUE wonder-DECL  
 ‘I heard that John met a pretty woman on the weekend, and I  
 wonder whether {she/\*it} is indeed pretty.
- b. John-i      nay phica-lul    mek-ess-ta-ko      tul-ess-nuntay,  
 John-NOM my   pizza-ACC eat-PST-DECL-COMP hear-PST-but  
 na-nun {(ku-ka/\*kukey)} peli-ess-ta-ko  
 I-TOP   he-NOM/it-NOM   throw.away-PST-DECL  
 sayngkakha-n-ta.  
 think-PRES-DECL  
 ‘I heard that John ate my pizza, but I think that {he/\*it} threw  
 (it) away.’

In (21a) we can have an overt subject *kunye-ka* ‘she-NOM’, but not the neuter one *kukey* ‘it.NOM’. Similarly, in (21b) we can have an overt subject *ku-ka* ‘he-NOM’, but not the neuter one *kukey* ‘it.NOM’. These examples tell us that the pronominal subject in (21a) anaphorically refers back to “the woman” by itself and the one in (21b) anaphorically refers back to “John”



and there is no specification relation between the pronominal subject and the non-*wh*-expression predicate. They are simply subject-predicate construction examples, where the non-*wh*-AdjP or verb with [VERBAL +] category on its own denotes the property of the (possibly phonologically null) pronominal subject.

As an AdjP or verb in these constructions serves as a predicate, when an AdjP appears here, it is then predicted that it must be used predicatively, blocking examples like the following:

- (22) \*John-i olayn chinkwu-lul manna-ass-ta-ko  
 John-NOM longtime friend-ACC meet-PST-DECL-COMP  
 tul-ess-nuntay, na-nun cincca olayn-ci kwungkumha-ta  
 hear-PST-but I-TOP indeed longtime-QUE wonder-DECL  
 ‘\*I heard that John met a long-time friend, but I wonder whether  
 he is indeed longtime.’

As was discussed earlier, adjectival expressions like *olayn* ‘longtime’ can only be used attributively. In this example, this adjectival expression is used within an NP in the antecedent clause as a correlate but since it must serve as a predicate in the sluice part, this example is ill-formed. Examples like this confirm the claim that the sluice part in the constructions at issue are indeed a clause.

Lastly, let us see what the (possibly phonologically null) pronominal subject can anaphorically refer back to in the antecedent clause. Consider the examples below:

- (23) a. John-i cwumal-ey yeppu-n yeca-lul  
 John-NOM weekend-on pretty-MOD woman-ACC  
 manna-ass-ta-ko tul-ess-nuntey, na-nun (kunye-ka) cincca  
 meet-PST-DECL-COMP hear-PST-but I-TOP she-Nom indeed  
 yeppu-nci kwungkumha-ta.  
 pretty-QUE wonder-DECL  
 ‘I heard that John met a pretty woman on the weekend, and I  
 wonder whether she is indeed pretty.
- b. salam-tul-un Mary-ka kwuiyep-ta-ko malha-ciman,  
 person-PL-TOP Mary-NOM cute-DECL-COMP say-but  
 na-nun (kunye-ka) aluntap-ta-ko sayngkakha-n-ta.  
 I-TOP she-NOM beautiful-DECL-COMP think-PRES-DECL  
 ‘People say that Mary is cute, but I think that she is beautiful.’
- c. John-i nay phica-lul mek-ess-ta-ko tul-ess-nuntey,  
 John-NOM my pizza-ACC eat-PST-DECL-COMP hear-PST-but  
 na-nun (ku-ka) peli-ess-ta-ko sayngkakha-n-ta.  
 I-TOP he-NOM throw.away-PST-DECL think-PRES-DECL  
 ‘I heard that John ate my pizza, but I think that he threw (it)  
 away.’

In (23a) and (23b), the [VERBAL +] predicates in the constructions are adjectival expressions. However, in the former its correlate is used attributively in an NP in the antecedent clause and the pronominal subject anaphorically refers back to the nominal expression “the woman”; on the other hand, in the latter its correlate is used as a predicate on its own in the antecedent clause and the pronominal subject anaphorically refers back to the the subject of which the correlate denotes the property. In (23c), a verb serves as a [VERBAL +] predicate and the pronominal subject refers back to the subject of which the correlate verb denotes the property. At the same time, however, information about the object of ‘threw away’ should also be retrieved from the antecedent

clause to attain a desired interpretation.

I have so far shown that the embedded sluicing-like construction and the embedded confirmative/contrastive construction are subject-predicate constructions with a (possibly phonologically silent) pronominal subject like the embedded sluicing construction, irrespective of whether a copula appears or not. The same grammatical properties of these constructions in many respects are naturally accounted for by the anaphoric subject-predicate analysis proposed here and their differences can also be explained once we understand their differences in terms of the [WH]-feature on the predicate and the correlate type.

### **4.3 Previous Analyses**

No independent analysis has been proposed for the embedded sluicing-like construction and the embedded confirmative/contrastive construction. Nonetheless, as pointed out earlier in this chapter, they have been noted in the sluicing/fragment literature. Therefore, in this section I briefly point out why previous analyses of the embedded sluicing construction mentioned in the previous chapter are problematic for these two constructions.

#### **4.3.1 Focus Movement + Deletion Analysis**

One may want to pursue a focus movement + PF deletion analysis of the embedded sluicing-like construction and the embedded confirmative/contrastive construction, assuming that the remnant moves to [Spec,

FocP] to check off the [FOCUS +] feature and then the remaining material gets deleted under identity in the same way as the embedded sluicing construction. These derivational processes can then be represented as follows:

- (24) a. John-i      nwukwunka-lul manna-ass-nuntay, na-nun  
           John-NOM someone-ACC meet-PST-but      I-TOP  
           Mary-i-nci      kwungkumha-ta.  
           Mary-COP-QUE wonder-DECL  
           ‘John met someone and I wonder whether it was Mary.’
- b. ...na-nun [<sub>FocP</sub> Mary<sub>i</sub>-lul [<sub>TP</sub> [<sub>VP</sub> ~~John-i t<sub>i</sub> manna~~]-ass]-nunci] kwungkumha-ta
- (25) a. John-i      Mary-lul      manna-ass-ta-ko      tul-ess-nuntay,  
           John-NOM Mary-ACC meet-PST-DECL-COMP hear-PST-but  
           na-nun Sue-la-ko      sayngkakha-n-ta.  
           I-TOP Sue-COP.DECL-COMP think-PRES-DECL  
           ‘I heard that John met Mary, but I think that it was Sue.’
- b. ...na-nun [<sub>FocP</sub> Sue<sub>i</sub>-lul [<sub>TP</sub> [<sub>VP</sub> ~~John-i t<sub>i</sub> manna~~]-ass]-ta-ko] sayngkakha-n-ta

Of course, this analysis can capture the fact that the non-*wh*-expression in these constructions receive some kind of focus. However, this analysis faces the same problems discussed in the previous chapter about the embedded sluicing construction. Even though this analysis assumes that the head of FocP can be filled either with the interrogative marker (*-nun*)*ci* or with the declarative marker *-ta-ko* unlike Kim’s (1997, 2000) original analysis, the same problems discussed in Chapter 2 linger here. For instance, this analysis cannot account

for the presence of a copula, case marker facts, the position of the pronominal subject *kukey* ‘it.NOM’, island insensitivity, etc. in these constructions.

In addition, this analysis does not explain the cases without a copula, since their underlying sources are ungrammatical. Consider the embedded confirmative/contrastive construction example in (26a) and its possible underlying representation under the focus movement + PF deletion analysis in (26b):

- (26) a. John-i      nay phica-lul   mek-ess-ta-ko              tul-ess-nuntay,  
              John-NOM my   pizza-ACC eat-PST-DECL-COMP hear-PST-but  
              na-nun peli-ess-ta-ko                      sayngkakha-n-ta.  
              I-TOP   throw.away-PST-DECL think-PRES-DECL  
              ‘I heard that John ate my pizza, but I think that (he) threw (it)  
              away.’
- b. ...\*na-nun [<sub>FocP</sub> peli<sub>i</sub> [<sub>TP</sub> [<sub>VP</sub> ~~John-i nay phica-lul ha~~]-ess]-ta-ko] sayngkakha-  
              n-ta

In (26a) the remnant is a verb and its possible source representation under the focus movement + PF deletion as in (26b) is ungrammatical. Thus, the embedded sluicing-like construction examples and the embedded confirmative/contrastive construction examples without a copula like (26a) are not explained by the focus movement + PF deletion analysis.

#### 4.3.2 Pseudo-cleft Analysis

The pseudo-cleft analysis is not so different. The problems with the pseudo-cleft analysis of the embedded sluicing construction remain the same in

the embedded sluicing-like construction and the embedded confirmative/contrastive construction. Note, first, that under the pseudo-cleft analysis the two constructions are derived as follows:

- (27) a. John-i      nwukwunka-lul manna-ass-nuntay, na-nun  
           John-NOM someone-ACC meet-PST-but      I-TOP  
           Mary-i-nci      kwungkumha-ta.  
           Mary-COP-QUE wonder-DECL  
           ‘John met someone and I wonder whether it was Mary.’
- b. ... na-nun [[<sub>CP</sub> ~~John-i~~      ~~manna-n~~ kes-i]      Mary-i-nci]  
       ... I-TOP      John-NOM meet-MOD KES-NOM Mary-COP-QUE  
       kwungkumha-ta.  
       wonder-DECL  
       ‘... I wonder whether <it was Mary ~~that John met~~>.’
- (28) a. John-i      Mary-lul manna-ass-ta-ko      tul-ess-nuntay,  
           John-NOM Mary-ACC meet-PST-DECL-COMP hear-PST-but  
           na-nun Sue-la-ko      sayngkakha-n-ta.  
           I-TOP Sue-COP.DECL-COMP think-PRES-DECL  
           ‘I heard that John met Mary, but I think that it was Sue.’
- b. ... na-nun [[<sub>CP</sub> ~~John-i~~      ~~manna-n~~ kes-i]  
       ... I-TOP      John-NOM eat-MOD KES-NOM  
       Sue-la-ko]      sayngkakha-n-ta.  
       Sue-COP.DECL-COMP think-PRES-DECL  
       ‘... I think that <it was Sue ~~that John met~~>.’

Again, the pseudo-cleft analysis is more valid than the focus movement + PF deletion analysis in accounting for the grammatical properties of these two constructions. For example, the pseudo-cleft analysis can capture the possibility to have a non-*wh*-expression in the pre-copula position, the presence

of a copula, and the lack of the grammatical case marker on a single non-*wh*-expression, and the tense marking on the copula, because they show the same behavior in these respects.

The pseudo-cleft analysis can also successfully explain the optional presence of the pronominal subject *kukey* ‘it.NOM’ in the constructions with a copula.

However, the same problems discussed in the embedded sluicing construction still remain here. For instance, it cannot explain the discrepancies between the pseudo-cleft on the one hand and these two constructions on the other. Such problems include the semantic case marker facts on the single non-*wh*-expression, the possibility to have the multiple phrases in the pre-copula position, island insensitivity, etc.

Moreover, the pseudo-cleft analysis cannot explain with the cases without a copula, as the pseudo-cleft structure always involves a copula. As an illustration, observe the embedded confirmative/contrastive construction example in (29a) and its presumptive derivational representation under the pseudo-cleft analysis in (29b):

- (29) a. John-i      nay phica-lul   mek-ess-ta-ko      tul-ess-nuntay,  
          John-NOM my   pizza-ACC eat-PST-DECL-COMP hear-PST-but  
          na-nun peli-ess-ta-ko                           sayngkakha-n-ta.  
          I-TOP   throw.away-PST-DECL think-PRES-DECL  
          ‘I heard that John ate my pizza, but I think that (he) threw (it)  
          away.’

- b. ... \*na-nun [[<sub>CP</sub> John-i    nay phica-lul ha-n    kes-i]  
 ... I-TOP            John-NOM my pizza-ACC do-MOD KES-NOM  
 peli-ess-ta-ko]                            sayngkakha-n-ta.  
 throw.away-PST-DECL-COMP think-PRES-DECL  
 ‘... \*I think that <what John did my pizza> was throw away.’

The pseudo-cleft structure cannot have a verb as its pivot and the underlying structure in (29b) does not have a copula after the presumed verb pivot. Thus, the representation is ill-formed, meaning that the example in (29a) is not derived from the pseudo-cleft structure.

In this section, I have shown that the focus movement + PF deletion analysis and the pseudo-cleft analysis of the embedded sluicing-like construction and the embedded confirmative/contrastive construction bear the same kinds of problems that we noted in accounting for the embedded sluicing construction.

## 4.4 Formal Representations

In this section, I provide formal representations of some representative examples of the two variants of the Korean embedded sluicing construction within the framework of HPSG. In doing so, I make use of some new features in addition to the ones used for the embedded sluicing construction in Chapter 3 to capture their grammatical properties.

As was noted at the beginning of this chapter, the most salient difference between the embedded sluicing-like construction and the embedded confirmative/contrastive construction on the one hand and the embedded sluicing



construction on the other concerns whether the [VERBAL +] predicate contains a *wh*-expression or not. This means that there should be some other feature to replace [WH +] and PARAMS and I make use of [FOCUS +].

Note first that the information structure in the specificational copula construction is fixed in such a way that only the non-subject, complement phrase gets new information and focus (Heycock and Kroch 2002; Kim, J.-B. 2015). Consider the English examples below (Heycock and Kroch 2002: 148-149):

(30) A: Who was the culprit? (John or Bill?)

B: The culprit is JOHN.

(31) A: What was John? (Was John the culprit or the victim?)

B: \*THE CULPRIT was John.

These mini question-answer dialogues show that the English specificational copula sentence only allows the post-copula NP to be focus.<sup>4</sup>

Such a fixed information structure is also seen in the Korean specificational copula construction:

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<sup>4</sup>One may feel that as a response to A in (30), “JOHN was the culprit” is more natural and thus one may want to argue that it does not seem right to say that the English specificational copula sentence only allows the post-copula NP to be focus. However, this response is a little different from the specificational copula construction examples we have discussed so far. First, the subject does not introduce a variable, but the complement of the copula does. In addition, the complement of the copula cannot be replaced by the neuter singular subject *it*, producing, “\*JOHN is it”.

- (32) A:   nwuka     pemin-i-ni?  
           who-NOM culprit-COP-QUE  
           ‘Who is the culprit?’
- B:   pemin-un   John-i-ya  
           culprit-TOP John-COP-DECL  
           ‘The culprit is John.’
- (33) A:   John-i     mwues-i-ni?  
           John-NOM what-COP-QUE  
           ‘What is John?’
- B:   \*pemin-i   John-i-ya  
           culprit-TOP John-COP-DECL  
           ‘The culprit is John.’

As shown here, in the Korean specificational construction, only the pre-copula XP2 gets new information and focus.

These then indicate that in the embedded sluicing-like construction and the embedded confirmative/contrastive construction with a specificational copula, the non-*wh*-expression in the pre-copula construction gets focus.

Focus comes from some other source in these constructions as well. For instance, in the embedded confirmative/contrastive construction, the non-*wh*-expression can get additional confirmative focus with the addition of an adverb like *cincca* ‘indeed’ although the non-*wh*-expression is identical to its correlate in terms of meaning, and it can also receive contrastive focus when it is in a contrastive relation with its correlate.

Given the commonly assumed idea that *wh*-phrases inherently receive focus (Rochemont 1986; Horvath 1986; Kiss 1998), we can then say that the

[VERBAL +] predicates in the embedded sluicing construction and its two variants share the property that they get focus and I explicitly make use of [FOCUS +] for the [VERBAL +] predicates with a non-*wh*-expression in the two variants of the embedded sluicing construction.

#### 4.4.1 Embedded Sluicing-Like Construction

As we have seen above, the embedded sluicing and sluicing-like constructions in Korean share a variety of grammatical properties; however, in spite of their commonalities, they show different behavior in some respects. The differences are 1) the predicate type in terms of *wh*-feature and 2) the possibility of the occurrence of a negative as well as a positive copula in the embedded sluicing clause. I showed above that these two have to do with the their difference in the [WH] feature of the [VERBAL +] predicate.

