A Predicate Inversion Analysis of *Kukes* in Korean "Sluicing"*

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Kim, Sun-Woong. 2012. A Predicate Inversion Analysis of *Kukes* in Korean “Sluicing”. *Linguistic Research* 29(1), 217-233. There has been a great amount of work regarding the identity of “sluicing” in Korean. Two major claims are the (pseudo)cleft analysis and the movement-cum-deletion analysis. The former claims the Korean “sluicing” is derived from a kind of cleft clause, while the latter claims it is derived in terms of movement and the subsequent deletion of the remnant clause. This paper is a piece of support to the cleft (or pseudocleft) analysis of Korean “sluicing” in contrast to the movement-cum-deletion analysis. Differently from the previous analyses, however, this paper claims that the optional presence of *kukes* in “sluicing” is actually an argument in Spec-TP, which has originated as the predicate of the embedded small clause. This is in line with the predicate inversion analysis of English pseudoclefts (Moro 1997, den Dikken 2008). The proposed analysis turns out to be effective in explaining the connectivity in “sluicing” in the same way as clefts in Korean.

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**Keywords** sluicing, cleft, pseudocleft, *kukes*, predicate inversion

1. **Introduction**

This paper argues that *kukes* ‘it’ in Korean "sluicing" is neither an expletive pronoun as in English nor a pronoun of resumptive or anaphoric nature.1 To be concrete, this paper proposes that *kukes* in the sentence given in (1) below is an

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1 Korean “sluicing” is double quoted in this paper, since it is not a regular sluicing that is found in German and English but similar to pseudosluicing in Merchant's (2001) terminology.
inverted predicate:

(1) John-i mwuenka-lul mekessnuntay, na-nun kukes-i mwues
    J-nom something-acc ate-but I-top it-nom what
    i-nci molla.
    be-Q don't-know
    'John ate something, but I don't know what it is.'

Although the debates are still going on whether the above sentence is an example of "sluicing" (J.-S. Kim 2001, B.-S. Park 2007, and J.-S. Lee 2012 among others) or pseudoclefting (M.-K. Park 1998, 2001), the present study simply adopts the latter view in that the sentence has kukes and the copula in it (Abe 2008). Proponents of the pseudocleft analysis of (1) assume that the sentence is derived by the same procedure as English pseudoclefts. This is shown below in (2) for English (Merchant 2001) and (3) for Korean:

(2) John loves someone, but I don't know who, <it is who
    t>i>
    >i-nci molla.
    be-Q don't-know
    'John ate something, but I don't know what it is.'

(3) John-i mwuenka-lul mekessnuntay, na-nun mwues; < (kukes-i)
    J-nom something-acc ate-but I-top what it-nom
    t>i-nci molla.
    be-Q don't-know
    'John ate something, but I don't know what it is.'

If (1) is a kind of pseudocleft, the question that immediately arises is whether kukes is a counterpart of it in English. In fact, Abe (2008) argues that the use of sore 'it' in Japanese counterpart of (1) evidences that the pseudocleft analysis of (1) is on the right track.

(4) Minna-wa John-ga dareka-o asisiteiru to itta ga,
    everyone-top J-nom someone-acc love C said but
    boku-wa sore-ga dare-o da ka wakara-nai
    I-top it-nom who-acc be Q know-not
    'Everyone said that John loved someone, but I don't know who it is.'
Paying a particular attention to the intuition that *kukes* (Korean), *sore* (Japanese), and *it* (English) all refer to the presuppositional content of the first conjunct (Park M.-K. 1998, 2001), this paper supposes that they can be analyzed as eventually having the same status in "sluicing". Narrowing focus down to Korean, this paper specifically claims that *kukes* in (1) is a predicate and moves to the subject position via predicate inversion (Moro 1997, den Dikken 2006, 2008). It will be shown that this proposal best explains connectivity effects that show up in "sluicing" in Korean. For reasons that will be clarified in section 2 and onwards, this paper analyzes the sentence like (1) in the same way as an example of Korean *kes*-clefts (S.-W. Kim 2010) rather than "sluicing".

2. Identifying *Kukes*

For the proper analysis of *kukes*, this section elaborates its syntactic and interpretational properties, followed by the critical review of the previous analyses.

