

Ellipsis of Wh-words and Some Theoretical Implications

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1. Introduction

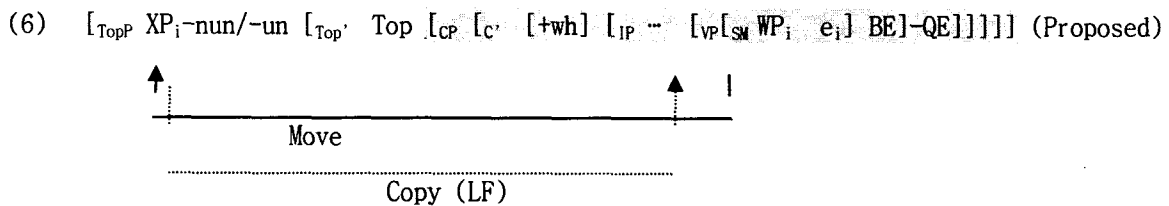
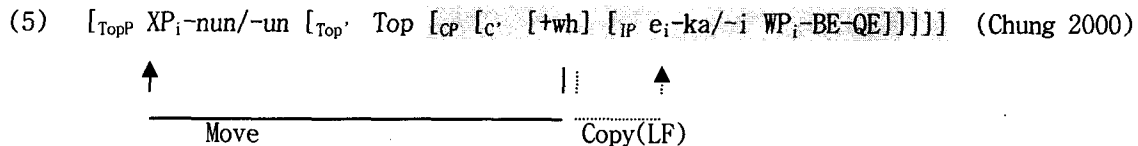
As reported in Chung (2000), Korean has a special form of ellipsis construction in which wh-question readings are produced even without a wh-phrase. For example, the sentences in (1)-(4) convey wh-question readings (with or) without the shaded parts overtly realized.

- (1) mikwuk chotay taythonglyeng-uy ilum-un (~~mwues-i-pnikka~~)?
America first president-Gen name-Top what-be-QE
'(What is) the name of the first president of America?'
- (2) kewul-a, kewul-a, seysang-eyse kacang yeppwun yeca-nun (~~nwukwu-i-ni~~)?
mirro-Voc mirror-Voc, world-in most beautiful woman-Top who-be-QE
'Mirror, mirror, (who is) the most beautiful woman in the world?'
- (3) ilpon-uy swuto-nun (~~eti-i-nipnikka~~)?
Japan-Gen capital;city-Top where-be-QE
'(What city is) the capital city of Japan?'
- (4) namcachinkwu-eykey chokkoley-tul cwu-nun nal-un (~~encey-i-ni~~)?
boyfriend-to chocolate-Acc give-Adn day-Top when-be-QE
'(When is) the day in which you give your boyfriend chocolate?'

Such WH-less WH-Questions (WLWQs) are often used as questions in written tests or in oral quizzes, especially in riddles. Chung (2000) reports various interesting facts about

WLWQs and tries to explain them in terms of general constraints like the principle of deletion-up-to-recoverability and Grician maxim of quality.

The aim of the paper is two-fold. First, although I basically lend support to Chung's (2000) claim that WLWQs are not sentence fragments but have a clausal architecture in (5), I propose a modified structure given in (6), adopting Yoon's (in Press) analysis of copula *-i* as a raising verb taking a small clause complement.



(6) enables us to accommodate the fact that the remnants in WLWQs invariably end with a topic marker as well as all other facts discussed in Chung (2000). A second major claim made in this paper is that, as far as WLWQs are concerned, an LF-copying approach to ellipsis should be favored over a PF-deletion approach.

2. Restrictions on the Remnants

There are several restrictions on the form of the remnants in WLWQs. First, it is marked with a topic marker, as was seen in (1) and (4). WLWQs do not tolerate other markers. For example, the WLWQ in (3) cannot have the intended reading when the topic marker is replaced by other markers:

- (7) *ilpon-uy swuto-ka/-lul/-to/-man/-eyse?
 Japan-Gen capital;city-Nom/-Acc/-also/-only/-in

Expressions like (7) are unacceptable unless they are construed as sentence fragments. Thus, such expressions cannot be uttered out of blue. The non-availability of the intended WLWQ reading with such expressions was attributed to the principle of deletion-up-to-recoverability in Chung (2000).¹

The remnants in WLWQs are also constrained about their internal syntactic and semantic content. They must be categorially nominal, as was exemplified in (1)-(4). No other categories are possible as remnants. I guess this follows from the structure of propositions. Propositions are composed of subject and its predicate. As schematically represented in (6), subject in WLWQs is viewed as a null wh-element whose formal (as well as semantic) property inherits (or, is copied) from the remnant which function as a predicate in the base position. Given this, the remnant should be nominal since subject is typically nominal.