Then, the representation of the embedded sluicing-like construction should not be so different from that of the embedded sluicing construction. For the embedded sluicing-like construction example in (34a), uttering the antecedent clause would update the DGB information as in (34b):

- (34) a. John-i      nwukwunka-lul manna-ass-nuntey, na-nun (kukey)  
          John-NOM someone-ACC meet-PST-but,      I-TOP it.NOM  
          Mary-i-nci      kwungkumha-ta.  
          Mary-COP-QUE wonder-DECL  
          ‘John met someone and I wonder whether it was Mary.’
- b. Uttering ‘John met someone’:

$$\left[ \text{DGB} \left[ \begin{array}{ll} \text{MAX-QUD} & \lambda\{i\}[\text{meet}(\text{John}, i)] \\ \text{SAL-UTT} & \left[ \begin{array}{ll} \text{CAT} & \text{NP}[\textit{acc}] \\ \text{SEM} & i \end{array} \right] \end{array} \right] \right]$$

In this example, the antecedent clause, “John met someone” adds to the DGB. The indefinite expression “someone” is the SAL-UTT that contributes to the NP and the referential index  $i$  which is bound in the MAX-QUD. The antecedent clause of the embedded sluicing-like construction is of the same type as the embedded sluicing construction. All we need to do now is to link the (possibly phonologically silent) pronominal subject to the non-*wh*-expression with a specificational copula. The sluice part in this construction would then be represented as in the following tree structure:

(35)

$$\begin{array}{c}
 \text{S} \\
 \left[ \begin{array}{l} \text{SYN} \left[ \begin{array}{l} \text{CAT} \quad [6] \\ \text{SEM} \quad [7] \end{array} \right] \\ \text{DGB} \left[ \begin{array}{l} \text{MAX-QUD} \quad \lambda\{i\}[\text{meet}(\text{John}, i)] \\ \text{SAL-UTT} \quad \left[ \begin{array}{l} \text{CAT} \quad \text{NP} \\ \text{SEM} \quad i \end{array} \right] \end{array} \right] \end{array} \right] \\
 \swarrow \quad \searrow \\
 \text{NP} \quad \text{VP} \\
 \left[ \text{IND} \quad i_i \right] \quad \swarrow \quad \searrow \\
 \text{(kukey)} \quad \text{NP} \quad \text{V} \\
 \text{'it.NOM'} \quad \left[ \begin{array}{l} \text{CAT} \quad [2] \\ \text{SEM} \quad k \\ \text{FOCUS} \quad + \end{array} \right] \quad \left[ \begin{array}{l} \text{SYN} \left[ \begin{array}{l} \text{CAT} \quad [6] \\ \text{SEM} \quad [7] \text{identity-rel}(i_i, k) \end{array} \right] \\ \text{POS} \quad \text{VERBAL} \quad \text{copula} \\ \text{MOOD} \quad \text{IC} \quad + \\ \text{IC} \quad - \end{array} \right] \\
 \text{Mary} \quad \text{i-nci} \\
 \text{'Mary'} \quad \text{'COP-QUE'}
 \end{array}$$

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Unlike the embedded sluicing construction, we can have a negative copula in the embedded sluicing-like construction as the [VERBAL +] predicate is not a *wh*-expression, as in (36):

- (36)      John-i      nwukwunka-lul manna-ass-nuntay, na-nun (kukey)  
              John-NOM someone-ACC meet-PST-but,      I-TOP it.NOM  
              Mary-ka      ani-la-ko                              sanygakakha-n-ta.  
              Mary-NOM NEG.COP-DECL-COMP think-PRES-DECL  
              ‘John met someone and I think that it was not Mary.’

The antecedent clause here would have the same DGB information as given in (34b). The remaining work to do is to link the pronominal subject and the non-*wh*-expression by means of a negative specificational copula. This would give us the following tree structure for the sluice part in (36).

(37)

$$\begin{array}{c}
 \text{S} \\
 \left[ \begin{array}{l} \text{SYN} \left[ \begin{array}{l} \text{CAT} \quad [6] \\ \text{SEM} \quad [7] \end{array} \right] \\ \text{DGB} \left[ \begin{array}{l} \text{MAX-QUD} \quad \lambda\{i\}[\text{meet}(\text{John}, i)] \\ \text{SAL-UTT} \quad \left[ \begin{array}{l} \text{CAT} \quad \text{NP} \\ \text{SEM} \quad i \end{array} \right] \end{array} \right] \end{array} \right]
 \end{array}$$

NP

[IND *i*]

(kukey)  
'it.NOM'

VP

NP

[CAT [2]  
SEM k  
FOCUS +]

Mary-ka  
'Mary-NOM'

V

[SYN [CAT [6]  
[POS VERBAL copula  
MOOD +  
IC decl  
-]]]  
[SEM [7]nonidentity-rel(*i*, k)]

ani-la-ko  
'NEG.COP-DECL-COMP'

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*Mary*, which has an NP category and whose referential index is  $k$ . Since the sluice part is embedded by the predicate ‘think’ and the specificational copula is in its negative form, the second clause in (36) will be interpreted as “the speaker thinks that the unique/specific  $x$  such that John met  $x$  is not Mary”.

The embedded sluicing and sluicing-like constructions behave the same in the other grammatical properties. Therefore, structures of the other embedded sluicing construction examples are not hard to construct as long as we encode the right information for the non-*wh*-expression in the [VERBAL +] predicate and the specificational copula (either in its positive or negative form).

#### 4.4.2 Embedded Confirmative/Contrastive Construction

We have seen that the sluice part in the embedded confirmative/contrastive construction is also a clause comprised of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate, just like the embedded sluicing construction and the embedded sluicing-like construction. In particular, when the sluice part is a copula clause, the non-*wh*-expression in the pre-copula position is linked to the pronominal subject by means of a specificational copula; on the other hand, when it is a copulaless clause, the non-*wh*-expression denotes the property of the pronominal subject.

The embedded confirmative/contrastive construction is most strikingly different from the embedded sluicing construction and the embedded sluicing-like construction in that the correlate of the former does not have to be an



indefinite expression like *something* or *someone*. Note also that logically we cannot get a confirmative or contrastive interpretation from a covert correlate (i.e., an *ini* instance). Given that a confirmative or contrastive interpretation is only available when the correlate is overt, the fact that this construction only has the merger type is naturally explained.

Then, the issue for this construction is what the pronominal subject anaphorically refers back to. Consider the example in (38a) and the DGB information of the antecedent clause in (38b):

- (38) a. John-i Mary-lul manna-ass-ta-ko tul-ess-nuntey,  
 John-NOM Mary-ACC meet-PST-DECL-COMP hear-PST-but  
 na-nun (kukey) Sue-la-ko sayingkakha-n-ta.  
 I-TOP it.NOM Sue-COP.DECL-COMP think-PRES-DECL  
 ‘I heard that John met Mary, but I think that it was Sue.’

- b. Uttering ‘John met Mary’:

$$\left[ \text{DGB} \left[ \begin{array}{ll} \text{MAX-QUD} & \lambda\{ \text{[meet(John, Mary}_i\text{)]} \} \\ \text{SAL-UTT} & \left[ \begin{array}{ll} \text{CAT} & \text{NP}[\textit{acc}] \\ \text{SEM} & i \end{array} \right] \end{array} \right] \right]$$

According to the DGB in (38b), the current topic is whether John met MARY. If the pronominal subject *kukey* ‘it.NOM’ anaphorically refers back to the correlate *Mary* in the antecedent clause directly, the second clause here should give rise to the meaning, “the speaker thinks that Mary is Sue” and this is not the intended meaning. The right meaning is, “the unique/specific x such that John met x is Sue”, as in the embedded sluicing construction and the embedded sluicing-like construction. I noted that for the embedded sluicing

construction and the embedded sluicing like construction, the pronominal subject anaphorically refers back to a variable (or a bundle of variables for multiple sluices) introduced by the correlate(s) in the antecedent clause. I assume that the same applies to the embedded confirmative/contrastive construction. In other words, the pronominal subject in the sluice part here needs to refer back to the variable introduced by the SAL-UTT, even though it is not an indefinite one. This indicates that we need a mechanism to replace the expression in the SAL-UTT with a variable (or a bundle of variable for multiple sluices). To this end, I would like to use the feature, *substitution*, in B(A)CKGR(OUN)D, following Gruenstein (2002). Note first that in order to explain English corrective fragments like (39), Gruenstein (2002) proposes a coercion operation for parameter correction as in (40).

- (39) a. A: Kim hit her. B: ME.  
b. A: Kim was despised by Sandy. B: (No.) by DAN.  
c. A: I will land at the field. B: No, the BASE.

$$(40) \quad \left[ \begin{array}{ll} \text{root-cl} & \\ \text{CTXT-PARAMS} & \{ \dots \boxed{i} \dots \} \\ \text{CONSTITS} & \left\{ \dots \left[ \begin{array}{ll} \text{CAT} & \boxed{3} \\ \text{CONT} & \boxed{i} [\text{INDEX} \quad \boxed{b}] \end{array} \right] \dots \right\} \\ \text{CONT} \mid \text{MSG-ARG} & \boxed{2} \end{array} \right] \rightarrow$$

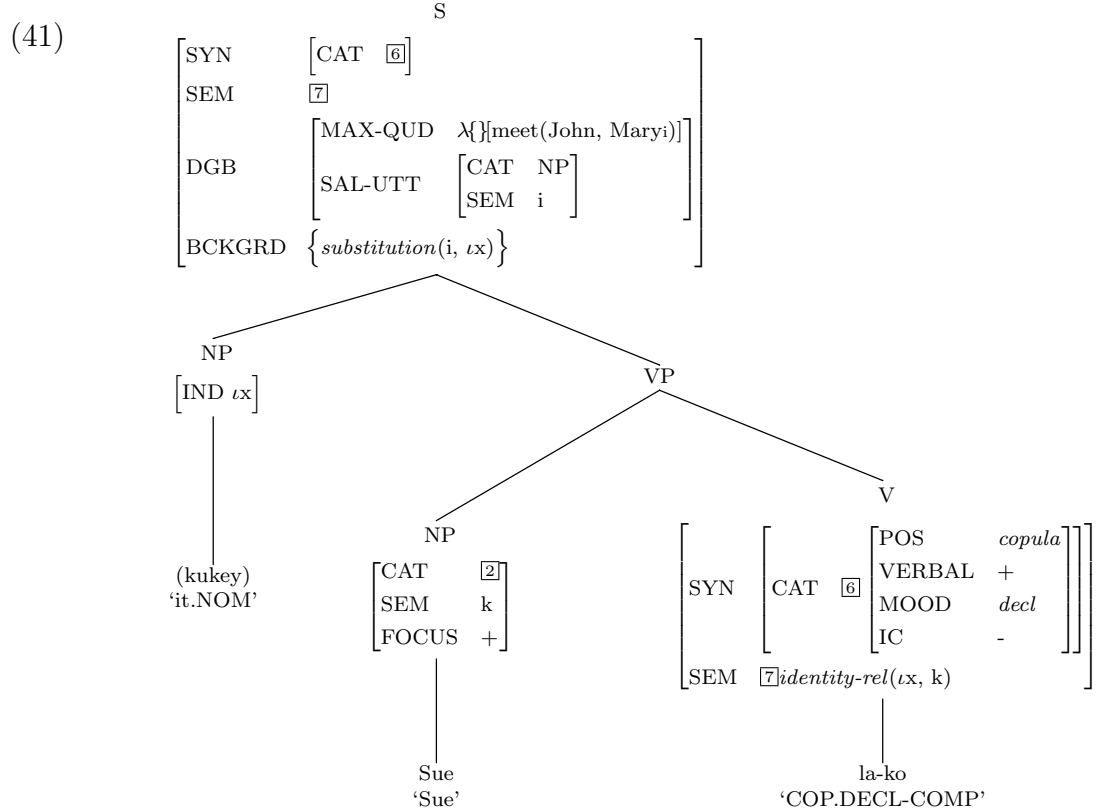
$$\left[ \begin{array}{l} \text{root-cl} \\ \text{CONSTITITS} \quad \left\{ \dots \left[ \begin{array}{cc} \text{CAT} & \boxed{3} \\ \text{CONT} & \boxed{j} \left[ \text{INDEX } \boxed{a} \right] \end{array} \right] \dots \right\} \\ \text{CONT | MSG-ARG} \quad \boxed{4} \text{ proposition} \\ \text{SAL-UTT} \quad \left[ \begin{array}{cc} \text{CAT} & \boxed{3} \\ \text{CONT | INDEX} & \boxed{a} \end{array} \right] \\ \text{MAX-QUD} \quad \left[ \begin{array}{cc} \text{question} & \\ \text{PARAMS} & \left\{ \boxed{j} \right\} \\ \text{PROP} & \boxed{4} \end{array} \right] \\ \text{BCKGRD} \quad \left\{ \text{substitution}(\boxed{4}, \boxed{2}, \boxed{a}, \boxed{b}) \right\} \end{array} \right]$$

The gist of this coercion operation is that the *substitution* operation in the BCKGRD feature allows the index of the constituent in the SAL-UTT (i.e.,  $\boxed{a}$ ) to be replaced by that of the fragment (i.e.,  $\boxed{b}$ ) and the meaning of the antecedent in the MAX-QUD (i.e.,  $\boxed{4}$ ) to be replaced by that of the clausal meaning of the fragment (i.e.,  $\boxed{2}$ ), accordingly.

Unfortunately, the same analysis cannot be extended to the Korean embedded confirmative/contrastive construction, because it necessarily involves a [VERBAL +] predicate and what matters is the relation between the (possibly phonologically null) pronominal subject and the [VERBAL +] predicate. Nevertheless, we can still make use of the idea of the *substitution* operation in the BCKGRD to account for the properties of the embedded confirmative/contrastive construction in Korean. In particular, there should be a *substitution* operation in the BCKGRD that replaces the constituent in the SAL-UTT with an iota one to which the pronominal subject can now anaphorically refer. The specificational copula then links the iota pronominal subject and

the non-*wh*-expression in the pre-copula position.

With the *substitution* operation in the BCKGRD, we can have a tree structure like the following for the sluice part in (38a):



Again, this shows that the sluice part with a copula in the embedded confirmative/contrastive construction is just a type of subject-predicate construction consisting of a (possibly phonologically silent) pronominal subject and a [VERBAL +] predicate, where the subject anaphorically refers back to the variable that has to do with the SAL-UTT and it is linked to the focused non-*wh*-expression in the pre-copula position by means of a specificational copula. In

order to guarantee that the pronominal subject in the sluice part does not anaphorically refer back to the SAL-UTT directly, the *substitution* operation is employed so that it anaphorically refers back to the variable that has to do with the SAL-UTT instead. With this mechanism, the second clause of (38a) would then be interpreted as “the speaker thinks that the unique x such that John met x is Sue, as opposed to what he heard, which is that John met Mary”.

Since the [VERBAL +] predicate is not a *wh*-expression in this construction, we can have a negative copula like the embedded sluicing-like construction.

- (42)      John-i      Mary-lul    manna-ass-ta-ko      tul-ess-nuntay,  
              John-NOM Mary-ACC meet-PST-DECL-COMP hear-PST-but  
              na-nun (kukey) Mary-ka    ani-la-ko  
              I-TOP it.NOM Mary-NOM NEG.COP-DECL-COMP  
              sayingkakha-n-ta.  
              think-PRES-DECL  
              ‘I heard that John met Mary, but I think that it was not Mary.’

The DGB information of the antecedent clause would be the same as the one in (38b) and the structure for the sluice part in the second clause in (42) should look like the following:



have a mechanism for the (possibly phonologically silent) pronominal subject in the embedded confirmative/contrastive construction not to anaphorically refer back to the SAL-UTT directly in the antecedent clause, but to refer to the variable that has to do with the SAL-UTT, we can explain their common grammatical properties.

Let us now consider the embedded confirmative/contrastive construction example without a copula clause in (44):

- (44) John-i      nay phica-lul   mek-ess-ta-ko              tul-ess-nuntay,  
 John-NOM my   pizza-ACC eat-PST-DECL-COMP hear-PST-but  
 na-nun (ku-ka)   peli-ess-ta-ko                      sayngkakha-n-ta.  
 I-TOP   he-NOM throw.away-P-ST-DECL think-PRES-DECL  
 ‘I heard that John ate my pizza, but I think that (he) threw (it)  
 away.’

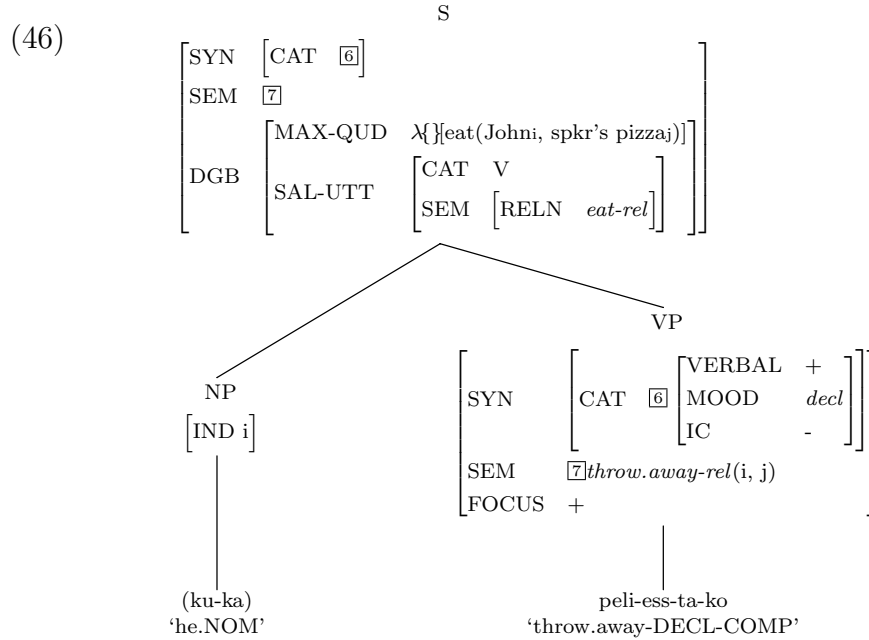
In this example, the [VERBAL +] predicate in the sluice part has *mek*- ‘eat’ as its correlate in the antecedent clause and the antecedent clause would yield the following DGB information:

- (45) Uttering: ‘John ate my pizza’:  

$$\left[ \begin{array}{c} \text{DGB} \\ \left[ \begin{array}{c} \text{MAX-QUD} \quad \lambda\{\}\text{[eat(John}_i, \text{spkr's pizza}_i\text{)]} \\ \text{SAL-UTT} \quad \left[ \begin{array}{c} \text{CAT} \quad \text{V} \\ \text{SEM} \quad \left[ \text{RELN} \quad \text{eat-rel} \right] \end{array} \right] \end{array} \right] \end{array} \right]$$

In the sluice part in (44), the [VERBAL +] predicate denotes the property of the (possibly phonologically silent) pronominal subject. This pronominal subject anaphorically refers back to the subject of the correlate in the antecedent

clause, namely, ‘John’. However, in order to obtain the right interpretation for the sluice part, we also need to have available the information about the object of ‘throw away’, which is identical to the object of ‘eat’. This means that we still need to look at the information from the antecedent clause to get the desired interpretation for the sluice part. Now observe the following tree structure for the sluice part in (44):



As illustrated here, the sluice part in the embedded confirmative/contrastive construction without a copula is a clause consisting of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate. Here, the sluice part describes a *throw.away* event and the pronominal subject is anaphoric to an element that serves as the subject of the correlate. However, *throw.away* is a two-place predicate. Thus, it also needs to find the other argument in



addition to the one that serves as the subject. This is achieved by referring to the DGB information. The second argument of the *throw.away* predicate should be identical to the second argument of the *eat* predicate in the antecedent clause. With all the argument positions filled in the right manner for the [VERBAL +] predicate in the sluice part by virtue of the DGB information, we obtain the desired meaning. The second clause in (44) would then be successfully interpreted as “the speaker<sub>x</sub> thinks that John threw away his<sub>x</sub> pizza”.