2.1 Syntax of *Kukes*

One of the most salient properties of *kukes* in the Korean *kes*-cleft is that its presence triggers or feeds connectivity effects. Connectivity of Condition (A) can be understood through the following examples in English:

(5) a. He is angry with himself.
    b. What he is __ is angry with himself.
    c. *She is angry with herself.
    d. *What she is __ is angry with herself.

As Condition (A) is satisfied in (5a) above, it is also satisfied in (5b), too. As it is not satisfied in (5c), it is also not satisfied in (5d). This is a typical instance of the connectivity of Condition (A) in English. In the same vein, Korean examples can be made up as follows (Sohn 2001):
   he-top self-to anger-nom occurred-dec
   'He got angry about himself.'

   he-nom anger-nom occurred-m-kes-top self-to be-dec
   'What he is angry is about himself.'

As Condition (A) is satisfied in (6a), it is kept as the same in (6b) too. Now, consider the following:

(7) John-i nwukwunka-ek ey hwa-ka nassnuntay, na-nun
   J-nom someone-to anger-nom occurred-but I-nom
   *(kukes-i) casin-ek ey-inci molukessta.
   it-nom self-to be-Q don't-know
   'John got angry at someone, but I don't know whether it is at himself.'

In the same way as Nakao and Yoshida (2005) point out regarding Japanese, (7) is grammatical with kukes, but it is not without it in Korean, too. In other works, Condition (A) is satisfied only if kukes is overtly present. In other words, the presence of kukes feeds connectivity.2

2 In actuality, other connectivity effects can also be found in different context including binding (Condition A, B, C), quantifier scope, bound anaphora interpretation, etc. Typical examples of connectivity are given below. Readers are advised to make relevant examples in line with the examples:

(i) Condition A and B
   a. What John, is __ is proud of himself/*him.i.
   b. John, is proud of himself/him.

(ii) Condition C
   a. *What he, claimed __ was that John, was innocent.
   b. *He, claimed that John, was innocent.

(iii) Bound anaphora interpretation
   a. What every linguist, loves __ is his, first syntax class.
   b. Every linguist, loves his, first syntax class.

(iv) Condition B (Korean)
      J-nom anger-nom get-thing-top him-to be-dec
      'What John got angry to him.'
The second noteworthy property of *kukes* in *kes*-clefts is that the presence of *kukes* bleeds extraction out of "sluiced" XP. Consider the following:

(8) John-un enu haksayng-i kimkyoswu-lul mannass-nunci
J-nom which student-nom prof. Kim-acc met-Q
alkoissceiman, parkkyoswu-nun (*it-nom) enu haksayng-inci molunta.
know-but prof. Park-top (*kukes-i) which student-Q don't know
'John knows which student met Prof. Kim, but (he) doesn't know Prof
Park, which student (it is).'

This is in line with the observation that scrambling out of the "sluiced" clause is not allowed when the pronoun *sore 'it' (kukes)* is present in Japanese (Takahashi 1994, cited in Nakao and Yoshida 2005).

The third property to be considered is that *kukes* cannot show up in "the antecedentless, Case-particle-deleted construction." (M.-K. Park 2001:721).

(9) John-i chayk-ul cwuesstako hatente, ne-nun kukes-i
J-nom book-acc gave say you-top it-nom
nwukwu’?(-ekey) inci ani?
who(-dat) be-Q you-know
'They say that John gave a book ___, you know (to) who?'

As is shown above, when *kukes* is present, *nwukwu 'who'* can hardly be used in the "sluiced" clause without a postposition.

It will be discussed in the following sections that the first and second properties can be explained if the Korean "sluicing" is analyzed in line with specificational pseudoclefts. The third property will turn out to follow from a general condition on deletion: recoverability.

### 2.2 Interpretation of *Kuces*

Now let us consider what *kukes* refers to. There are two possible interpretations

*J-nom him-to anger-nom got-dec*

'John got angry at him.'
reported in the literature. M.-K. Park (2001) observes that *kukes* in "sluicing" can refer either to the preceding entity or to the preceding clause. Look at the following:

(10) John-i nwukwunka-ekey chayk-ul cwuesstako hatente, ne-nun
    J-nom someone-to book-acc gave say you-top
    kukes-i nwukwu-ekey inci you-know
    it-nom who(-dat) be-Q ani?