The remnants in WLWQs are also semantically restrained. They are typically non-referring definite descriptions, as exemplified in (1)-(4). Referring expressions like proper names and generic nominal expressions are not allowed as remnants in WLWQs:

- (8) *John-un?
 J.-Top
 (Intended) 'Who is John?'
- (9) *khemphyute-nun?
 computer-Top
 (Intended) 'What is the computer?'

The definite description used in the WLWQs should be uniquely identifiable. Compare the

¹ Except for the cases of nominative case markers, for which some discussion will be carried on in section xx.

following sentences:

- (8) a. hankwuk-uy swuto-nun?
 Korea-Gen capital-Top
 ‘What is the capital city of Korea?’
- b. *swuto-nun?
 capital-Top
 What is the capital city?
- (9) a. hankwuk salam-uy phyengkyun swumyeng-un?
 Korea people-Gen average life;span-Top
 ‘What is the average life span of Korean people?’
- b. *phyengkyun swumyeng-un?
 average life;span-Top
 ‘What is the average life span?’

Sentences like (8a) and (9a) can be uttered out of blue, but those like (8b) and (9b) cannot because the remnants in the latter sentences are not specific enough to identify anything.

In the same vein, no wh-element may reside within the remnant of a WLWQ:

- (10) *enu nala-uy swuto-nun?
 which country-Gen capital;city-Top
 ‘(What city is) the capital city of which country?’

Containing a wh-phrase, the remnant in (10) could not identify anything.

There are examples of WLWQs that apparently allow proper names and generic expressions as remnants. Consider the following:

(11) NGO-lan?

NGO-LAN

'What is NGO?'

(12) phoyutongmwul-ilan?

mammal-ILAN

'What are mammals?'

The apparent proper name *NGO* in (11) does not refer to anything until its semantic content is provided by the hearer. Similarly, the apparent generic nominal *phoyutngmwul* in (12) does not gain the generic sense until its semantic content is provided by the hearer. They mean 'the so-called X'. Thus, (12), for example, can be paraphrased as (13) below or it might be the case that (12) could be derived from (13) by a series of deletion process.

(13) phoyutongmwul-i-la-ko pwul-i-nun kes-un?

mammal-be-DE-C call-Passive-ADN thing-Top

(Lit.) ' (What is) the thing that is called ' mammals' ?

Note that a definite description is involved in (13). Thus, it could be said that structures in (12) and (13) are just instances of WLWQs, where the definite description part is disguised.

The remnants in WLWQs are reminiscent of specificational constructions discussed in Akmajian (1971), Higgins (1979) and Kim (2000, ch 4). According to Kim (2000), the first part of specification may be a pseudo-cleft, a relative construction or a simple nominal expression:

(14) a. What John likes is a picture of himself.

b. The animal I am pointing at is a kangaroo.

c. John's favorite present is a picture of himself.

Kim (2000:128) calls the underlined parts “ abstract labels” and the post-copular parts “ content items of the labels” . The remnants in WLWQs behave like the abstract labels in that they can be a pseudo cleft, a relative, or a simple nominal expression. The Korean counterparts corresponding to the underlined parts in (14), for examples, can form WLWQs when marked with a topic. Licensing environments are also similar. According to Kim (2000) specificational constructions are licensed as follows:

(15) (Kim 2000: 131, his (9))

A content item is licensed by a descriptive name a name which does not refer to an identifiable object but entails that there is an object described by it.

As was seen above, a similar constraint applies to the WLWQs.

3. Restrictions on the Retrieval of Wh-elements

The wh-element to be retrieved in WLWQs should be nominal. As was seen in the examples in (1)-(4), WHAT, WHO, WHEN, and WHERE may be retrieved in the structures. (WHEN and WHERE are also nominal in Korean. Unlike English counterparts, they may also function as subjects in Korean: *encey-ka/eti-ka* ...) WHY and HOW, however, cannot function as post-copular elements in WLWQs. Consider the following:

(16) *?Forest Gump-ka kyesok tali-nun kes-un?

FG-Nom continuously run-A thing-Top

Intended ‘ Why/How is Forest Gump running continuously?’

The unacceptability of (16) with the intended reading could be explained as follows. According to (6), the null wh-element functions as subject in the base. HOW and WHY cannot

function as subject since they are not nominal. Even when HOW/WHY are overtly realized in such constructions, the same grammaticality results:²

- (17) *Forest Gump-ka kyesok tali-nun kes-un way/ettehkey-ni?
 FG-Nom continuously run-A thing-Top why/how-QE
 Intended 'Why/How is Forest Gump running without stop?'