## 4.5 Conclusion

In this chapter, I investigated the embedded sluicing-like construction and the embedded confirmative/contrastive construction in Korean. I first noted the defining properties that distinguish them with reference to the embedded sluicing construction. I then showed that the anaphoric subject-predicate analysis proposed for the embedded sluicing construction can be expanded to account for the properties that the three share, arguing that these two are just variants of the embedded sluicing construction. Their different grammatical properties are simply due to their differences in terms of the [WH +] feature on the [VERBAL +] predicate and the correlate type.

In offering formal representations of some representative examples of these two constructions, I used [FOCUS +] in place of [WH +] and [PARAMS] for the embedded sluicing construction. This is based on the observation that the [VERBAL +] predicate in the sluice part in all the three constructions

should have focus, irrespective of whether it contains a *wh*-expression or a non-*wh*-expression.

In addition, I made use of the *substitution* operation in the BCKGRD feature, adopting the idea of Gruenstein (2002). This is because the (possibly phonologically silent) pronominal subject in the sluice part in the embedded confirmative/contrastive construction cannot be directly anaphoric to the SAL-UTT. This feature replaces the index of the constituent in the SAL-UTT in the DGB with an iota one. This way, the pronominal subject here is anaphoric to the iota one as in the embedded sluicing construction and the embedded sluicing-like construction.

Lastly, the anaphoric subject-predicate analysis proposed here can be extended to their main clause counterparts like the ones shown below:

- (47) a. A: nwukwunka-ka nay phica-lul mek-ess-e. B: (kukey)  
           someone-NOM my pizza-ACC eat-PST-DECL it.NOM  
           John-i-ya?  
           John-COP-QUE  
           A: Someone ate my pizza. B: Was it John?
- b. A: John-i Mary-lul manna-ass-e. B: aniya. (kuken)  
           John-NOM Mary-ACC meet-PST-DECL no it.TOP  
           Sue-ya.  
           Sue-COP.DECL  
           ‘A: John met Mary. B: No, it was Sue.’
- c. A: John-i Mary-hantheyse senmwul-ul pat-ass-e B:  
           John-NOM Mary-from present-ACC receive-PST-DECL

(kukey) cincca Mary-hantheyse-i-ni?  
 it.NOM really Mary-from-COP-QUE  
 ‘A: John received a present from Mary. B: Was it indeed from Mary?’

- (48) a. A: Mary-nun kwuiye-wo. B: aniya. alumta-wo.  
           Mary-TOP cute-DECL no beautiful-DECL  
           ‘A: Mary is cute. B: No, (she is) beautiful.’
- b. A: John-i nay phica-lul mek-ess-e. B: cincca  
           John-NOM my pizza-ACC eat-PST-DECL really  
           mek-ess-e?  
           eat-PST-QUE  
           ‘A: John ate my pizza. B: (He) indeed ate (it)?’

In B’s utterances here, the sluice parts are not embedded by another predicate. Thus, they are instances of the main clause sluicing-like construction and the main clause confirmative/contrastive construction and except for the embedded environment they exhibit the same grammatical properties as the embedded ones. Under the anaphoric subject-predicate analysis proposed here, these are just subject-predicate construction examples in a main clause environment; therefore, these are naturally accounted for under the present analysis, without having to posit further stipulations.

## Chapter 5

### The Stripping Construction in Korean

#### 5.1 Introduction

The last construction that I will discuss in this dissertation is the Korean stripping construction. Generally, stripping is known as a construction where a non-*wh*-remnant occurs as a fragment often with a focus adverb or a negative marker, as exemplified in the English examples in (1) (Hankamer and Sag 1976; May 1991; Reinhart 1991; Fiengo and May 1994; Depiante 2000; Jones 2004; Merchant 2006):

- (1) a. John ate apples yesterday, and pears too.  
b. John ate apples yesterday, but not pears.

The remnant in the stripping construction is contrasted with its overt correlate. For instance, in each of the examples in (1) the remnant *pears* is contrasted with its correlate *apples*.

Korean also has a similar construction as shown in (2):

- (2) a. John-i ecey sakwa-lul mek-ess-e. kuliko  
John-NOM yesterday apple-ACC eat-PST-DECL and

pay-to-(ya).  
 pear-also-COP  
 ‘John ate apples yesterday, and pears too.’

- b. John-i ecey sakwa-lul mek-ess-e. haciman pay-nun  
 John-NOM yesterday apple-ACC eat-PST-DECL but pear-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John eats apples, but not pears.’

In the Korean example in (2a), the second clause consists of a coordinate conjunction *kuliko*, a remnant with a focus marker *-to* ‘also’, and an optional positive copula *i*.<sup>1</sup> Similarly, in (2b) the second clause is composed of another coordinate conjunction *haciman* ‘but’, a remnant with a contrastive focus/topic marker *-nun*, and a negative copula *ani*-. In fact, the positive copula in (2a) is optional but the negative copula in (2b) is obligatory. In spite of this difference, in this dissertation I will call the examples as in (2) instances of the stripping construction in Korean and I will mainly focus on the examples with a copula.<sup>2</sup> Of course, in the English stripping construction examples as in (1) a copula is not needed. Despite this difference between the constructions in the two languages, I will compare the two to see in what respects they show similar and different behavior. In addition, I will use the

---

<sup>1</sup> *Ya* is a morphological realization of the copula and an informal declarative sentential ending marker.

<sup>2</sup> Different authors use different terms for examples like (2). Some authors call them instances of VP ellipsis (Kim, J.-E. 2012), discussing only examples where the remnant corresponds to a subject in the antecedent clause, while others like Kim and Sohn (1998) classify them as instances of pseudo-VP ellipsis. Still others consider them instances of stripping (Park, M. 1997; Hoji 1990) or pseudo-gapping/stripping (Kim, J.-S. 1997a, 1997b, 2006; Park, B. 2008).

term ‘negative stripping construction’ to refer strictly to examples like (1b) and (2b), where a negative marker or a negative copula is used, when they need to be distinguished from the one with a focus marker like *too*, *also* or such a focus marker along a positive copula; otherwise, I will just use ‘stripping construction’ as a cover term in general (Merchant 2001, 2003; Nakao 2009).

The remaining sections of this chapter are organized as follows. Section 2 looks into grammatical properties of the Korean stripping construction, including its similarities to and differences from the English stripping construction, matching/mismatching cases, multiple remnants, cases without a copula.

Section 3 reviews previous analyses of the Korean stripping construction, showing that the previous analyses that posit PF deletion and/or silent syntax (i.e., the focus movement + PF deletion analysis and the pseudo-cleft analysis) have quite the same problems noted in the previous chapters. In other words, not only are they inapplicable to the cases without a copula, they also make wrong predictions for the cases with a copula in several respects.

Sections 4 and 5 provide an anaphoric subject-predicate analysis and offer formal representations of some representative examples of the Korean stripping construction. I argue that the Korean stripping construction is also a type of subject-predicate construction composed of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate in the same way as the embedded sluicing construction and its two variants discussed in the previous chapters. In formal representations, I introduce some other features such as

[MARKING] and provide the lexical information for the auxiliary *ha-* ‘do’ to capture the grammatical properties of the Korean stripping construction that are different from the other three constructions.

Section 6 summarizes and concludes the chapter.

## 5.2 Grammatical Properties of the Korean Stripping Construction

This section explores grammatical properties of the Korean stripping construction. In doing so, I will first focus on the stripping construction with a copula and then move on to the one without a copula. In this section, I will discuss its similarities to and differences from the English stripping construction, its similarities to the subject-predicate constructions discussed in the previous chapters, and its idiosyncratic properties.

### 5.2.1 Korean Stripping with a Copula: Similarities to English Stripping

One basic property of the Korean stripping construction is that the remnant can correspond to a variety of constituents in the antecedent clause as in (3):

- (3) a. John-i phica-lul mek-ess-e kuliko Mary-to-ya.  
 John-NOM pizza-ACC eat-PST-DECL and Mary-also-COP.DECL  
 ‘John ate pizza, and Mary too.’
- b. John-i sakwa-lul mek-e kuliko pay-to-ya.  
 John-NOM apple-ACC eat-DECL and pear-also-COP.DECL  
 ‘John eats apples, and pears too.’

- c. John-i Mary-eykey sathang-ul cwu-ess-e. kuliko  
 John-NOM Mary-DAT candy-ACC give-PST-DECL and  
 Sue-eykey-to-ya.  
 Sue-DAT-also-COP.DECL  
 ‘John gave candy to Mary, and to Sue too.’
- d. John-i kyosil-eyse kongpwuha-y. kuliko  
 John-NOM classroom-LOC study-DECL and  
 tosekwan-eyse-to-ya.  
 library-LOC-also-COP.DECL  
 ‘John studies in the classroom, and in the library too.’
- (4) a. John-i phica-lul mek-ess-e. haciman Mary-nun  
 John-NOM pizza-ACC eat-PST-DECL but Mary-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John ate pizza, but not Mary.’
- b. John-i sakwa-lul mek-e. haciman pay-nun  
 John-NOM apple-ACC eat-DECL but pear-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John eats apples, but not pears.’
- c. John-i Mary-eykey sathang-ul cwu-ess-e. haciman  
 John-NOM Mary-DAT candy-ACC give-PST-DECL but  
 Sue-eykey-nun ani-ya.  
 Sue-DAT-TOP NEG.COP-DECL  
 ‘John gave candy to Mary, but not to Sue.’
- d. John-i kyosil-eyse kongpwuha-y. haciman  
 John-NOM classroom-LOC study-DECL but  
 tosekwan-eyse-nun ani-ya.  
 library-LOC-TOP NEG.COP-DECL  
 ‘John studies in the classroom, but not in the library.’

In each of these examples the remnant in the stripping construction corresponds to the subject, the object, the dative argument, and the locative ad-



junct in the antecedent clause, respectively. The same behavior is observed in the English stripping construction as the translations show.<sup>3</sup>

The English stripping construction is usually accompanied by a focus marker like *also/too* or a negative marker *not* as in (5). In a similar manner, as shown in (6), the Korean stripping construction contains an additive focus marker *-to* ‘also/too’ on the remnant or a negative marker *ani-* ‘NEG.COP’ along with a contrastive focus/topic marker *-(n)un* on the remnant (Albrecht 2006; Kim and Sohn 1998: 461; Kim, J. 2006: 279-280).

(5) a. I talked to John yesterday, and to Mary too.

b. I saw John yesterday, but not Bill.

(6) a. John-i sakwa-lul mek-ess-e. kuliko pay-\*(to)-ya.  
 John-NOM apple-ACC eat-PST-DECL and pear-also-COP.DECL  
 ‘John ate apples and pears too.’

b. John-i sakwa-lul mek-ess-e. haciman pay-nun  
 John-NOM apple-ACC eat-PST-DECL but pear-TOP  
 ani-ya.  
 NEG.COP.DECL  
 ‘John ate apples but not pears.’

With these focus/negative markers, the Korean and English stripping constructions induce an additive or contrastive interpretation.

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<sup>3</sup>This provides one piece of evidence that it is hard to classify examples like (3) and (4) as instances of VP ellipsis.

Another similarity between the Korean and English stripping constructions comes from the possibility to give rise to both strict and sloppy interpretations, as shown in the following examples (cf. Hankamer and Sag 1976; Merchant 2003):<sup>4</sup>

- (7) a. John-i casin-ul pinanha-yess-e. Bill-to-ya.  
 John-NOM self-ACC criticize-PST-DECL Bill-also-COP.DECL  
 ‘John criticized himself. Bill too.’ [criticized himself/him]
- b. John-i ku-uy yenge sensayngnim-ul cohaha-y.  
 John-NOM he-GEN English teacher-ACC like-DECL  
 Bill-to-ya.  
 Bill-also-COP.DECL  
 ‘John likes his English teacher. Bill too.’ [likes his own English teacher/John’s English teacher]
- c. John-i casin-ul pinanha-yess-e. Bill-un ani-ya.  
 John-NOM self-ACC criticize-PST-DECL Bill-TOP NEG.COP-DECL  
 ‘John criticized himself. But not Bill.’ [= Bill did not criticize himself/him]
- d. John-i ku-uy yenge sensayngnim-ul cohaha-y. Bill-un  
 John-NOM he-GEN English teacher-ACC like-DECL Bill-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John likes his English teacher. But not Bill.’ [= Bill does not like his own English teacher/John’s English teacher]

As the interpretations show, when the antecedent clause contains a reflexive expression like *casin* ‘self’ or a pronominal expression like *ku-uy* ‘his’, the Korean stripping construction can induce both strict and sloppy interpretations.

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<sup>4</sup>The examples can also be interpreted as if the remnant forms a [VERBAL +] predicate with a copula and the subject is retrieved from the antecedent clause. For instance, the example in (7a) can also mean, “John criticized Bill too”.

These two types of interpretations are also available in the English counterpart as given in the translations above.

Furthermore, considering that English prepositions function similarly to semantic case markers in Korean, it can be said that the Korean stripping construction and the English stripping construction behave the same in that they both permit the optionality of semantic case markers/prepositions.<sup>5</sup>

- (8) a. John-i ecey Mary-lopwuthe sathang-ul  
 John-NOM yesterday Mary-from candy-ACC  
 pat-ass-e. kuliko Sue-(lopwuthe)-to-ya.  
 receive-PST-DECL and Sue-from-also-COP.DECL  
 ‘John received candy from Mary yesterday, and (from) Sue too.’
- b. John-i ecey sluicing-ey tayhayse iyakiha-yess-e. kuliko  
 John-NOM yesterday sluicing-to about talk-PST-DECL and  
 stripping-(ey tayhayse)-to-ya.  
 stripping-to about-also-COP.DECL  
 ‘John talked about sluicing yesterday, and (about) stripping too.’
- c. John-i ecey Mary-lopwuthe sathang-ul  
 John-NOM yesterday Mary-from candy-ACC  
 pat-ass-e. haciman Sue-(lopwuthe)-nun ani-ya.  
 receive-PST-DECL but Sue-from-TOP NEG.COP-DECL  
 ‘John received candy from Mary yesterday, but not (from) Sue.’
- d. John-i ecey sluicing-ey tayhayse iyakiha-yess-e. haciman  
 John-NOM yesterday sluicing-to about talk-PST-DECL but

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<sup>5</sup>Of course, with the semantic case marker/preposition present, the meaning is clearer and the sentence does not result in ambiguity. For instance, when the semantic case marker in Korean and the preposition are not present in (8a), the Korean and English sentences both can have an additional interpretation, *John received candy from yesterday, and Sue did too.*

stripping-(ey tayhayse)-nun ani-ya.  
stripping-to about-TOP NEG.COP-DECL  
‘John talked about sluicing yesterday, but not (about) stripping.’

Thus far, we have seen some similarities between the Korean stripping construction and the English stripping construction and they can be summed up as in the following table:

Table 5.1: Similarities between the Korean and the English stripping constructions

Property	Korean stripping	English stripping
1. Various types of constituents	Yes	
2. Focus/negative marker	Required	
3. Meaning	Additive/contrastive	
4. Strict/sloppy interpretations	Possible	
5. Optionality of P/semantic case marker	Possible	

Despite these similarities between the Korean and English stripping constructions, there are also a few striking differences between them and some have to do with language-specific properties of Korean. In what follows, I will examine those differences and language-specific properties.

### 5.2.2 Differences Between the Korean and English Stripping Constructions and Language Specific Properties

Needless to say, the most noticeable difference between the Korean stripping construction and its English counterpart is the presence of a copula. As shown by the contrast below, in the Korean stripping construction, a copula is used, while in the English counterpart it is not.

- (9) a. John-i sakwa-lul mek-ess-e. pay-to-(ya).  
 John-NOM apple-ACC eat-PST-DECL pear-also-COP  
 ‘John ate apples. Pears too.’
- b. John-i sakwa-lul mek-ess-e. pay-nun \*(ani)-ya.  
 John-NOM apple-ACC eat-PST-DECL pear-TOP NEG.COP-DECL  
 ‘John ate apples. But not pears.’
- (10) a. John ate apples, and (\*was/\*were/\*be) pears too.
- b. John ate apples, but not (\*was/\*were/\*be) pears.

As was already discussed above, in the Korean stripping construction a positive copula is optional, whereas a negative one is obligatory; on the other hand, in the English counterpart any copula form is not needed.

Next, they also show different behavior in terms of the possibility to occur in an embedded environment.<sup>6</sup>

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<sup>6</sup>Here, the copula is not overtly phonetically realized in the embedded clause. Consider the following examples:

- (i) a. John-un Mary-ka chencay-{\*i-ta-ko/la-ko}  
 John-TOP Mary-NOM genius-COP-DECL-COMP/COP-DECL-COMP  
 mit-nun-ta.  
 believe-PRES-DECL  
 ‘John believes that Mary is a genius.’
- b. John-un Mary-ka totwuk-{\*i-ta-ko/i-la-ko}  
 John-TOP Mary-NOM thief-COP-DECL-COMP/COP-DECL-COMP  
 mit-nun-ta.  
 believe-PRES-DECL  
 ‘John believes that Mary is a thief.’