'They say that John gave a book to someone, you know (to) who?'

In (10), *kukes* can refer to the preceding indefinite pronoun *nwukwunka* 'someone' or the preceding clause as a whole, *John-i chayk-ul cwun kes* '(the fact) that John gave a book (to someone).' According to M.-K. Park (2001), the evidence for the latter interpretation comes from two kinds of data. One concerns the following:

(11) John-i changmwun-ul pwusyesstako hatente, ne-nun kukes-i
    J-nom window-acc broke-C say you-acc it-nom
    mwues*(-ulo)-inci ani?
    what-with-be-Q know-Q

'They say that John broke the window with something, do you know with what?'

M.-K. Park (2001) claims that in the antecedentless setting, (11) implies that *kukes* is identified with the clefted clause headed by the semantically incomplete nominal, that is, *John-i changmwun-ul pwusin kes* 'the fact that John broke the window.' This correctly shows that *kukes* in actuality refers to the preceding clause.³

As for the antecedent setting, consider the following:

(12) John-i nwukwunka-lul wuhay kkoch-ul sasstako hatente,
    J-nom someone-acc for flower-acc bought say
    na-nun kukes-i nwukwu-lul wuyhayse-inci molla.
    I-top it-nom who-acc for-be-Q don't know

³ This could not be a good piece of argument if this sentence is uttered in purpose to reveal something about the contrast between the presence of the antecedent and that of postpositions. He only argues that the relationship between *kukes* and its reference, the preceding clause, exists.
'They say that John bought flower for someone, but I don't know for who.'

According to M.-K. Park (2001), this implies that kukes is identified with the clefted clause headed by the semantically incomplete nominal, that is, John kkoch-ul san-kes 'the thing that John bought flowers.' If this is reconstructed, it would become something like (13):

(13) • (John-i kkoch-ul nwukwunka-lul wuyhayse san kes
J-nom flower-acc someone-acc for bought-n thing
(palo)) kukes-i nwukwu-inci molla.
just kukes-nom who-be-Q don't know
(lit) 'John bought flowers for someone, but I don't know it is for whom.'

From this, M.-K. Park (2001) concludes that kukes is a kind of resumptive pronoun. His insight that kukes is a substitute for a clausal cleft headed by the semantically incomplete nominal kes is on the same track with the present paper.4 Although this paper basically agree to his intuition that kukes refers to the clefted clause, his analysis of kukes as a resumptive pronoun is dubious. This paper will get to it in section 3 where the predicate nature of kukes is discussed. The evidence that kukes is not nwukwunka is clear. As is clearly agreed among Korean linguists, the animate nwukwunka cannot be replaced by the inanimate pronoun like kukes (as was also argued by Nakao and Yoshida (2005) in Japanese).

J-nom someone-acc meet-and, it/the man-with
iyakihayssta.
talked
'John met someone and talked with him.'

b. John-i nwukwunka-lul mannassnuntay, na-nun kukes-i

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4 His analysis of it as an alternating pronoun with pro, however, needs more consideration. The alternation between it and pro is a matter for a deeper consideration in that pro in Korean is not referring unlike Romance pro in pro-drop languages (Abe 2008).
In (14a), *kukes* cannot replace *nwukwunka* 'someone' in that *kukes* must refer to an object, not a human being, when used as a referring pronoun. *Ku salam* 'the man' is all right in that the expression is definitely referring to a human being. In contrast, *kukes* in *kes*-clefts can be used even when the antecedent is present in the first conjunct. This means that *kukes* in (14b) refers to something else other than *nwukwunka* 'someone.'

Nakao and Yoshida (2005) claim that Japanese "pronominal sluicing" is derived from the pseudocleft which contains a definite determiner. If this is applied to Korean, the derivation would be something like that given in (15).

