## Korean Nominalizer kes and its Information Structure Properties

The Korean noun *kes* means 'fact' or 'thing', and nominalizes a VP or S. Some uses of *kes* create what look like English clefts or pseudo-clefts; we focus on these here. Specifically, and contrary to most research on Korean, we argue that there is no need for special properties of 'cleft' or 'pseudo-cleft' constructions, and that all the facts are predicted solely by the simplest analysis of *kes* and right analysis of the Korean copula, which appears in all the examples below.

(1) seems to show a pseudo-cleft and either a cleft or an inverted pseudo-cleft, respectively. Kang (2006) noticed an interesting asymmetry in (2) – with an animate topic, b is unacceptable:

- (1) a. [John-i sa-n kes]-un i chayk-i-ta [John-NOM buy-MOD kes]-TOP this book-COP-DECL 'What John bought is this book.'
  - b. i chayk-un [John-i sa-n kes]-i-ta this book-TOP [John-NOM buy-MOD *kes*]-COP-DECL 'This book is what John bought.'
- (2) a. [John-i manna-n kes-un] i yeca-i-ta [John-NOM meet-MOD *kes*]-TOP this woman-COP-DECL 'Who John met is this woman.'
  - b. \*i yeca-nun [John-i manna-n kes]-i-ta this woman-TOP [John-NOM meet-MOD *kes*]-COP-DECL 'This woman is who John met.'

One immediate consequence of this is that the a and b examples cannot be derived with one as the inverse of the other, as there is no way to block (2)b but allow (1)b. In Kang's analysis (2006), the (1-2)a examples have *kes* as a C heading a CP, insensitive to animacy, while the (1-2)b examples have *kes* as N heading NP, necessarily inanimate. However, there is nothing in her analysis to restrict CP-*kes*-phrases to subject/topic position as in the (1-2)a examples and the NP-*kes*-phrases to predicate position as in the (1-2)b examples. Of course, it is always possible to add complexity in the syntax via specialized functional heads to force the right outcomes.

In our proposal, *kes* is either a true noun ('thing') or a formal noun, nominalizing a property. The key to the contrast above lies in the nature of copular constructions, which can be predicative or equative. We find the following (quite familiar) patterns of information-structure expression, which show differences depending on the partition of given and new information. Consider first a predicative use of the copula as in (3):

- (3) mina-nun cikep-i mwe-ni?('What is Mina's occupation?')
  - a. mina-nun kyoswu-i-ta Mina-TOP professor-COP-DECL 'Mina is a professor.'
- b. \*kyoswu-nun mina-i-ta professor-TOP Mina-COP-DECL

The question here asks for some property of the topic 'Mina', and what is new is expressed in the predicate position, providing some descriptive information.

In contrast, presupposing the existence of a property, and asking who has that property, the new information can be expressed equatively, either in subject position or as part of the predicate:

(4) nwukwu-ka i pan pancang-i-ni? ('Who is the speaker of this class?')

 a. i pan pancang-nun mina-i-ta this class speaker-TOP Mina-COP-DECL 'The speaker of the class is Mina.'
 b. mina-ka i pan pancang-i-ta Mina-NOM this class speaker-COP-DECL 'Mina is the speaker of the class.'

In these equational uses, the given and new information may appear either in subject or predicate positions, for the constructions are literally of the form x=y.

Now, examples involving *kes* follow these predicative or equative patterns **precisely**. In predicative uses, the subject is given information and the predicate provides new descriptive information about a given entity. In equative uses, the new information is that two independent descriptions (given or not) pick out the same individual. There is a constraint on the use of *kes*:

(5) A nominalization with the formal noun *kes* cannot provide descriptive (new) information. In the equative use, both subject and predicate are referential, and can be inverted, as in (6) – note that both argument positions are nominalizations headed by *kes*.

- (6) a. [ney-ka hay-ya ha-nun kes]-un [PC-lul mence cwumwunha-nun kes]-i-ta [you-NOM do-COMP must-MOD *kes*]-TOP [PC-ACC first order-MOD *kes*]-COP-DECL 'What you must do (to solve your problem) is buy a PC first.'
  - b. [PC-lul mence cwumwunha-nun kes]-i [ney-ka hay-ya ha-nun kes]-i-ta [PC-ACC first order-MOD *kes*]-NOM [you-NOM do-COMP must-MOD *kes*]-COP-DECL 'Buy a PC first is what you must do.'

We argue that (1) is the same, in that both positions are referential, and hence both examples in (1) are acceptable. (Strictly speaking, (1)a could be predicative or equative; but the fact that it can be equative allows it to be inverted.) We can show that (1) is equative by the contrast in (7): *mwues* 'what' typically asks for a property, while *enu kes* 'which one' looks to identify one member of a given set. The improvement in c over b over a shows that *John-i sa-n kes* picks out an index, not some descriptive property:

- (7) a. ??mwues-i [John-i sa-n kes]-i-ni?
  What is what John bought?'
  b. ?i kes-tul-cwung mwues-i [John-i sa-n kes]-i-ni?
  'Among these things, what is what John bought?'
  - c. enu kes-i [John-i sa-n kes]-i-ni?'Which thing is what John bought?'

Now in contrast, in predicative position, *mwues* is perfectly acceptable, as is *nwukwu* ('who'):

(8) a. [John-i sa-n kes]-un mwues-i-ni?
b. [John-i manna-n kes]-un nwukwu-i-ni?
'What is it that John bought?'
'Who is it that John met?'

So in (2)a the subject nominalized by *kes* is referential, and the predicate expresses new information, extra descriptive material. (2)b is not acceptable as this predicative information cannot be expressed in subject position ((2)a/b are predicative, parallel to (3)a/b). All other structures that might be assigned to (2)b are bad: if the *kes*-phrase is taken to be the predicate, it violates (5), and if *kes* is taken to be a true noun, it means 'thing' and an animacy clash results.

The generalization in (5) can be understood in terms of file-card semantics – e.g., Engdahl and Vallduví (1996) – to the effect that the *kes*-phrase always has its own file card, and cannot simply provide information to update another card. This is the fundamental constraint on *kes*. The full paper will provide a more detailed account of the information structure of the Korean copula and of examples involving *kes*.