When the declarative embedded sentence has a copula predicate, the declarative marker is realized as *-la*, not as *-ta*. Also, as can be seen here, when the complement of the copula ends in a vowel in a declarative embedded sentence, the copula *i-* ‘be’ is not overtly realized. Thus, I assume that although the embedded element in (11) does not contain an overtly phonetically-realized copula it is still an instance of the stripping construction.

- (11) a. John-i sakwa-lul mek-ess-e. Mary-nun  
 John-NOM apple-ACC eat-PST-DECL Mary-TOP  
 pay-to-la-ko sayngkakha-y.  
 pear-also-COP.DECL-COMP think-DECL  
 ‘John ate apples. Mary thinks that (he ate) pears too.’
- b. John-i sakwa-lul mek-ess-e. Mary-nun pay-nun  
 John-NOM apple-ACC eat-PST-DECL Mary-TOP pear-TOP  
 ani-la-ko sayngkakha-y.  
 not-COP.DECL-COMP think-DECL  
 ‘John ate apples. Mary thinks that (he did) not (eat) pears.’
- (12) a. \*John ate apples. Mary thinks that pears too.
- b. \*John ate apples. Mary thinks that not pears.

Examples like (11) show that the Korean stripping construction does not have to occur as a main clause and it can appear in an embedded environment with its antecedent clause not in the same embedded environment. This is actually different from the English stripping construction as shown in (12) (Depiante 2000: 104; Aelbrecht 2006).<sup>7</sup>

The Korean and English stripping constructions also show different behavior in terms of island violation repairs. As shown in (13), the English stripping construction does not save island violations (Merchant 2004: 714).<sup>8</sup>

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<sup>7</sup>Wurmbrand (2017) points out that when the complementizer is not present, examples like (13) are acceptable. However, a complementizer is obligatory in an Korean embedded clause. Therefore, the generalization in the English stripping construction does not hold in the Korean stripping construction.

<sup>8</sup>There seems to be variation about judgments for examples like (13). For instance, Stephen Wechsler finds (13a) fine.

- (13) a. A: Microsoft hired a linguist who is on good terms with Chomsky.  
       B: \*With Bresnan, too.
- b. \*They arrested the guy who was making obscene calls to Abby already, but not to Beth.

In each of these English examples the remnant in the stripping construction corresponds to a constituent within an island in the antecedent clause and they are unacceptable. On the other hand, island violations are repaired in the Korean stripping construction as demonstrated below:

- (14) a. John-un thongsalon-ul cal ha-nun haksayng-ul cohaha-y.  
       John-TOP syntax-ACC well do-MOD student-ACC like-DECL  
       uymilon-to-ya.  
       semantics-also-COP.DECL  
       ‘John likes the students who are good at syntax. Semantics too.’
- b. John-un thongsalon-ul cal ha-nun haksayng-ul cohaha-y.  
       John-TOP syntax-ACC well do-MOD student-ACC like-DECL  
       uymilon-un ani-ya.  
       semantics-TOP NEG.COP-DECL  
       ‘John likes the students who are good at syntax. But not semantics.’

In these Korean stripping examples, the remnant corresponds to a constituent in a relative clause island, but they are still acceptable as opposed to the English stripping examples in (13).

Another difference between the Korean stripping construction and the English stripping construction has to do with the grammatical case marker on the remnant. As in (15), in the English stripping construction, the accusative

form is used on the remnant for both a nominative-marked correlate and an accusative-marked correlate, while the genitive form is used for a genitive-marked correlate (Schütze 2001: 213).

- (15) a. The kids often go skating on the lake, and sometimes {us/??we} too.
- b. Our friends will go to the beach almost any day of the year, but not {us/?\*we}.
- c. John met him yesterday, and her too.
- d. John met him yesterday, but not her.
- e. John met Mary's boyfriend yesterday, and {Sue's/\*Sue} (= Sue's boyfriend) too.
- f. John met Mary's boyfriend yesterday, but not {Sue's/\*Sue} (= Sue's boyfriend).

The Korean stripping construction shows different behavior in terms of case marking on the remnant. As in (16) and (17), a grammatical case marker cannot appear on the remnant in the Korean stripping construction.<sup>9</sup>

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<sup>9</sup>Since the grammatical case markers cannot be present in the Korean stripping construction, in some cases it is ambiguous to which constituent the remnant corresponds in the antecedent clause, as in the following example:

- (i) a. John-i Mary-lul coaha-y kuliko Sue-to-ya.  
 John-NOM Mary-ACC like-DECL and Sue-also-COP.DECL  
 'John likes Mary, and Sue too.' [Sue likes Mary too/John likes Sue too]



- (16) a. John-i sakwa-lul mek-e. kuliko Mary-(\*ka)-to-ya.  
 John-NOM apple-ACC eat-DECL and Mary-NOM-also-COP.DECL  
 ‘John eats apples, and Mary does too.’
- b. John-i sakwa-lul mek-e. kuliko pay-(\*lul)-to-ya.  
 John-NOM apple-ACC eat-DECL and pear-ACC-also-COP.DECL  
 ‘John eats apples, and pears too.’
- c. nwukwunka-ka John-uy cikap-ul hwumci-e ka-ass-e.  
 someone-NOM John-GEN wallet-ACC steal-CONN go-PST-DECL  
 kuliko Mary-(\*uy)-to-ya.  
 and Mary-GEN-also-COP.DECL  
 ‘Someone stole John’s wallet, and Mary’s too.’
- (17) a. John-i sakwa-lul mek-e. haciman Mary-(\*ka)-nun  
 John-NOM apple-ACC eat-DECL but Mary-NOM-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John eats apples. But not Mary.’
- b. John-i sakwa-lul mek-e. haciman pay-(\*lul)-un  
 John-NOM apple-ACC eat-DECL but pear-ACC-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John eats apples. But not pears.’
- c. nwukwunka-ka John-uy cikap-ul hwumci-e ka-ass-e.  
 someone-NOM John-GEN wallet-ACC steal-CONN go-PST-DECL  
 haciman Mary-(\*uy)-nun ani-ya.  
 but Mary-GEN-TOP NEG.COP-DECL  
 ‘Someone stole John’s wallet. But not Mary’s.’

At this point, let us consider the co-occurrence possibilities of a grammatical case marker, a focus maker, and a copula. Based on the classification of Yang (1972), Cho and Sells (1995) adopt the well-known template in (18) for the

Korean nominal system, with each slot filled by the markers given in (19) and (20):

(18) Nroot – Postposition – Conjunctive – Delim (X-LIM) – Delim (Z-LIM)

(19)	<b>Postpositions</b>		<b>Conjunctives</b>	
	<i>eykey(se), hanthey(se)</i>	dative	<i>hako, (k)wa</i>	conjunctor
	<i>ey, eyse</i>	locative	<i>pota</i>	comparator
	<i>ey, (u)lo</i>	directive	<i>(i)na</i>	disjunctor/‘something like’
	<i>(u)lo</i>	instrumental	<i>pwuthe</i>	‘from’
	<i>kkaci</i>	goal	<i>chelem</i>	‘like’
	<i>hako, (k)wa</i>	comitative		
	<i>kkey</i>	dative (hon.)		
	<i>kkeyse</i>	hon. subj.		

(20)	<b>Delimiters</b>			
	‘X-LIM’	‘Z-LIM’		
	<i>man</i>	‘only’	<i>(n)un</i>	FOCUS/TOPIC
	<i>kkaci</i>	‘even’	<i>to</i>	‘also’
	<i>mace</i>	‘even’	<i>(i)lato</i>	‘even’
	<i>cocha</i>	‘even’	<i>i/ka</i>	NOM
	<i>pakkey</i>	‘only’	<i>(l)ul</i>	ACC
			<i>uy</i>	GEN

As illustrated here, the grammatical case markers, NOM, ACC, and GEN, occupy the same slot in Z-LIM as the focus marker *-to* ‘also’ and the focus/topic marker *-(n)un*. This explains why examples like (21) are unacceptable.

(21) a. \*Mary-ka-to sakwa-lul mek-ess-e.  
 Mary-NOM-also apple-ACC eat-PST-DECL  
 ‘Mary also ate apples.’

- b. \*John-i sakwa-lul-to mek-ess-e.  
John-NOM apple-ACC-also eat-PST-DECL  
'John ate apples too.'
- c. \*Mary-ka-nun sakwa-lul an mek-ess-e.  
Mary-NOM-TOP apple-ACC not eat-PST-DECL  
'Mary didn't eat apples.'
- d. \*John-i sakwa-lul-un an mek-ess-e.  
John-NOM apple-ACC-TOP not eat-PST-DECL  
'Mary didn't eat apples.'

This also accounts for why the remnant with the focus marker *-to* 'also' or the focus/topic marker *-nun* in the Korean stripping construction cannot have the same grammatical case marker as its correlate. In other words, the impossibility of the grammatical case marker on the remnant with a focus marker *-to* 'also' or a focus/topic marker *-nun* in the Korean stripping construction is not a construction-specific constraint; instead, it is simply a morphological constraint of the impossible co-occurrence of a grammatical case marker and of those focus markers within the same nominal expression.

Returning to the semantic case marker on the remnant in the Korean stripping construction, as shown in the template above, semantic case markers like DAT and LOC take a different slot from the focus marker *-to* 'also' and the focus/topic marker *-(n)un*. This accounts for why the examples as in (22) and (23) are acceptable:

- (22) a. John-i Mary-eykey-to sathang-ul cwu-ess-e.  
John-NOM Mary-DAT-also candy-ACC give-PST-DECL  
'John gave candy to Mary too.'

- b. John-i tosekwn-eyse-nun kongpwuha-ci anh-a.  
 John-NOM library-LOC-TOP study-CONN not-DECL  
 ‘John does not study in the library.’
- (23) a. John-i ecey gapping-ey tayhayse iyakiha-yess-e.  
 John-NOM yesterday gapping-to about talk-PST-DECL  
 stripping-ey tayhayse-to-ya.  
 stripping-to about-also-COP.DECL  
 ‘John talked about gapping yesterday. About stripping too.’
- b. John-i ecey Mary-hantheyse sathang-ul  
 John-NOM yesterday Mary-from candy-ACC  
 pat-ass-e. Sue-hantheyse-nun ani-ya.  
 receive-PST-DECL Sue-from-TOP NEG.COP-DECL  
 ‘John received candy from Mary yesterday. But not from Sue.’

The case marker facts in the Korean stripping construction thus suggest that we need to take the Korean nominal system into account.

Another intriguing property of the Korean stripping construction is that it permits multiple remnants as in (24), unlike the English stripping construction as in (25): (Kim and Sohn 1998: 464-465):

- (24) a. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Sue-hantheyse chokholleys-to-ya.  
 Sue-from chocolate-also-COP.DECL  
 ‘John received candy from Mary. (He received) chocolate from Sue too.’
- b. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Sue-hantheyse chokholleys-un ani-ya.  
 Sue-from chocolate-TOP NEG.COP-DECL  
 ‘John received candy from Mary. But (he did) not (receive) chocolate from Sue.’

- (25) a. \*John received candy from Mary. Chocolate from Sue too.
- b. \*John received candy from Mary. But not chocolate from Sue.

As shown here, multiple stripping is available in Korean, while it is not in English.<sup>10</sup>

Although the Korean and English stripping constructions have some commonalities as noted in the previous section, they show some different behavior in some respects and their differences I discussed in this section are summarized in the table below:

Table 5.2: Differences between the Korean and the English stripping constructions

Property	Korean stripping	English stripping
1. Copula	Yes	No
2. Embedded environment	Possible	No
3. Grammatical case marker	No	ACC/GEN
3. Island sensitive	No	Yes
4. Multiple remnants	Possible	No

### 5.2.3 Matches and Mismatches

In this section, I examine cases where the information in the Korean stripping construction after the retrieval of the presumptive elided/missing material and that of its antecedent clause match and do not match. First, the

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<sup>10</sup>The English counterpart for the Korean multiple stripping construction may be treated as the gapping construction instead.

Korean stripping construction does not tolerate voice mismatches, as exemplified in (26) (Ishihara 2011: 76-78 for Japanese):

- (26) a. \*John-i Mary-lul ccoch-ass-e. Bill-eykey-to-ya.  
 John-NOM Mary-ACC chase-PST-DECL Bill-DAT-also-COP.DECL  
 (int.) ‘John chased Mary. (Mary was chased) by Bill too.’
- b. John-i Mary-lul ccoch-ass-e. Mary-nun Bill-eykey-to  
 John-NOM Mary-ACC chase-PST-DECL Mary-TOP Bill-DAT-also  
 ccoch-ki-ess-e.  
 chase-PASS-PST-DECL  
 ‘John chased Mary. Mary was chased by Bill too.’
- c. \*John-i Mary-lul mwul-ess-e. Bill-eykey-nun  
 John-NOM Mary-ACC bite-PST-DECL Bill-DAT-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John bit Mary. But (Mary was) not (bitten) by Bill.’
- d. John-i Mary-lul mwul-ess-e. Mary-nun Bill-eykey-nun  
 John-NOM Mary-ACC bite-PST-DECL Mary-TOP Bill-DAT-TOP  
 mwul-li-ci anh-ass-e.  
 bite-PASS-CONN not-PST-DECL  
 ‘John bit Mary. But Mary was not bitten by Bill.’

In (26a) and (26c) the stripping construction has a dative-marked remnant, which serves as the oblique complement in a passive voice sentence, while the antecedent clause has a nominative-marked correlate, which functions as the subject in its active voice counterpart, and these examples are ungrammatical. On the other hand, its non-elided version in (26b) and (26d) are grammatical. These examples show that voice mismatches are not possible in the Korean stripping construction.

The Korean stripping construction patterns with the English stripping construction in this respect.<sup>11</sup> As illustrated in (27), the English stripping construction disallows voice mismatches (Merchant 2008).

- (27) a. \*John kissed Mary, and by Bill too.  
 b. John kissed Mary and she was kissed by Bill too.  
 c. \*Max brought the roses, not by Amy!  
 d. Max brought the roses—they weren't brought by Amy!

Similarly, case/argument alternations are not permitted in the Korean stripping construction. We can test this with predicates like *philyoha-* 'need/necessary' and *chaywu-* 'fill' again. As was noted in the previous chapters, predicates like *philyoha-* 'need/necessary' can take a nominative- or dative-marked subject and predicates like *chaywu-* 'fill' permit argument alternations. However, in the Korean stripping construction, case/argument alternations are disallowed as illustrated in (28):<sup>12</sup>

- (28) a. \*John-i ton-i philyoha-y. Mary-hanthey-nun  
 John-NOM money-NOM necessary-DECL Mary-DAT-TOP  
 ani-ya.  
 NEG.COP-DECL  
 '(int.) John needs money. But not Mary.'

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<sup>11</sup>See Merchant (2008, 2013b) and the references therein for further examples, discussion, and qualifications, and the differences between the stripping construction and VP-ellipsis.

<sup>12</sup>Although there seems to be a default case on the remnant whose correlate is nominative- or accusative-marked in the English stripping construction, as was discussed above, the English stripping construction does not allow for argument alternations, as shown in the translation for (28b).

- b. \*John-i pyeng hana-ey mwul-ul chaywu-ess-e.  
 John-NOM bottle one-LOC water-ACC fill-PST-DECL  
 wuywu-lo-to-ya.  
 milk-with-also-COP.DECL  
 ‘\*John filled water into a bottle. With milk too.’

Although there needs to be matching information between the presumptive missing element in the stripping construction and its corresponding constituent in the antecedent clause in some respects, there are some possible mismatching information as well. A first thing concerns the tense information of the copula and that of the predicate in the antecedent clause. Notice that the tense information of the Korean stripping construction is determined by its antecedent clause. Consider the contrast below:

- (29) a. John-i ecey tosekwan-ey ka-ass-e.  
 John-NOM yesterday library-to go-PST-DECL  
 kucey/\*nayil-to-ya.  
 the.day.before.yesterday/tomorrow-also-COP.DECL  
 ‘John went to the library yesterday. {The day before yesterday/\*tomorrow} too.’
- b. John-i nayil tosekwan-ey ka-l-ke-ya.  
 John-NOM tomorrow library-LOC go-FUT-NMLZ-COP.DECL  
 \*ecey/moley-nun ani-ya.  
 yesterday/the.day.after.tomorrow-TOP NEG.COP-DECL  
 ‘John will go to the library tomorrow. But not {\*yesterday/the day after tomorrow}.’

In (29a) the antecedent clause contains a past tense adverb *ecey* ‘yesterday’ along with a past tense verb *ka-ass-e* ‘go-PST-DECL’, whereas in (29b) it contains a future tense adverb *nayil* ‘tomorrow’ along with a future tense verb



*ka-l-ke-ya* ‘go-FUT-NMLZ-COP.DECL’. The example in (29a) is acceptable when the *to*-marked remnant in the stripping is a past tense adverb *kucey* ‘the day before yesterday’, whereas the example is not when the remnant is a future tense adverb *nayil* ‘tomorrow’; on the other hand, the example in (29b) is acceptable when the remnant is a future tense adverb *moley* ‘the day after tomorrow’, whereas the example is not when the remnant is a past tense adverb *ecey* ‘yesterday’. Thus, these examples show that the Korean stripping construction involving *-ya/ani-ya* ‘be/not be’ is only acceptable when it has the same tense information as that of its antecedent clause. This property of the Korean stripping construction accounts for why the examples in (30) have the given interpretations:

- (30) a. John-i khephi-lul masi-e. Mary-to-ya.  
 John-NOM coffee-ACC drink-PRES.DECL Mary-also-COP.DECL  
 ‘John drinks coffee. Mary does too.’
- b. John-i ttena-ass-e. Mary-nun ani-ya.  
 John-NOM leave-PST-DECL Mary-TOP NEG.COP-DECL  
 ‘John left but Mary didn’t.’
- c. John-i ttena-l-ke-ya. Mary-to-ya.  
 John-NOM leave-FUT-NMLZ-COP.DECL Mary-also-COP.DECL  
 ‘John will leave. Mary will too.’