(15) a. John-i nwukwunka-lul mannassnuntay, na-nun kukes-i
    J-nom someone-acc meet, I-top it-nom
    nwukwu-inci molla.
    who-dec-Q don't know
    'John met someone, but I don't know who.'

b. … na-nun [DP ku [<CP [TP John-i t; mannan] kes]> D]-i
    nwukwu-inci molla.

Assuming that the D head and the demonstrative *ku+D* (after CP deletion) are morphologically turned into the pronoun *kukes* (or *sore* in Japanese), they claim that *ku* actually turns into *kukes* (or *sore* becomes *sore* in Japanese). Their analysis is, however, improbable in one crucial respect. Their insight that *kukes* (or *sore*) is something clausal is right but their analysis is very dubious. In particular, the conversion of *ku* to *kukes* (or *sore* to *sore*) totally disregards morphological difference between the two.⁵ So, disregarding a possible extension of Nakao and

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⁵ Their analysis seems to be based on Percus's (1997) proposal regarding the derivation of *it*. According to him, *it* is derived from an English-specific phonological rule that obligatorily turns 'the Ø (one) t_CP' in subject position to *it*. For a brief criticism against Percus (1997), readers are referred to Merchant (2006).
Yoshida's (2005) analysis to Korean, let us move on to the main proposal of this paper.

To recapitulate, the following holds: *Kukes* in Korean *kes*-clefts is the clefted clause, which corresponds to the nominalized presupposition of the first conjunct. In the next section, this paper will analyze *kukes* as a predicate which has moved to Spec-T via predicate inversion (Moro 1997, den Dikken 2006, 2008).

3. Proposal

The present study claims that *kukes* 'it' is actually the inverted predicate of specificational *kes*-cleft, based on the discussion of S.-W. Kim (2010), which is in turn based on den Dikken's (2006, 2008) analysis of specificational clefts in English. For this let us look into what den Dikken's (2008) idea is. As is well known, there are two types of clefts (both for *it*-clefts and *wh*-clefts): specificational and predicational. For example, the *it*-cleft sentence in (16) below has two different meanings regarding focus as is given in (17):

(16) It was an interesting meeting that I went to last night.
(17) a. I went to the following last night: an interesting meeting.
    b. The meeting I went to last night was interesting.

(17a) has a specificational reading in that the entire postcopular NP is the focus of the *it*-cleft and supplies new information. Here *an interesting meeting that I went to last night* as a whole is the new information. (17b), on the other hand, has a predicational reading in that only the attributive adjective *interesting* supplies the new information, while *meeting* is the old information.

This paper adopts the view of S.-W. Kim (2010) that Korean *kes*-clefts are specificational rather than predicational in that they show significant properties of specificational clefts. The most salient property of specificational clefts is that they keep the binding connectivity intact. Look at the examples below:

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6 This may well correspond to presupposition projection of Heim (1992) at SS.
7 For heuristic purposes, I'd like to use "*it*-clefts" for clefts and "*wh*-clefts" for pseudoclefts in this paper.
John got angry at someone, but I don't know whether it is at himself."

(18) is accepted by Korean native speakers with a coreferential reading between John and casin 'self.' This is consistent with the observation that kukes in Korean is propositional in nature. It can be understood in turn that kukes is something like a predicate though it may have a referential function. In terms of the interpretation exemplified in (17), the best candidate for the referential predicate would be to a specificational cleft.

Now, the question is how to derive it. For this, let us start with the examples in (19). (19a) is a typical example of specificational copular sentence; (19b) is the inverse of it.

(19) a. John is his best friend.
b. His best friend is John.

According to den Dikken (2008), (19b) is derived by predicate inversion. To see the distinction in more detail, look at the following from den Dikken (2008). If embedded under the small clause, the copula is optional; but the copula must not show up under predicate inversion. This is an important property of the predicate 'his best friend.'

(20) a. I consider John (to be) his best friend.
b. I consider his best friend *(to be) John.

What is interesting is that even when the it-cleft is embedded under the small clause, the same distributional property is found.

(21) a. I consider it (to be) an interesting subject that they are discussing tonight.
b. I consider it *(to be) John who is his best friend.