4. On the Structure: Clausal vs. Fragment Analysis

Sentence fragments are heavily dependent on the context in their interpretation and thus generally have diverse readings depending on the context. Unlike sentence fragments, WLWQs are interpreted in severely constrained ways. They display the following characteristics, among others: (i) They have a wh-question reading but not other mood readings like declaratives, yes-no question readings, and imperatives, etc.; (ii) the head noun in the remnant and wh-expression to be retrieved agree in some syntactic and semantic features but not phonetic features, e.g., both are categorically nominal and features like [+/-human], [+/-place], [+/-time], etc. are shared; (iii) the predicate, if ever retrieved, should be a copula; and (iv) they always bear a present tense reading. Being constrained by such aspects of sentence grammar, WLWQs should be represented as a full clausal structure, despite the apparent paucity of PF.

The particle Δ (n)un was viewed as a topic marker in Chung (2000). An alternative view conceivable in the sentence fragment analysis would be to regard the particle as a [+wh] question marker hosting a nominal expression. The latter view may account for some aspects of WLWQs, e.g., the interrogative mood and the fact that the remnant ends with Δ (n)un but not with a nominative marker: DP/NP-(n)un/*-ka. (See below for further

² The sentences in (16) seem to be a little better than those in (17). This may be so because *kes* in (16) can be construed as a nominal expression, i.e., *iyu* 'reason' and *pangpep* 'method', in which case the unrealized wh-element is a nominal wh-element, corresponding to WHAT. No such possibility is conceivable for (17) since the wh-elements are overtly realized.

discussion.) The question particle analysis, however, faces various problems that the topic marker analysis does not suffer from. First, question particles should be divided into two types: nominal $\square (n)un$ and all other verbal particles, unnecessarily proliferating grammar. Second, topic markers appear in parallel structures cross-linguistically, e.g. *-wa* in Japanese and *-shi* in Chinese. (See Lee 2001 for the claim that $\square shi$ is a topic marker derived from a copula.) Third, the remnant part of WLWQs cannot contain a *wh*-element in, as in (10), repeated below:

- (10) *enu nala-uy swuto-nun?
 which country-Gen capital;city-Top
 ‘(What city is) the capital city of which country?’

There is no *a priori* reason not to have a multiple *wh*-question reading. The topic marker analysis does not suffer from this since Topic does not allow a *wh*-element in it. Fourth, WLWQs convey a matrix *wh*-question reading, which is predicted in the topic marker analysis since Topic is a matrix element in a language like Korean.

In the proposed structure in (6), the remnant of a WLWQ originates from the predicate in the small clause complement of a copula. This accounts for the fact that the remnant of a WLWQ invariably ends with a topic marker but not with a nominative case marker: DP/NP- $(n)un/*-ka$. According to Yoon (in Press), Korean copula $\square i$ is a raising verb taking a small clause complement and when subject is raised, it is realized in TopP-SPEC or in IP-SPEC, while when predicate (nominal) is raised, it is realized in TopP-SPEC but not in IP-SPEC (Partee 1998: (i) Subject-Top DP/NP-copula, (ii) Subject-Nom DP/NP-copula, (iii) DP/NP-Top Subject-copula; but (iv) *DP/NP-Nom Subject-copula. Thus, if the remnants in WLWQs are viewed as originating from the predicate position in copula construction as in (6), the obligatory topic marking in WLWQs naturally follows. According to Partee (1998), inverse copula construction is possible when the predicate has a higher topicality.

5. PF-Deletion vs. LF-Copying

It was pointed out in Chung (2000) that WLWQs differ from other elided structures in the size of copy/deletion. In other ellipsis constructions such as VP ellipsis, gapping, pseudo-gapping, ACD, comparative deletion, etc., the size of copy/deletion is phrasal or word-level at the least. (Gapping and pseudo-gapping could be instances of phrasal ellipsis depending on the analysis. See Lasnik 1995, 1999 and Kim 1997.) What are elided in WLWQs, however, are sub-word-level formal and semantic features, but not phonetic features. Notice that the head noun in the remnant and the wh-element to be retrieved only share the categorical feature, i.e., nominal, and some core semantic features like [+/-human], [+/-place], [+/-temporal], etc. (Of course, the retrieval of the [+wh] feature should be somehow carried out.) The unpronounced wh-element does not have any antecedent with an identical string of overt expressions in the sentence or in the discourse. (The sentences in (1)-(4) can be uttered out of blue.) Only formal and semantic features are relevant in the ellipsis construction, while phonetic features are not taken into consideration at all. Thus, as far as WLWQs are concerned, an LF copying approach should be favored over a PF-deletion approach to ellipsis.

Another theoretical implication that can be made from the same observation is that in the LF side (of a Y model of syntax), a syntactic operation like copying can refer to sub-word-level features. In other words, lexical items are not frozen even after introduced into syntax, which seems reasonable if morphology is active in the PF side of the model.

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