All the examples in (30) are acceptable with the stripping constructions having the same tense information as their respective antecedent clause.

Notice at this juncture that the informal declarative sentential ending

marker *-a* by itself does not have an overt tense morpheme.<sup>13</sup> However, when it is used alone, it indicates the present tense, as shown in the following:

- (31) a. John-i sakwa-lul mek-e.  
 John-NOM apple-ACC eat-DECL  
 ‘John eats apples.’
- b. na-nun Mary-ka coh-a.  
 I-TOP Mary-NOM like-DECL  
 ‘I like Mary.’
- c. Mary-ka yeppu-e.  
 Mary-NOM pretty-DECL  
 ‘Mary is pretty.’

Based on this, one may assume that the Korean stripping construction with the *-ya/ani-ya* copula form should always indicate the present tense. Nevertheless, its antecedent clause can be in any other tense and the tense of the stripping construction is determined by that of its antecedent clause, as we have seen thus far. Therefore, technically there can be tense information mismatches between the present tense of the *-ya/ani-ya* copula form in the Korean stripping construction and the tense of its antecedent clause; however, the stripping construction involving the *-ya/ani-ya* copula form is interpreted as if its tense is the same as the tense of its antecedent clause.

Of course, some other tense information can be overtly encoded on the copula verb in the Korean stripping construction too, as shown in (32):

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<sup>13</sup>There are two variants of this informal declarative sentential ending marker and the other is *-e*. The vowel quality of the last syllable determines which variant is used.

- (32) a. John-i ecey khephi-lul masi-ess-e.  
 John-NOM yesterday coffee-ACC drink-PST-DECL  
 nokcha-to-{ya/yess-e}.  
 green.tea-also-COP.DECL/COP.PST-DECL  
 ‘John drank coffee yesterday. Green tea too.’
- b. John-i phathi-ey o-l ke-ya. Mary-nun  
 John-NOM party-to come-FUT NMLZ-COP.DECL Mary-TOP  
 {ani-ya/ani-l ke-ya}.  
 NEG.COP-DECL/NEG.COP-FUT NMLZ-COP-DECL  
 ‘John will come to the party. But not Mary.’

Therefore, the examples in (29) – (32) show that the tense information of the copula and that of the predicate in the antecedent clause can be matched or mismatched and when the copula has the bare form with no tense morpheme, the tense information of the copula is identical to that of the predicate in the antecedent clause.

Another possible mismatching area between the information of the stripping construction and its antecedent clause is related to negation information. Consider the following examples:

- (33) a. John-i sakwa-lul an mek-ess-e.  
 John-NOM apple-ACC not eat-PST-DECL  
 Mary-to-{ya/ani-ya}.  
 Mary-also-COP.DECL/NEG.COP-DECL  
 ‘John didn’t eat apples. Mary either.’
- b. John-i sakwa-lul an mek-ess-e.  
 John-NOM apple-ACC not eat-PST-DECL  
 pay-to-{ya/ani-ya}.  
 pear-also-COP.DECL/NEG.COP-DECL  
 ‘John didn’t eat apples. Pears either.’

In each of the examples in (33), the antecedent clause contains a negative predicate and the copula can be in its positive or negative form along with a remnant and a focus marker *-to* ‘also’, conveying the same meaning. Therefore, when the copula takes the positive form, the polarity value of the copula and that of the predicate of the antecedent clause can differ. This in turn means that there can be polarity value mismatches between the copula and the predicate of the antecedent clause.

In this section, I have examined what kinds of information need to be matched and can be mismatched between the stripping construction after the retrieval of the presumptive elided/missing material and the antecedent clause. The matching and mismatching cases of the Korean stripping construction are summarized in the following table:

Table 5.3: Matches and mismatches in the Korean stripping construction

Property	
1. Voice mismatches	Impossible
2. Case alternations	Impossible
3. Argument alternations	Impossible
4. Tense mismatches	Possible with a bare form copula
5. Tense matches	Possible with a tense marked copula
6. Polarity mismatches	Possible with a positive copula and a negative antecedent

### 5.2.4 More on Multiple Remnants in the Korean Stripping Construction

As we have discussed earlier, one interesting property of the Korean stripping construction is that it can have multiple remnants as in (34):<sup>14</sup>

- (34) a. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Bill-i Sue-hantheyse-to-ya.  
 Bill-NOM Sue-from-also-COP.DECL  
 ‘John received candy from Mary. Bill (received candy) from Sue too.’
- b. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Bill-i Sue-hantheyse-nun ani-ya.  
 Bill-NOM Sue-from-TOP NEG.COP-DECL  
 ‘John received candy from Mary. But not Bill from Sue (= Bill did not receive candy from Sue).’

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<sup>14</sup>Kim, J. (1997a: 446-447; 1997b: 56-66), and Kim and Sohn (1998: 464-465) also point out that multiple remnants are allowed in the Korean stripping construction, presenting ditransitive construction antecedent clauses, as in the following:

- (i) a. John-i Mary-eykey panci-lul cwu-ess-e. mukkeli-lul  
 John-NOM Mary-DAT ring-ACC give-PST-DECL necklace-ACC  
 Bill-to-ya.  
 Bill-also-COP.DECL  
 ‘John gave a ring to Mary. Bill did [= gave to Mary] a necklace too.’
- b. John-i Mary-eykey panci-lul cwu-ess-e. Sue-eykey  
 John-NOM Mary-DAT ring-ACC give-PST-DECL Sue-DAT  
 Bill-to-ya.  
 Bill-also-COP.DECL  
 ‘John gave a ring to Mary. Bill did [= gave a necklace] to Sue too.’

In these examples, the Korean stripping construction contains a *to*-marked remnant whose correlate is the subject of the antecedent clause and another remnant whose correlate is one of the internal arguments of the verb in the antecedent clause.

As shown here, even with multiple remnants the Korean stripping construction conveys the intended meaning.

One thing to note regarding the multiple remnants in the Korean stripping construction concerns the presence/absence of the case markers. We have seen that the single remnant in the Korean stripping construction can optionally have a semantic case marker if its correlate has one. However, in the Korean stripping construction with multiple remnants, the semantic case markers are no longer optional.

- (35) a. John-i mwul-ul pyeng-ey chaywu-ess-e. wuywu-lul  
 John-NOM water-ACC bottle-LOC fill-PST-DECL milk-ACC  
 khep-\*(ey)-to-ya.  
 cup-LOC-also-COP.DECL  
 ‘John filled water into the bottle. (He filled) milk (into) the cup too.’
- b. John-i mwul-ul pyeng-ey chaywu-ess-e. wuywu-lul  
 John-NOM water-ACC bottle-LOC fill-PST-DECL milk-ACC  
 khep-\*(ey)-nun ani-ya.  
 cup-LOC-TOP NEG.-COP-DECL  
 ‘John filled water into the bottle. But not milk (into) the cup (= he did not fill milk into the cup).’

In these examples, the last remnant which is marked with a focus marker *-to* ‘also’ or a contrastive marker *-nun*, needs to keep its semantic case marker. As was discussed in the previous chapters, here the semantic case marker on the last remnant needs to be retained for pragmatic reasons and for unambiguity as well.

On the other hand, in the Korean stripping construction with multiple remnants, the last remnant cannot keep its grammatical case marker as shown below:

- (36) a. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Bill-i chokholleys-\*(ul)-to-ya.  
 Bill-NOM chocolate-ACC-also-COP.DECL  
 ‘John received candy from Mary. Bill (received) chocolate (from Mary) too.’
- b. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Bill-i chokholleys-\*(ul)-un ani-ya.  
 Bill-NOM chocolate-ACC-TOP NEG.COP-DECL  
 ‘John received candy from Mary. But not Bill chocolate (= Bill did not receive chocolate from Mary).’

Despite the difference between the grammatical and semantic case marker on the last remnant in the Korean stripping construction in terms of their presence/absence, the non-last remnant(s) must have all their grammatical and semantic case markers as in (37):

- (37) a. John-i sakwa-lul mek-ess-e. Mary-\*(ka)  
 John-NOM apple-ACC eat-PST-DECL Mary-NOM  
 pay-to-ya.  
 pear-also-COP.DECL  
 ‘John ate apples. Mary (ate) pears too.’
- b. John-i Mary-hantheyse sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Sue-\*(hantheyse) chokholleys-un ani-ya.  
 Sue-from chocolate-TOP NEG.COP-DECL  
 ‘John received candy from Mary. But not chocolate from Sue (= He did not receive chocolate from Mary).’

The Korean stripping construction examples with multiple remnants thus show different behavior from the ones with the single remnant with respect to the grammatical/semantic case marker preservation.

### 5.2.5 Stripping Construction Without a Copula

Thus far we have only seen the Korean stripping construction examples with a copula. However, there are cases that do not contain a copula and in fact the presence of the copula renders them ungrammatical. Consider the following examples:

- (38) a. Mary-nun yeppu-e. chakha-ki-to-{\*ya/ha-y}.
- Mary-TOP pretty-DECL kind-NMLZ-also-COP.DECL/do-DECL
- ‘Mary is pretty. Kind too.’
- b. John-i kamca-lul kwuwu-ess-e.
- John-NOM potato-ACC bake-PST-DECL
- thwuiki-ki-to-{\*ya/ha-yess-e}.
- fry-NMLZ-also-COP.DECL/do-PST-DECL
- ‘John baked potatoes. Fried too.’
- (39) a. Mary-nun yeppu-e. chakha-ci-nun
- Mary-TOP pretty-DECL kind-CONN-TOP
- {\*ani-ya/anh-a}.
- NEG.COP-DECL/NEG.do-DECL
- ‘Mary is pretty. But not kind.’
- b. John-i kamca-lul kwuwu-ess-e. thwuiki-ci-nun
- John-NOM potato-ACC bake-PST-DECL fry-CONN-TOP
- {\*ani-ess-e/anh-ass-e}.
- NEG.COP-PST-DECL/NEG.do-PST-DECL
- ‘John baked potatoes. But not fried.’



In these Korean stripping construction examples, the remnant is an AdjP or a verb. In (38), the [VERBAL +] remnant is nominalized with *-ki* first and the nominalized [VERBAL +] remnant is *-to*-marked, and the resulting *-to*-marked remnant co-occurs with a *ha-* ‘do’ verb, not with a copula. In (39), on the other hand, the [VERBAL +] remnant takes a connective marker *-ci* and a contrastive marker *-nun*, and the resulting form combines with a negative *ha-* ‘do’ verb, not with a negative copula.

Note that one major difference between the stripping construction without a copula and the one with a copula is that for the former the retrieval of the presumed elided/missing material still involves *ha-* ‘do’, while for the latter it does not involve a copula. Observe the contrast between (40) and (41):

- (40) a. Mary-nun yeppu-e. chakha-ki-to ha-y.  
 Mary-TOP pretty-DECL kind-NMLZ-also do-DECL  
 ‘Mary is pretty. Kind too.’
- b. Mary-nun yeppu-e. kunye-nun chakha-ki-to ha-y.  
 Mary-TOP pretty-DECL she-TOP kind-NMLZ do-DECL  
 ‘Mary is pretty. She is kind too.’
- c. Mary-nun yeppu-e. chakha-ci-nun anh-a.  
 Mary-TOP pretty-DECL kind-CONN-TOP NEG.do-DECL  
 ‘Mary is pretty. But not kind.’
- d. Mary-nun yeppu-e. kunye-nun chakha-ci-nun anh-a.  
 Mary-TOP pretty-DECL she-TOP kind-CONN-TOP NEG.do-DECL  
 ‘Mary is pretty. But she is not kind.’
- (41) a. John-i sakwa-lul mek-ess-e. pay-to-ya.  
 John-NOM apple-ACC eat-PST-DECL pear-also-COP.DECL  
 ‘John ate apples. Pears too.’

- b. John-i sakwa-lul mek-ess-e. ku-nun pay-to  
 John-NOM apple-ACC eat-PST-DECL he-TOP pear-also  
 mek-sse-e.  
 eat-PST-DECL  
 ‘John ate apples. He ate pears too.’
- c. John-i sakwa-lul mek-ess-e. pay-nun ani-ya.  
 John-NOM apple-ACC eat-PST-DECL pear-TOP NEG.COP-DECL  
 ‘John ate apples. Not pears.’
- d. John-i sakwa-lul mek-ess-e. ku-nun pay-nun {an  
 John-NOM apple-ACC eat-PST-DECL he-TOP apple-TOP not  
 mek-ess-e/mek-ci anh-ass-e}.  
 eat-PST-DECL/eat-CONN NEG.do-PST-DECL  
 ‘John ate apples. But he didn’t eat pears.’

As shown in (40), the non-elided, sentential counterpart of the stripping construction still contains a positive *ha-* ‘do’ verb or a negative one like the the stripping construction without a copula. On the other hand, as in (41), the non-elided, sentential counterpart of the stripping construction does not contain a copula unlike the stripping construction with a copula.<sup>15</sup>

### 5.3 Previous Analyses of the Korean Stripping Construction

Two different types of analyses have been provided for the Korean stripping construction in the literature. One is the focus movement + PF deletion analysis and the other is the pseudo-cleft analysis. In this section, I

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<sup>15</sup>In (41d), neither of the two negative forms involves a copula. The two forms are actually known as short form negation (SFN) and long form negation (LFN). The former simply has a negative marker *an* before a main verb, while the latter consists of a *-ci*-marked main verb and an negative auxiliary *ahn-* ‘NEG.do’. In this regard, neither form contains a copula.

show that they face problems in a similar way to the ones for the embedded sluicing construction and its two variants discussed in the previous chapters.

### 5.3.1 Focus Movement + PF Deletion Analysis

Kim J.-S. (1997a, 1997b, 2006) and Kim and Sohn (1998) argue that the Korean stripping construction is derived by overt movement of the focused phrase into [Spec, FocP] followed by deletion. According to their analysis, the derivational processes of the stripping construction examples in (42) can be represented as in (43) (Kim J. 2006: 281):<sup>16</sup>

- (42) a. John-i sakwa-lul mek-e. Mary-to-ya.  
 John-NOM apple-ACC eat-DECL Mary-also-COP.DECL  
 ‘John eats apples. Mary too.’
- b. John-i sakwa-lul mek-e. pay-to-ya.  
 John-NOM apple-ACC eat-DECL pear-also-COP.DECL  
 ‘John eats apples. Pear too.’
- (43) a. [<sub>FocP</sub> Mary<sub>i</sub>-to [<sub>TP</sub> [<sub>AgroP</sub> t'<sub>i</sub> [<sub>VP1</sub> t<sub>i</sub> [<sub>AgroP</sub> [<sub>VP2</sub> sakwa-lul t<sub>j</sub>] Agro] mek<sub>j</sub>] Agro] ya<sub>T</sub>] [+focus]]
- b. [<sub>FocP</sub> pay<sub>i</sub>-to [<sub>TP</sub> [<sub>AgroP</sub> [<sub>VP1</sub> John-i [<sub>AgroP</sub> t<sub>i</sub> [<sub>VP2</sub> t<sub>i</sub> t<sub>j</sub>] Agro] mek<sub>j</sub>] Agro] ya<sub>T</sub>] [+focus]]

In (43a) the focused phrase which corresponds to the subject in the antecedent clause overtly moves to [Spec, FocP] from the higher VP in order to check

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<sup>16</sup>These authors adopt the so-called split VP structure (Koizumi 1993, Lasnik 1995 among others), in which there might be no difference between specifiers and complements as each VP only has one argument.

its strong [+focus] feature in head Foc. In (43b) the focused phrase which corresponds to the object in the antecedent clause overtly moves to [Spec, FocP] for the same reason. Then, the deletion of VP<sub>1</sub> takes place in PF, and a copula is inserted to save a stranded tense.<sup>17</sup> As a consequence, the stripping construction examples in (42) are derived.

If the negative stripping construction is derived in the same way, the negative stripping construction example in (44a) is assumed to have undergone the derivational processes represented in (44b):

- (44) a. John-i sakwa-lul mek-e. pay-nun ani-ya.  
 John-NOM apple-ACC eat-DECL pear-TOP NEG.COP-DECL  
 ‘John eats apples. But not pear.’
- b. [<sub>FocP</sub> pay<sub>i</sub>-nun [<sub>TP</sub> [<sub>AgrsP</sub> [<sub>VP1</sub> ~~John-i~~ [<sub>AgrsP</sub> t<sub>i</sub> [<sub>VP2</sub> t<sub>i</sub> t<sub>j</sub>] ~~Agrs~~] ~~mek<sub>j</sub>~~]  
 Agrs] ani-ya<sub>T</sub>] [+focus]]

Therefore, the positive and negative stripping constructions can be analyzed in the same way under the focus movement + deletion analysis.

As a piece of supporting evidence to claim that the Korean stripping construction involves overt focus movement, they provide examples like (45), where the remnant corresponds to a phrase within an island in the antecedent clause.