(21a) is predicational; it here is the subject as a referential pronoun like *John in (20a). In contrast, (21b) is specificational; it is the predicate like *his best friend in (20b), not an argument but an inverted predicate. Non-argument/predicate property of it (21b) is confirmed by the fact that neither control (den Dikken 2008) nor a parasitic gap is possible with respect to (21b):

(22) a. ?*It is Peter who is coming without PRO, being a nice man.
   b. ?*It will be this paper that will be filed without being read at

(22a) shows that it cannot be the controller of the PRO; (22b) shows that it-clefts are not compatible with the parasitic gap.

In this regard, this paper proposes the derivation of *kukes in the "sluicing" starts from within the small clause (den Dikken 2006, 2008) in the same way as it in it-clefts does in English. To be more specific, the "sluiced" clause in (23a), which is understood as meaning (23b), is derived as in (24a) through (24b):

(23) a. Chelswu-ka mwuenka-lul messesstanuntay, ne-nun kukes-i
   C-nom something-acc ate-and you-top it-nom
   mwues-inci ani?
   what-be-whether know-Q
   b. Chelswu-ka mwuenka-lul messesstanuntay, ne-nun [[Chelswu-ka
   C-nom something-acc ate-and you-top C-nom
   mekunkes] [mwues-i kukes]-inci ani?
   ate-thing what-be it-be-whether know-Q
   'I heard that Chelswu ate something, and do you know what?'

(24) a. Ne-nun [CP [Chelswu-ka mekunkes] [TP [T [SC mwues-i
   You-top C-nom ate-thing what-nom

(i) a. What John is is important to him. (predicational)
   b. What John is is important to himself. (specificational)
(ii) a. I consider what John is (to be) important to him. (predicational)
   b. I consider what John is *(to be) important to himself. (specificational)

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8 Here are more examples of predicational/specificational distinction (den Dikken 2008):

(i) a. What John is is important to him. (predicational)
   b. What John is is important to himself. (specificational)
(ii) a. I consider what John is (to be) important to him. (predicational)
   b. I consider what John is *(to be) important to himself. (specificational)
kukes]-inci][] ani?

(Lit) 'Do you know what is it that Chelswu ate?'

b. Ne-nun [CP <Chelswu-ka mekunkes> [TP kukes [T' [VP <Chelswu-ka mekunkes> [SC mwues-i <kukes>-inci]]] ani?

The "sluiced" clause starts as the structure given in (24a). It is notable that the small clause is embedded as the complement clause of the embedded VP. This small clause consists of a subject mwues and a predicate kukes. The predicate kukes raises to Spec-TP via predicate inversion (Moro 1997, den Dikken 2008) as in (23b). Chelswu-ka mekunkes 'what Chelswu ate' originates from Spec-VP, moves to Spec-CP, and is deleted in identity with the antecedent in the first conjunct. This is roughly represented in (25) below.9

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9 This derivation is an extension of the question and answer pair analysis of English cleft sentences (den Dikken 2006, 2008, 2009). According to this analysis, clefts like in (ia) is derived from (ib) via the raising of the focused pivot followed by the deletion of the remnant clause.

(i) a. What John ate is spaghetti.
    b. What John ate is John ate spaghetti.
    c. What John ate is [spaghetti, <John ate t>]}
(25) Derivation of (24b) via (24a)

The proposed analysis assumes that *kukes* starts as a predicate of the small clause. It moves to Spec-TP. This is also an extension of den Dikken's analysis of specificational *it*-clefts in which it is fronted to the subject position via predicate inversion. One might ask whether *kukes* is actually equal to *it* in English *it*-clefts. The answer is of course no. As was discussed above regarding (22), if it is an expletive like *it* in English, a natural expectation is that *kukes* cannot be a controller of PRO. This is actually born out. In some cases of clefts in English, *it* cannot control PRO. Look at the following again:

(26) *It, was Ryan who murdered Brian, besides PRO, being a bad guy.