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<sup>17</sup>Here, the AgrsP deletion also generates the same surface form. Thus, we cannot tell whether it is the VP<sub>1</sub> deletion or the AgrsP deletion that derives the stripping constructions in (42) and in fact Kim J.-S. (2006) assumes the VP<sub>1</sub> deletion, whereas Kim and Sohn (1998) assumes the AgrsP deletion, for instance.

(45) Example from Kim J.-S. (2006: 280, ex. (19))

??John-i Mary-ka phiano-lul yencwuha-n-ta-nun  
 John-NOM Mary-NOM piano-ACC play-PRES-DECL-COMP  
 sasil-ul al-a. paiollin-to-ya.  
 fact-ACC know-DECL violin-also-COP.DECL  
 ‘John knows the fact that Mary plays the piano. The violin too.’

In this example, the remnant in the stripping construction corresponds to the object NP within a complex noun phrase in the antecedent clause and they argue that the marginal grammaticality of examples like (45) supports their claim that the focused phrase overtly moves to [Spec, FocP] in the stripping construction.

However, as we have seen earlier, my informants and I judge examples like (45) and examples involving other types of islands as in (46) as fully acceptable.

- (46) a. John-un nwukwu-lul Mary-ka tosekwan-eyse  
 John-TOP who-ACC Mary-NOM library-LOC  
 manna-ass-nunci kwungkumha-y ha-y.  
 meet-PST-QUE wonder-CONN do-DECL  
 kongwen-eyse-to-ya.  
 park-LOC-also-COP.DECL  
 ‘John wonders whom Mary met in the library. In the park too.’  
 (*Wh*-island)
- b. John-un kangaci-ka aphu-ass-ki ttaymwuney  
 John-TOP puppy-NOM sick-PST-NMLZ because  
 sulphaha-yess-e. koyangi-nun ani-ya.  
 sad-PST-DECL cat-TOP NEG.COP-DECL  
 ‘John was sad because the puppy was sick. But not the cat.’ (Ad-  
 junct island)

The acceptability of examples like (46) indeed poses problems for this kind analysis of the Korean stripping construction that posits overt focus movement.

As pointed out by Ishihara (2011: 85), an additional problem with the focus movement + deletion analysis of the Korean stripping construction is that the analysis cannot account for cases where the antecedent clause has a different tense from that of the copula in the stripping construction, as in (47):

- (47) a. John-i sakwa-lul mek-ess-e. Mary-to-ya.  
 John-NOM apple-ACC eat-PST-DECL Mary-also-COP.DECL  
 ‘John eats apples. Mary too.’
- b. John-i sakwa-lul mek-ess-e. pay-nun ani-ya.  
 John-NOM apple-ACC eat-PST-DECL pear-TOP NEG.COP.DECL  
 ‘John eats apples. But not pears.’

As discussed above, the *-ya/ani-ya* copula form denotes the present tense; however, the tense information of the stripping construction with the *-ya/ani-ya* form is determined by the tense information of the antecedent clause. Given that there is only one T position in (44) and (43), it is then unclear how tense mismatching cases can be explained under the focus movement + PF deletion analysis, because the analysis predicts that the tense stranded by the VP<sub>1</sub> deletion should be that of the presumptive deleted predicate.

Another potential problem with the focus movement + deletion analysis concerns the optionality of the semantic case marker on the remnant in the stripping construction. When a semantic case-marked NP moves, it needs to retain its semantic case marker, as shown in (48):

- (48) a. John-i stripping-ey tayhayse iyakiha-yess-ta.  
 John-NOM stripping-to about talk-PST-DECL  
 ‘John talked about stripping.’
- b. stripping-ey tayhayse<sub>i</sub> John-i t<sub>i</sub> iyakiha-yess-ta.  
 stripping-to about John-NOM talk-PST-DECL  
 ‘About the stripping, John talked.’
- c. \*stripping<sub>i</sub> John-i t<sub>i</sub>-ey tayhayse iyakiha-yess-ta.  
 stripping John-NOM to about talk-PST-DECL  
 ‘Stripping, John talked about.’

However, semantic case markers are optional on the single remnant in the Korean stripping construction.

- (49) a. John-i Mary-eykey sathang-ul cwu-ess-e.  
 John-NOM Mary-DAT candy-ACC give-PST-DECL  
 Sue-(eykey)-to-ya.  
 Sue-DAT-also-COP.DECL  
 ‘John gave candy to Mary. (To) Sue too.’
- b. John-i Mary-lopwuthe sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Sue-(lopwuthe)-nun ani-ya.  
 Sue-from-TOP NEG.COP-DECL  
 ‘John received candy from Mary. But not (from) Sue.’
- c. John-i sluicing-ey tayhayse iyakiha-yess-e. stripping-(ey  
 John-NOM sluicing-to about talk-PST-DECL stripping-to  
 tayhayse)-to-ya.  
 about-also-COP.DECL  
 ‘John talked about sluicing. (About) stripping too.’

If we assume overt movement of the focused phrase in the stripping construction, these semantic case markers should move along with their nominal heads.

Then, the focus movement + deletion analysis cannot explain why the semantic case markers can be optional in the Korean stripping construction.

It is also unclear how the focus movement + PF deletion works for the stripping construction cases without a copula. If we assume that the focused [VERBAL +] remnant moves to [Spec, FocP] as well, the presumptive derivational processes for (50a) can be at best represented as in (50b):

- (50) a. John-i kamca-lul kwuwu-ess-e.  
 John-NOM potato-ACC bake-PST-DECL  
 thwuki-ki-to-ha-yess-e.  
 fry-NMLZ-also-do-PST-DECL  
 ‘John baked potatoes. Fried too.’
- b. \*<sub>[FocP]</sub> thwuki-ki<sub>i</sub>-to <sub>[TP]</sub> <sub>[AgrsP]</sub> t'<sub>i</sub> <sub>[VP1]</sub> t<sub>i</sub> <sub>[AgroP]</sub> <sub>[VP2]</sub> ~~John-i kamca-lul t<sub>i</sub>~~  
~~Agro~~ Agrs] ha-yess <sub>τ</sub>] [+focus]]

The example before deletion represented in (50b) is ungrammatical and it does not provide an explanation for why it is not a copula, but a dummy *ha-* ‘do’ verb here that is inserted to save the stranded tense unlike the stripping construction with a copula.

### 5.3.2 Pseudo-cleft Analysis

Park M. (1997) proposes that the Korean stripping construction is derived from a pseudo-cleft structure.<sup>18</sup> In his pseudo-cleft analysis of the Korean

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<sup>18</sup>See Kuwabara (1996), Nishiyama et al. (1996), and Ishihara (2011) for the same line of reasoning for the Japanese stripping construction.



stripping construction, the underlying structures for the stripping constructions in (51) are represented in (52):

- (51) a. John-i sakwa-lul mek-ess-e. Mary-to-ya.  
 John-NOM apple-ACC eat-PST-DECL Mary-also-COP.DECL  
 ‘John eats apples. Mary too.’
- b. John-i sakwa-lul mek-ess-e. pay-nun ani-ya.  
 John-NOM apple-ACC eat-PST-DECL pear-TOP NEG.COP-DECL  
 ‘John eats apples. But not pears.’
- (52) a. sakwa-lul mek-un kes-un Mary-to-ya.  
 apple-ACC eat-MOD KES-TOP Mary-also-COP.DECL  
 ‘It was Mary as well who ate apples.’
- b. John-i mek-un kes-un pay-nun ani-ya.  
 John-NOM eat-MOD KES-TOP pear-TOP NEG.COP.DECL  
 ‘What John ate was not pears.’

As the Korean pseudo-cleft construction involves a copula, the pseudo-cleft analysis naturally captures the presence of a copula in the stripping construction with a copula.

In addition, under the pseudo-cleft analysis, tense mismatches between the present tense of the *-ya* copula form and a non-present tense of the predicate in the antecedent clause can also be accounted for, as there are two different T positions in the pseudo-cleft construction, namely, one in the KES-clause and the other with the copula in the matrix clause.

- (53) a. sakwa-lul mek-un kes-un  
 apple-ACC eat-MOD KES-TOP  
 Mary-to-{ya/yess-e}.  
 Mary-also-COP.DECL/COP.PST-DECL  
 ‘It {is/was} Mary as well who ate apples.’

- b. John-i mek-un kes-un pay-nun  
 John-NOM eat-MOD KES-TOP pear-TOP  
 {ani-ya/ani-yess-e}.  
 NEG.COP.DECL/COP.PST-DECL  
 ‘What John ate {is/was} not pears.’

However, there are some properties of the Korean stripping construction that cannot be explained under the pseudo-cleft analysis. First, just like the focus movement + PF deletion analysis, the pseudo-cleft analysis cannot account for island insensitivity of the stripping construction. Observe the contrast in (54a) and (54b):

- (54) a. John-un thongsalon-ul cal ha-nun haksayng-ul cohaha-y.  
 John-TOP syntax-ACC well do-REL student-ACC like-DECL  
 uymilon-to-ya.  
 semantics-also-COP.DECL  
 ‘John likes the students who are good at syntax. Semantics too.’
- b. \*John-un cal ha-nun haksayng-ul cohaha-nun kes-un  
 John-TOP well do-REL student like-MOD KES-TOP  
 uymilon-to-ya.  
 semantics-also-COP.DECL  
 ‘\*What John likes the students who are good at is semantics too.’

The stripping construction example in (54a) is grammatical, although the correlate of the remnant is within a relative clause island; however, if we construct its putative source pseudo-cleft sentence, it is ungrammatical as in (54b). The difference in grammaticality of this pair is not expected under the pseudo-cleft analysis.

Additionally, the pseudo-cleft analysis cannot capture the optionality of the semantic case marker on the single remnant in the Korean stripping construction.

- (55) a. John-i Mary-lopwuthe sathang-ul pat-ass-e.  
 John-NOM Mary-from candy-ACC receive-PST-DECL  
 Sue-(lopwuthe)-to-ya.  
 Sue-from-also-COP.DECL  
 ‘John received candy from Mary. (From) Sue too.’
- b. John-i sathang-ul pat-un kes-un  
 John-NOM candy-ACC receive-MOD KES-TOP  
 Sue-\*(lopwuthe)-to-ya.  
 Sue-from-also-COP.DECL  
 ‘It was \*(from) Sue as well that John received candy.’
- c. \*John-i sathang-ul -lopwuthe pat-un kes-un  
 John-NOM candy-ACC from receive-MOD KES-TOP  
 Sue-to-ya.  
 Sue-also-COP.DECL  
 ‘(int.) It was Sue as well that John received candy from.’

As shown in (55b) and (55c), in the Korean pseudo-cleft construction, the pivot needs to carry its semantic case marker with it. However, the semantic case marker is optional on a single remnant in the Korean stripping construction as in (55a). This difference between the Korean stripping construction and the pseudo-cleft further weakens the idea that the Korean stripping construction is derived from the pseudo-cleft structure.

It is also questionable how the multiple remnants in the Korean stripping construction can be explained under the pseudo-cleft analysis (cf. Kim, J. 1997). Observe the contrast in grammaticality in the following examples:

- (56) a. John-i sakwa-lul mek-ess-e. Mary-ka  
 John-NOM apple-ACC eat-PST-DECL Mary-NOM  
 pay-to-ya.  
 pear-also-COP.DECL  
 ‘John ate apples. Mary (ate) pears too.’
- b. \*mek-un kes-un Mary-ka pay-to-ya.  
 eat-MOD KES-TOP Mary-NOM pear-also-COP.DECL  
 ‘\*It was Mary pears as well that ate.’
- (57) a. John-i Mary-eykey panci-lul cwu-ess-e. Sue-eykey  
 John-NOM Mary-DAT ring-ACC give-PST-DECL Sue-DAT  
 mukkeli-nun ani-ya.  
 necklace-TOP NEG.COP-DECL  
 ‘John gave a ring to Mary. But not a necklace to Sue (= he did not give a necklace to Sue).’
- b. \*John-i cwu-n kes-un Sue-eykey mukkeli-nun  
 John-NOM give-MOD KES-TOP Sue-DAT necklace-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘\*It was not a necklace to Sue that John gave.’

As shown in the examples in (56a) and (57a), multiple remnants are possible in the Korean stripping construction; on the other hand, their pseudo-cleft counterpart examples in (56b) and (57b) are all ungrammatical. This different behavior lends additional support to the idea that the Korean stripping construction is not derived from the pseudo-cleft structure.

As illustrated below, the pseudo-cleft construction and the stripping also show different behavior when they involve the inalienable possession construction, secondary predicates, adverbial modifiers, and comparative expres-

sions (cf. Sohn 2000: 284-285).<sup>19</sup>

(58) Inalienable possession

- a. John-i Bill-ul woynccok son-ul ttayli-ess-e.  
 John-NOM Bill-ACC left hand-ACC hit-PST-DECL  
 ‘John hit Bill’s left hand.’
- b. \*John-i Bill-ul ttaylu-n kes-un woynccok son-i-ya.  
 John-NOM Bill-ACC hit-MOD KES-TOP left hand-COP-DECL  
 ‘\*It was his left hand that John hit Bill.’
- c. John-i Bill-ul woynccok son-ul ttayli-ess-e. olunccok  
 John-NOM Bill-ACC left hand-ACC hit-PST-DECL right  
 son-to-ya.  
 hand-also-COP.DECL  
 ‘John hit Bill’s left hand. Right hand too (= He hit Bill’s right hand too).’

(59) Secondary predicate

- a. ku kos-eyse-nun salam-tul-i Mary-lul mi-uy  
 the place-LOC-TOP person-PL-NOM Mary-ACC beauty-GEN  
 yesin-ulo yeki-e.  
 goddess-as consider-DECL  
 ‘People there consider Mary a goddess of beauty.’
- b. \*ku kos-eyse-nun salam-tul-i Mary-lul yeki-nun  
 the place-LOC-TOP person-PL-NOM Mary-ACC consider-MOD  
 kes-un mi-uy yesin-(ulo)-ya.  
 KES-TOP beauty-GEN goddess-as-COP.DECL  
 ‘It is a goddess of beauty that people there consider Mary.’

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<sup>19</sup>Sohn (2000: 284-285) provides simple examples and pseudo-cleft examples as in the (a) and (b) examples in (58) – (60) and their corresponding sluicing examples and shows that the Korean sluicing construction is not derived from the pseudo-cleft construction.

- c. ku kos-eyse-nun salam-tul-i Mary-lul mi-uy  
 the place-LOC-TOP person-PL-NOM Mary-ACC beauty-GEN  
 yesin-ulo yeki-e. pwu-uy yesin-(ulo)-to-ya.  
 goddess-as consider-DECL wealth-GEN goddess-as-also-COP.DECL  
 ‘People there consider Mary a goddess of beauty. A goddess of  
 wealth too (= They consider her a goddess of wealth too).’

(60) Manner adverb

- a. ku swuuyisa-ka hangsang tonmuwl-tul-ul cengsengsulepkey  
 the veterinarian-NOM always animal-PL-ACC sincerely  
 talwu-e.  
 treat-DECL  
 ‘The veterinarian always treats animals sincerely.’
- b. \*ku swuuyisa-ka hangsang tongmwul-tul-ul talwu-nun  
 the veterinarian-NOM always animal-PL-ACC treat-MOD  
 kes-un censengsulepkey-ya.  
 KES-TOP sincerely-COP.DECL  
 ‘\*It is sincerely that the veterinarian always treats animals.’
- c. ku swuuyisa-ka hangsang tonmuwl-tul-ul cengsengsulepkey  
 the veterinarian-NOM always animal-PL-ACC sincerely  
 talwu-e. cosimsulepkey-to-ya.  
 treat-DECL carefully-also-COP.DECL  
 ‘The veterinarian always treats animals sincerely. Carefully too (= She always treats animals carefully too).’

(61) Comparative expression

- a. John-i Mary-pota khi-ka khu-ta.  
 John-NOM Mary-than height-NOM tall-DECL  
 ‘John is taller than Mary.’
- b. \*John-i khi-ka khu-n kes-un Mary-pota-i-ta.  
 John-NOM height-NOM tall-MOD KES-TOP Mary-than-COP-DECL  
 ‘\*It is than Mary that John is taller.’

- c. John-i Bill-pota khi-ka khu-e.  
 John-NOM Bill-than height-NOM tall-DECL  
 Kim-pota-to-ya.  
 Kim-than-also-CO.DECL  
 ‘John is taller than Bill. Than Kim too (= He is taller than Kim too).’

In the pseudo-cleft construction examples above, the pre-copula pivot position is occupied by a body part of the inalienable possession construction, a secondary predicate, an adverbial modifier, and a comparative expression, respectively, and they are unacceptable. By contrast, in the corresponding stripping construction examples such expressions can serve as a remnant. The difference in grammaticality between the pseudo-cleft construction examples and the stripping construction examples are problematic for the pseudo-cleft analysis.

The pseudo-cleft analysis is also problematic for the stripping construction cases without a copula. The problem is simply that such cases do not have a copula but a *ha-* ‘do’ verb. Considering the fact that the predicate part of a pseudo-cleft structure in Korean is composed of a focused phrases and a copula, the pseudo-cleft analysis cannot account for the stripping construction examples without a copula.

#### 5.4 Further Extension of the Anaphoric Subject-Predicate Analysis: The Korean Stripping Construction

In this section, I aim to further extend the anaphoric subject-predicate analysis proposed for the embedded sluicing construction and its two vari-

ants in the previous chapters to the stripping construction. I first discuss its grammatical properties distinct from the embedded sluicing construction and its two variants. I then show that the grammatical properties of the stripping construction naturally follow under the anaphoric subject-predicate analysis.