(*22a*)

According to den Dikken (2009), *it* cannot be the controller of PRO when the cleft sentence is interpreted as specificational. This in turn means that the *it* in English specificational clefts is not an argument NP but a kind of expletive. Now, let us
consider a Korean example:

(27) [PRO ik-ci-to anh-ko] ttang-ey ttelecin kes-un
    ripen-n-even neg-do-and earth-on fall-n thing-top
    (kukes-i) sakwa-ita.
      it-nom    apple-be-dec
\[\text{It is an apple that fell down to earth even before it got ripe.}\]

Differently from (26), (27) is accepted as grammatical. If this is true, then it can be concluded that Korean \textit{kukes} is different from English \textit{it} in clefts.\textsuperscript{10} For this, this paper assumes that \textit{kukes} can be type-shifted to an argument in Spec-TP.

The proposed predicate inversion analysis explains the connectivity in Korean “sluicing” in the same way as Korean \textit{kes}-clefts.

(28) John-i nwukwunka-ekey hwa-ka nassnuntay, na-nun kukes-i
       J-nom someone-to anger-nom got-but, I-nom it-nom
       caki-ekey-inci molukessta.
      self-to-Q don’t know
(\text{lit}) ‘John got angry at someone, but I don’t know whether to himself.’

The reflexive \textit{caki} in (28) is bound by the coindexed \textit{kukes} (= \textit{John-i hwa-ka nanan-kes} 'What John got angry at'), which has moved to Spec-TP from the predicate position inside the small clause. From this position, it can bind the reflexive without problems.

Regarding the second property that \textit{kukes} bleeds extraction out of "sluiced" XP, the predicate inversion analysis of this paper is better than other proposals. This bleeding comes from the phasehood of the XP which consists of the cleft clause. If \textit{Park kyoswu} 'professor Park' is extracted out of XP in Spec-VP, this extraction would violate the PIC due to XP phase. The relevant part of the example (8) would have the following representation:

\textsuperscript{10} Some Koreans feel that (27) sounds more acceptable when \textit{sakwa} 'apple' rather than \textit{kukes} acts as the controller. In actuality, if \textit{kukes} is interpreted as meaning 'what fell down to earth,' this sentence becomes less acceptable.
(29) John-un enu haksayng-i kimkyoswu-lul mannass-nunci alkoissciman,
park kyoswu-nun [VP [XP <park kyoswu-lul> mannan-kes [SC enu
haksayng-i <kukes>] -i ⋯ enu haksayng-ini molunta. (=8)
'John knows which student met Prof. Kim, but (he) doesn't know Prof
Park, which student (it is).'

Lastly, regarding the third property, it is evidently due to the recoverability
problem of 
‘to’.

(30) John-i chayk-ul cwuesstako hatente, ne-nun kukes-i
J-nom book-acc gave say you-top it-nom
nwukwu '(-ekey) inci ani? (=9)
who(-dat) be-Q you-know
'They say that John gave a book ___, you know (to) who?'

If 
‘to’ is a postposition with its own lexical content, its deletion should require the
antecedent. This is why (30) is bad without 
‘to’. This conjecture is evidenced by
the improved grammaticality of (31).

(31) John-i nwukwunka-ekey chayk-ul cwuesstako hatente, ne-nun
J-nom someone-to book-acc gave say you-top
kukes-i nwukwu inci ani?
it-nom who be-Q you-know

(31) shows that an addition of the antecedent in the first conjunct makes the whole
string perfect.

4. Summary and Conclusion

There has been a great amount of work regarding the identity of “sluicing” in
Korean. They can be largely divided into two major claims: the (pseudo)cleft
analysis and the movement-cum-deletion analysis. The former claims the Korean
“sluicing” is derived from a kind of cleft clause (M.-K. Park 2001 among others), while the latter claims it is derived in terms of movement and the following deletion of the remnant clause (J.-S. Kim 1997, B.-S. Park 2007, J.-S. Lee 2012). This paper is a piece of support to the cleft (or pseudocleft) analysis of Korean “sluicing”. Differently from the previous analyses, however, this paper claims that kukes in Korean “sluicing” is originated as the predicate of the embedded small clause. This is in line with the predicate inversion analysis of English pseudoclefs of Moro (1997) and den Dikken (2008). The proposed analysis turns out to be effective in explaining the connectivity in “sluicing” in the same way as clefts in Korean and other phenomena regarding the presence of kukes.

References

den Dikken, Marcel. 2009. Predication and specification in the syntax of cleft sentences. Ms. CUNY.