#### 5.4.1 Distinguishing Properties

The Korean stripping construction involves a non-*wh*-expression. It needs to have an overt correlate in the antecedent clause and it does not have to be an indefinite expression. In this way, it behaves the same as the embedded confirmative/contrastive construction.

Next, the meaning of the stripping construction is additive or contrastive. This meaning arises due to the relationship between the remnant and the correlate and the presence of an additive focus marker *-to* ‘also’ or a contrastive focus/topic marker *-nun* with a negative copula or dummy *ha-* ‘do’ verb, as shown below again:

- (62) a. John-i ecey sakwa-lul mek-ess-e. pay-to-ya.  
 John-NOM yesterday apple-ACC eat-PST-DECL pear-also-COP  
 ‘John ate apples yesterday. Pears too.’
- b. John-i ecey sakwa-lul mek-ess-e. pay-nun  
 John-NOM yesterday apple-ACC eat-PST-DECL pear-TOP  
 ani-ya.  
 NEG.COP-DECL  
 ‘John eats apples. But not pears.’
- c. John-i kamca-lul kwuwu-ess-e. thwuiki-ci-nun  
 John-NOM potato-ACC bake-PST-DECL fry-CONN-TOP



anh-ass-e.  
 NEG.do-PST-DECL  
 ‘John baked potatoes. But not fried (= he did not fry them).’

Irrespective of whether the stripping construction has a copula as in (62a) and (62b) or not as in (62c), the remnant in the stripping construction needs to have either of the focus markers to induce a desired additive or contrastive meaning.

#### 5.4.2 Copula Clause

In this section, I show how the anaphoric subject-predicate analysis proposed for the embedded sluicing construction and its two variants with a copula can be further extended to the stripping construction with a copula.

First, the anaphoric subject-predicate analysis predicts that the stripping construction with a copula can have a neuter singular pronominal subject *kukes* ‘it’ overtly. This possibility has not been discussed in the previous literature on the Korean stripping construction. In fact, it makes the construction sound a little weird. Consider the following example:

- (63) John-i ecey sakwa-lul mek-ess-e. {?kukey/?kuken}  
 John-NOM yesterday apple-ACC eat-PST-DECL it.NOM/it-TOP  
 pay-to-ya.  
 pear-also-COP  
 ‘John ate apples yesterday. (It was) pears too.’

The oddness of examples like these seems to arise due to the uniqueness condition of a specificational copula construction and its clash/redundancy with

the content in the stripping construction. For this example, the uniqueness condition clashes with the meaning of the additive focus marker *-to* ‘also’.

Nonetheless, attested corpus examples as in (64) are found, where the stripping construction has an overt pronominal subject *kukes* ‘it’:<sup>20,21</sup>

- (64) a. A: tasi manna-se na-n kippu-ess-e. B: kuken  
 again meet-to I-TOP glad-PST-DECL it.TOP  
 na-to-ya.  
 I-also-COP-DECL  
 ‘A: I was glad to meet you again. B: Me too (lit. it was me as well).’
- b. A: ... kuliko ne-ka cengmal alumtap-ta-ko  
 ... and you-NOM really beautiful-DECL-COMP  
 sayngkakha-y. B: mwe, kuken ne-to-ya.  
 think-DECL well it.TOP you-also-COP-DECL  
 ‘A: ... and I think that you are really beautiful. B: Well, you too (lit. it was you as well).’

Note here that the expression in the pre-copula position is an animate entity and its correlate as well, but we still can have a neuter singular pronominal subject *kukes* ‘it’. Although the overt presence of a pronominal subject *kukes* ‘it’ makes the Korean stripping construction sound a little odd in some cases for some semantic reason, they are not totally unacceptable and there are authentic corpus examples in which the pronominal subject appears. Thus, these examples indicate that the Korean stripping construction with a copula is actually a copula clause composed of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate with specificational use of the copula.

<sup>20</sup><http://m.blog.naver.com/soo040309/220714180868>

<sup>21</sup><http://cfile3.uf.tistory.com/attach/22566C4652171E7605F292>

Once we have shown that the stripping construction with a copula can have an overt neuter singular pronominal subject, the other grammatical properties of the construction are easy to explain under the anaphoric subject-predicate analysis proposed here. The stripping construction with a copula are expected to show the same grammatical behavior as the embedded sluicing construction and its two variants in terms of the other grammatical properties and this is indeed the case. They exhibit the same behavior with respect to the optional tense morpheme on the copula, case marker facts, the appearance of an AdvP or multiple phrases in the pre-copula position, island insensitivity, no voice mismatches, and no case/argument alternations.

Therefore, the Korean stripping construction with a copula is a subject-predicate construction with a specificational use of the copula, like the embedded sluicing construction and its two variants. It is simply different from the others with regard to how the non-*wh*-expression in the pre-copula position receives focus.

### 5.4.3 Copulaless Clause

In this section, I show how the anaphoric subject-predicate analysis proposed for the embedded sluicing construction and its two variants without a copula can be further extended to the stripping construction without a copula.

First, as we have noted above, there are examples, where the stripping construction cannot occur with a copula, and they are the cases with an Adj or verb non-*wh*-expression, as illustrated in (65):

- (65) a. John-un yeppu-n yeca-lul manna-ass-e.  
 John-TOP pretty-MOD woman-ACC meet-PST-DECL  
 chakha-ki-to-{\*ya/ha-y}.  
 kind-NMLZ-also-COP.DECL/do-DECL  
 ‘John met a pretty woman. Kind too.’
- b. Mary-nun yeppu-e. chakha-ki-to-{\*ya/ha-y}.  
 Mary-TOP pretty-DECL kind-NMLZ-also-COP.DECL/do-DECL  
 ‘Mary is pretty. Kind too.’
- c. John-i kamca-lul kwuwu-ess-e.  
 John-NOM potato-ACC bake-PST-DECL  
 thwui-ki-to-{\*ya/ha-yess-e}.  
 fry-NMLZ-also-COP.DECL/do-PST-DECL  
 ‘John baked potatoes. Fried too.’

The fact that stripping construction examples as in (65) actually involve a clause can be seen in examples like the following with an overt subject.

- (66) a. John-un yeppu-n yeca-lul manna-ass-e.  
 John-TOP pretty-MOD woman-ACC meet-PST-DECL  
 {kunya-nun/\*kukun} chakha-ki-to-ha-y.  
 she-TOP/it.TOP kind-NMLZ-also-do-DECL  
 ‘John met a pretty woman. {She/\*It} is kind too.’
- b. Mary-nun yeppu-e. {ku-nun/\*kukun}  
 Mary-TOP pretty-DECL he-TOP/it.TOP  
 chakha-ki-to-ha-y.  
 kind-NMLZ-also-do-DECL  
 ‘Mary is pretty. {She/\*It} is kind too.’
- c. John-i kamca-lul kwuwu-ess-e. {ku-nun/\*kukun}  
 John-NOM potato-ACC bake-PST-DECL he-TOP/it.TOP  
 thwui-ki-to-ha-yess-e.  
 fry-NMLZ-also-do-PST-DECL  
 ‘John baked potatoes. {He/\*It} fried (them) too.’

In these examples, the possible subject should agree with its antecedent in person, number, and gender, and it cannot be realized as the neuter singular pronominal subject *kukes* ‘it’. Note also that in (66a) the meaning of the stripping construction is, “she (= the woman) is kind too”, not “John met a kind woman too”. These examples then show that they are simply subject-predicate construction examples, where the [VERBAL +] expression denotes the property of the (possibly phonologically silent) pronominal subject as in the embedded sluicing construction and its two variants.

Since an AdjP or verb in this construction serves as a [VERBAL +] predicate on its own, when an AdjP appears here, it must be used predicatively, ruling out examples like the following:

- (67)      \*John-i    cwumal-e    calsayngki-n      chinkwu-lul  
              John-NOM weekend-on good-looking-MOD friend-ACC  
              manna-ass-e.    say-ki-to-ha-y.  
              meet-PST-DECL new-NMLZ-also-do-DECL  
              ‘\*John met a good-looking friend on the weekend. He is new too.

As noted in earlier, adjectival expressions like *say* ‘new’ can only be used attributively. The ungrammaticality of the example in (67) shows that it occurs in a predicate position. Also, it cannot mean, “John met a new friend on the weekend too”, because in this interpretation the adjectival expression is not used predicatively. Therefore, the ungrammaticality of examples like (67) supports the claim that the stripping construction without a copula is indeed a clause.

Lastly, let us consider what the (possibly phonologically silent) pronominal subject can be anaphoric to in the antecedent clause. Observe the examples again:

- (68) a. John-un yeppu-n yeca-lul manna-ass-e. (kunye-nun)  
 John-TOP pretty-MOD woman-ACC meet-PST-DECL she-TOP  
 chakha-ki-to-ha-y.  
 kind-NMLZ-also-do-DECL  
 ‘John met a pretty woman. (She is) kind too.’
- b. Mary-nun yeppu-e. (ku-nun) chakha-ki-to-ha-y.  
 Mary-TOP pretty-DECL he-TOP kind-NMLZ-also-do-DECL  
 ‘Mary is pretty. (She is) kind too.’
- c. John-i kamca-lul kwuwu-ess-e. (ku-nun)  
 John-NOM potato-ACC bake-PST-DECL he-TOP  
 thwuiki-ki-to-ha-yess-e.  
 fry-NMLZ-also-do-PST-DECL  
 ‘John baked potatoes. (He) fried (them) too.’

In (68a) and (68b), the [VERBAL +] predicates in the constructions are adjectival expressions. In (68a) the correlate is used attributively in an NP in the antecedent clause and the pronominal subject is anaphoric to the nominal expression “the woman”; on the other hand, in (68b) the correlate is used as a [VERBAL +] predicate on its own in the antecedent clause and the pronominal subject is anaphoric to the subject of which the correlate describes the property. In (68c) a verb serves as a [VERBAL +] predicate and the pronominal subject is anaphoric to the subject of which the correlate verb depicts the property. At the same time, however, information about the object of

‘fry’ should also be retrieved from the antecedent clause to get an intended interpretation.

Thus far I have shown that the Korean stripping construction is a subject-predicate construction with a (possibly phonologically null) pronominal subject like the embedded sluicing construction and its two variants. The same grammatical properties of these constructions in diverse respects can be systematically accounted for by the anaphoric subject-predicate analysis proposed here and their differences can also be explained once we understand their differences with respect to the how they get focus.

## 5.5 Formal Representations

In this section, I offer formal representations of some representative examples of the Korean stripping construction within the framework of HPSG. In doing so, I introduce a new feature [MARKING] to indicate that the expression in the pre-copula position with a copula clause or the [VERBAL +] predicate without a copula has a special marking *-to* ‘also’ or *-nun*. In addition, I also provide lexical information about the dummy auxiliary *ha-* ‘do’ in the stripping construction without a copula.

First, consider the Korean stripping example in (69a) and the DGB information of the antecedent clause in (69b):

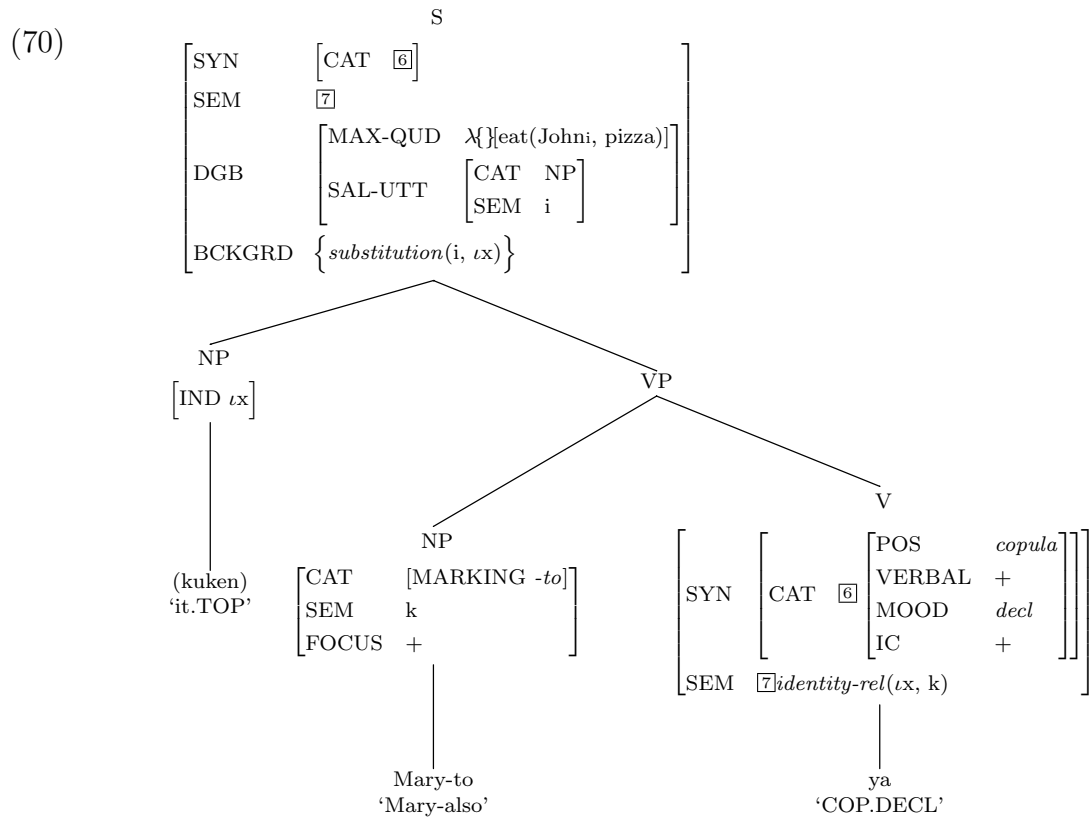
- (69) a.    John-i        phica-lul   mek-ess-e.        (kuken) Mary-to-ya.  
              John-NOM pizza-ACC eat-PST-DECL it.TOP   Mary-also-COP.DECL  
              ‘John ate pizza. Mary too.’

$$\left[ \text{DGB} \left[ \begin{array}{ll} \text{MAX-QUD} & \lambda\{\text{eat}(\text{John}_i, \text{pizza})\} \\ \text{SAL-UTT} & \left[ \begin{array}{ll} \text{CAT} & \text{NP}[\textit{nom}] \\ \text{SEM} & i \end{array} \right] \end{array} \right] \right]$$

According to the DGB information in (69b), the current topic is whether JOHN ate pizza. If the pronominal subject *kuken* ‘it.TOP’ is directly anaphoric to the SAL-UTT *John* in the antecedent clause, the second clause here should produce the meaning, “John is Mary too”. This is not the desired meaning. On the present anaphoric subject-predicate analysis, the Korean stripping construction involves a full clause and if it contains a copula, the copula is used specificationally as in the embedded sluicing construction and its two variants. Then, the meaning of the stripping part in (69a) should be, “the unique/specific x such that x ate pizza is Mary as well as John”.

Note now that similar to the embedded confirmative/contrastive construction with a copula, we need to make use of the *substitution* operation in the BCKGRD for the stripping construction with a copula, since the pronominal subject does not anaphorically refer back to the SAL-UTT in the antecedent clause directly. Also, the non-*wh*-expression in the pre-copula position is marked with the additive focus marker *-to* ‘also’ or the contrastive focus/topic marker *-nun*. Therefore, this information needs to be encoded as well. To this end, I make use of the [MARKING] feature. Then, we can have a tree structure like the following for the stripping part in (69a):





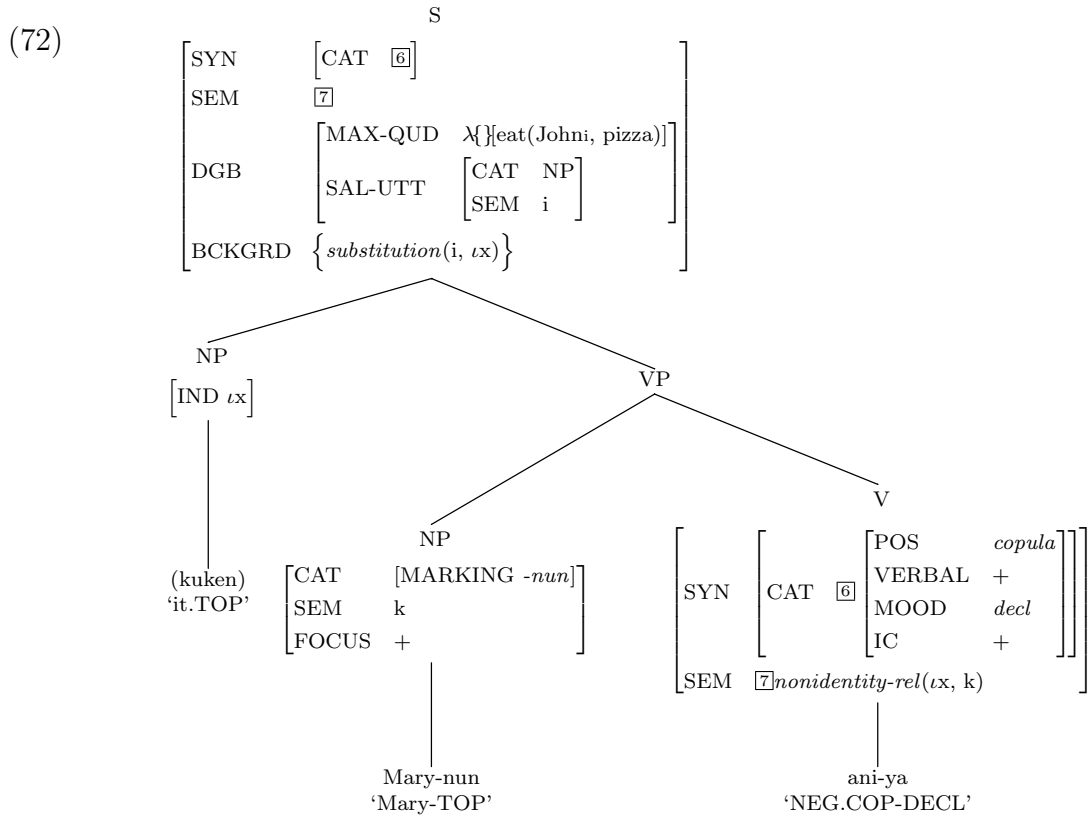
This structure shows that the stripping construction with a copula is just a kind of subject-predicate construction composed of a (possibly phonologically silent) pronominal subject and a [VERBAL +] predicate, where the subject anaphorically refers back to the variable that has to do with the SAL-UTT and it is linked with the *-to*-marked focused non-*wh*-expression in the pre-copula position by virtue of a specificational copula. The *substitution* operation allows the index of the SAL-UTT to be replaced with an iota one and the pronominal subject refers back to this iota one, not the SAL-UTT directly. The additive focus marker *-to* ‘also’ induces an additive meaning for the expression in the pre-copula expression and the positive specificational copula ensures the iden-

tivity relation between the pronominal subject and the pre-copula expression. Then, the stripping construction with a copula in (69a) would be interpreted as “the unique *x* such that *x* ate pizza is Mary as well as John”.

As the [VERBAL +] predicate is not a *wh*-expression in the stripping construction, a negative copula can occur as in the embedded sluicing-like construction and the embedded confirmative/contrastive construction.

- (71)      John-i      phica-lul   mek-ess-e.      (kuken) Mary-nun  
              John-NOM pizza-ACC eat-PST-DECL it.TOP   Mary-TOP  
              ani-ya.  
              NEG.COP-DECL  
              ‘John ate pizza. But not Mary.’

The antecedent clause here has the same DGB information as in (69b) and the tree structure for the stripping part should be the one in (72):



This structure is identical to the one in (70) except for the [MARKING] value for the non-*wh*-expression in the pre-copula position and the semantics of the copula. The contrastive focus/topic marker *-nun* along with the negative specificational copula ensures the negative identity relation between the pronominal subject and the pre-copula expression and the contrastive relation between the two as well. Thus, the stripping part here would be interpreted as “the unique *x* such that *x* ate pizza is not Mary in contrast to John”.

All the other instances of the stripping construction with a copula clause can be accounted for in the same way as the embedded confirma-

tive/contrastive construction with a copula with the addition of the appropriate [MARKING] value for the pre-copula expression.

Let us now consider the stripping construction without a copula as in (73):

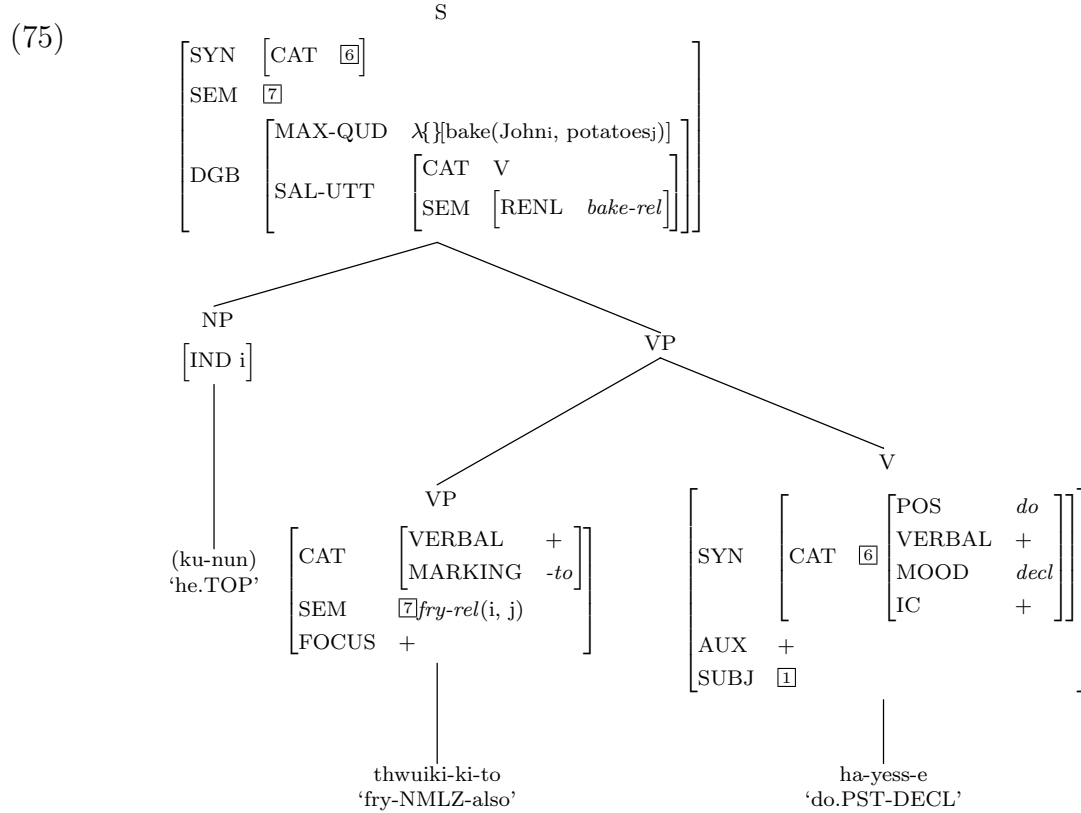
- (73)      John-i      kamca-lul   kwuwu-ess-e.   (ku-nun)  
              John-NOM potato-ACC bake-PST-DECL he-TOP  
              thwuiki-ki-to-ha-yess-e.  
              fry-NMLZ-also-do-PST-DECL  
              ‘John baked potatoes. (He) fried (them) too.’

Here, the stripping part has *kwup-* ‘bake’ as its correlate in the antecedent clause and the antecedent clause would update the DGB information as follows:

- (74)      Uttering: ‘John baked potatoes’:  
              
$$\left[ \text{DGB} \left[ \begin{array}{l} \text{MAX-QUD} \quad \lambda\{\}\text{[bake(John}_i\text{, potatoes}_j\text{)]} \\ \text{SAL-UTT} \quad \left[ \begin{array}{l} \text{CAT} \quad \text{V} \\ \text{SEM} \quad \left[ \text{RELN} \quad \text{bake-rel} \right] \end{array} \right] \end{array} \right] \right]$$

In the stripping part in (73), the [VERBAL +] predicate denotes the property of the (possibly phonologically null) pronominal subject. This pronominal subject is anaphoric to the subject of the correlate in the antecedent clause, ‘John’. However, in order to get the right information for the stripping part, we also need to have available the information about the object of ‘fry’, which is identical to the object of ‘bake’. This indicates that we still need to look at the information from the antecedent clause to obtain the intended interpretation for the stripping part. Furthermore, we should encode the lexical

information about the *ha-* ‘do’ verb, which is a dummy auxiliary with no important semantic information. The tree structure having all this information for (73) can then be represented as in (75):



As shown here, the stripping part without a copula is a clause composed of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate. Interestingly, important semantic information such as the argument information comes from the *-to*-marked [VERBAL +] predicate, whereas the category value of the entire clause is projected from the dummy *ha-* ‘do’ verb specifying tense information. Here, the stripping part describes a *fry* event

and the pronominal subject is anaphoric to the subject of the correlate in the antecedent clause. However, as *fry* is a two-place predicate, it also needs to find the other argument beside the one that serves as the subject. This is done by referring to the DGB information. The second argument of the *fry* predicate should be the same as the second argument of the *bake* predicate in the antecedent clause. With all the argument positions filled in the right way for the *-to*-marked [VERBAL +] predicate by means of the DGB information available, we obtain the intended meaning, “John fried potatoes as well”.

## 5.6 Conclusion

In this chapter, I examined the Korean stripping construction. I first explored grammatical properties of the Korean stripping construction and showed that the construction exhibits similar properties to the embedded sluicing construction and its two variants. Just like the others, the stripping construction has two types: one with a copula and the other without a copula.

However, I showed that the stripping construction is different from the embedded sluicing and sluicing-like constructions but similar to the embedded confirmative/contrastive construction in that it does not have an indefinite correlate in the antecedent clause and it only has the merger type. More specifically, the additive/contrastive meaning of the stripping construction comes from the additive marker *-to* ‘also’ or the contrastive focus/topic marker *-nun* along with a negative copula or a negative *ha-* ‘do’ verb.

In order to account for its grammatical properties, I further extended the anaphoric subject-predicate analysis. In other words, I argued that the stripping construction also consists of a (possibly phonologically silent) pronominal subject and a [VERBAL +] predicate. When the construction involves a copula, it has a specificational use; on the other hand, when it does not involve a copula, the the *-to/-nun*-marked [VERBAL +] predicate denotes the property of the pronominal subject and a dummy auxiliary *ha-* appears to encode the tense information with no other semantic information.

In formal representations for the stripping construction in general, I employed the [MARKING *-to/-nun*] to indicate that the expression in the pre-copula position or in the pre-dummy *ha-* position is marked with either of these two to induce an additive or a contrastive focus meaning. For the stripping construction examples with a copula, I made use of the *substitution* operation in the BCKGRD feature to guarantee that the pronominal subject does not anaphorically refer back to the SAL-UTT in the antecedent clause directly as in the embedded confirmative/contrastive construction. For the stripping construction without a copula, I encoded the lexical information for the dummy *ha-* verb in such a way that it does not have significant semantic contribution to the construction.

Thus, the anaphoric subject-predicate analysis proposed here enables us to capture the same behavior among the embedded sluicing construction, its two variants, and the stripping construction. We can also explain its differences from the others if we understand how it gets focus and the role of the

dummy *ha-* ‘do’ verb.



## Chapter 6

### Conclusion

This dissertation investigated what have been traditionally taken as ellipsis phenomena in Korean, with particular focus on the embedded sluicing and sluicing-like constructions, the embedded confirmative/contrastive construction, and the stripping construction. I showed that they do not in fact involve ellipsis. Syntactically they are straightforward subject-predicate constructions, with anaphoric relations to previous utterances. I also pointed out that previous studies have just focused on the constructions with a copula but there are also instances of the constructions where a copula cannot appear.

In Chapter 2 I first discussed the grammatical properties of embedded sluicing construction and showed that the previous analyses of this construction face problems in two different ways. In one, the analyses such as the movement + focus movement analysis and the pseudo-cleft analysis, which posit PF deletion and/or silent syntax and resort to strict syntactic derivations from their putative source structures to license them, do not account for their different behavior from their source structures. In the other, all the previous analyses do not distinguish the constructions with a copula and those without a copula.

Observing these problems, in Chapter 3 I proposed an anaphoric subject-predicate analysis of the embedded sluicing construction, on which the construction consists of a (possibly phonologically null) pronominal subject and a [VERBAL +] predicate, irrespective of they have a copula or not. This way, those that with a copula and without a copula can be treated in the same way. However, the copula clause and the copulaless clause are different in that in the former the copula has a specificational use but in the latter the [VERBAL +] predicate denotes the property of the pronominal subject. I showed that it is important to figure out what the pronominal subject is anaphoric to in the antecedent clause and that once we assume that the copula in the construction is used specificationally, we can account for its diverse grammatical properties.

In Chapters 4 – 5, I extended the anaphoric subject-predicate analysis to the embedded sluicing-like construction, the embedded confirmative/contrastive construction, and the stripping construction. I showed that we can account for the same behavior of all the constructions with a copula in many respects under the assumption that the copula is used specificationally. I also showed that if we understand the correlate type, the relationship between the correlate and the expression in the pre-copula position or the [VERBAL +] predicate, the antecedent of the anaphoric pronominal subject, and the way of focus realization, we can explain their differences as well.

In Chapters 3 - 5, I also provided formal representations of some representative examples of each of the constructions within the framework of HPSG, which allows us to make the most of discourse information with MAX-

QUD and SAL-UTT in DGB. With relevant feature specifications for the constructions at issue, I tried to demonstrate how we obtain meanings of some representative examples of the constructions.

The anaphoric subject-predicate analysis of the embedded sluicing construction can naturally account for its main clause counterpart and it also explains the existence of the main clause counterparts of its two variants, since under the present analysis they are all just some types of subject-predicate constructions and thus they do not have to occur only in an embedded environment and they do not have to appear with a *wh*-expression.

One note I would like to make at this point is that although some previous studies have focused on the constructions that appear in a main clause environment without a copula as in (1), I assume that the constructions discussed in this dissertation are more basic and prototypical.

- (1) a. A: John-i     mwuenka-lul   mek-ess-e.     B: mwue-(lul)?  
           John-NOM something-ACC eat-PST-DECL     what-ACC  
           ‘A: John ate something. B: What?’ (Sluicing)
- b. A: John-i     phica-lul   mek-ess-e.     B: Mary-to.  
           John-NOM pizza-ACC eat-PST-DECL     Mary-also  
           ‘A: John ate pizza.’ B: Mary too.’ (Stripping)

Previous studies called examples like (1a) instances of the matrix sluicing construction (Yoo 2013; Kim, J.-B. 2015).<sup>1</sup> In (1a), B’s utterance consists of a *wh*-remnant with or without the case marker as its correlate in the antecedent

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<sup>1</sup>As pointed out by Stephen Wechsler (p.c.), this is actually a misnomer, given the traditional notion of a ‘matrix clause’. A matrix clause is a clause that contains a subordinate

and its question mood is delivered by means of a rising intonation and a question marker. In (1b), B's utterance is composed of a remnant with an additive focus marker *-to* 'also'. Although some previous studies argue that these examples without a copula are more prototypical than the embedded counterparts with a copula, I object to the idea for the following reasons (Kim, J.-B. 2015; Kim and Cho 2016). First, even though B's utterance in (1a) is shorter, it can also have a copula, as discussed at the end of Chapter 3.

- (2) A: John-i mwuenka-lul mek-ess-e. B: (kukey)  
 John-NOM something-ACC eat-PST-DECL it.NOM  
 mwue-i-ni?  
 what-COP-QUE  
 'A: John ate something. B: What?'

B's utterance here contains a copula and a question marker at the end and it should still be treated as a main clause sluicing construction example, because it is surely not embedded by a predicate.

In addition, there is no main clause counterpart of the embedded confirmative/contrastive construction without a copula. Consider the following examples.

- (3) a. A: John-i phica-lul mek-ess-e. B: \*aniya, Mary-(ka).  
 John-TOP pizza-ACC eat-PST-DECL no Mary-ACC  
 'A: John ate pizza. B: No, Mary.'

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clause. However, in examples like (1) the sluicing construction and the stripping construction do not contain a subordinate clause. Therefore, it is not really correct to say that examples like (1) are instances of the matrix sluicing construction and the matrix stripping construction.

- b. A: John-i phica-lul mek-ess-e. B: aniya, (kuken)  
 John-TOP pizza-ACC eat-PST-DECL no it.TOP  
 Mary-ya.  
 Mary-COP.DECL  
 ‘A: John ate pizza. B: No, (it was) Mary.’

Each of B’s utterances here attempts to correct the information from A’s by having a negative particle at the beginning of the utterance and a constituent which is in a contrastive relation to one constituent in the antecedent. However, the one without a copula in (3a) is unacceptable, while the one with a copula in (3b) is acceptable. This indicates that the constructions under discussion with a copula are more general than the ones without a copula.

Furthermore, the constructions at issue without a copula in a main clause environment can only be used between close acquaintances in an informal setting; thus, they have a comparatively restricted use. Note that Korean has different verbal endings, depending on formality and the relationship between interlocutors in terms of social status. For instance, in a situation where A is a professor and B is a student of A, the examples in (1) are unacceptable/undesirable. Instead, the following with an appropriately conjugated copula should be used in the situation.

- (4) a. A: John-i mwuenka-lul mek-ess-ta. B:  
 John-NOM something-ACC eat-PST-DECL  
 mwues-\*(i-pnikka)?  
 what-COP-DEF.QUE  
 ‘A: John ate something. B: What?’

- b. A: John-i phica-lul mek-ess-ta. B:  
 John-NOM pizza-ACC eat-PST-DECL  
 Mary-to-\*(i-pnita).  
 Mary-also-COP-DEF.DECL  
 ‘A: John ate pizza.’ B: Mary too.’

In these examples, B’s utterances contain a copula with a deferential ending to indicate that B sounds polite and formal when speaking to A. This is because information about formality, honorification, and politeness is typically encoded on a predicate (a verb or an adjective) in Korean.

The idea that the constructions under discussion with a copula are more basic than those without it in a main clause environment is further supported by the negative stripping construction.

- (5) John-un ecey Mary-wa iyakiha-yess-ciman,  
 John-TOP yesterday Mary-with talk-PST-but  
 Sue-wa-nun ani-ta.  
 Sue-with-TOP NEG.COP-DECL  
 ‘John talked to Mary yesterday, but not to Sue.’

As discussed in Chapter 5, there is no way of constructing a negative stripping construction without a negative copula in examples like (5).

Lastly, I hope that the anaphoric subject-predicate analysis proposed here can be extended to the corresponding constructions in Japanese, which is typologically similar to Korean. Previous literature on Japanese sluicing has focused on the examples with an (optional) copula, disregarding the examples that cannot occur with a copula (Takahashi 1994; Kizu 1997; Nishigauchi 1998; Fukuya 2003; Abe 2008; Hasegawa 2008; Hiraiwa and Ishihara 2012). If such

examples exist in Japanese and they behave similarly to the ones without a copula in Korean, we may be able to show that an anaphoric subject-predicate analysis is more viable for such Japanese constructions as well. I leave it to future research.

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