Complementizer Allomorphy in Busan Korean

Nutshell: We investigate the phenomenon of complementizer agreement in Busan Korean (BK) interrogatives within the framework of the Distributed Morphology. Unlike Seoul Korean, various interrogative complementizers such as *–ka, -ko, -na,* and *–no* are observed. The choice of allomorph depends on (i) the categorial feature of the predicate and (ii) the type of question (polar vs. content). Allomorphy based on categorial feature is typologically quite rare, so this study adds important empirical data to the discussion on agreement in generative grammar. Our analysis provides and account of the allomorphy of the interrogative complementizer, including unexpected cases of allomorphy.

Background: BK, a dialect of Korean spoken in the southern tip of the Korean peninsula, has an unusual case of allomorphy on its interrogative complementizers. The complementizer encodes, among other things, whether the predicate is nominal or verbal. We have found only two other cases of allomorphy conditioned by lexical category in the literature before (Rezac, 2004, Wilson, 2014), thus the current study adds a vital typological component to agreement possibilities in the world's languages.

Data: The basic paradigm for complementizer allomorphy in questions is shown in the following data (So, 1984). The complementizers are shown in boldface. Observe that the consonant (hereafter K) varies with respect to the categorial status of the predicate (Kv versus Kn), and that the vowel (V) varies with respect to the kind of question (polarity, V_Q vs. content, V_{WH}). We thus propose that the complementizer is actually a sequence of two morphemes, K-V. Note that declaratives have the complementizer *-ta*, which does not exhibit the allomorphy shown below.

(1)   a.   Ni-ka   pap-ul   mwuk-**n-a**
                you-NOM   rice-ACC   eat-Kv-V_Q
                'Are you eating a meal?'

        b.   Ni-ka   mwe-lul   mwuk-**n-o**
                you-NOM   what-ACC   eat-Kv-V_{WH}
                'What are you eating?'

        c.   Ce   salam-i   Mincwun-i-**k-a**
                that   man-NOM   Mincwun-COP-Kn-V_Q
                'Is that man Mincwun?'

        d.   Ce   salam-i   nwu-Ø-**k-o**
                that   man-NOM   who-COP- Kn-V_{WH}
                'Who is that man?'

The picture above shows quite neatly that the complementizer can be analyzed as a sequence of two morphemes. Consider the following data, however, where unexpected forms arise. In the first example Kv is found on a copular construction (rather than the expected Kn). In the second example Kn is found on a verbal predicate (rather than the expected Kv).

(2)   a.   Ce   salam-i   Mincwun-i-yess-**n-a**   **(*k-a)**
                that   man-NOM   Mincwun-PST-COP-Kv-V_Q (Kn-V_Q)
                'Was the man Mincwun?'

        b.   Ni-ka   pap-ul   mwuk-ul-ke-**k-a**   **(*n-a)**
                you-NOM   rice-ACC   eat-IRR-NMZ-COP- Kn-V_Q (Kv-V_Q)
                'Will you have a meal?'

In the next section we analyze the basic facts and go on to provide an account for the unexpected cases.

Discussion: The observation above is that the BK interrogative complementizer is a bimorphemic complex. The consonant (hereafter K) encodes interrogative Force and co-varies with the lexical category of the predicate (with the exceptions noted above) and the vowel (hereafter V) co-varies with the type of question: polarity versus content. The puzzling case of allomorphy is that found on the consonant. Given the cyclic nature of vocabulary insertion, higher morphemes should not be morphologically conditioned by morphemes lower on the tree. Thus, when lexical insertion takes place, K should not be able to see the categorial features on the predicate underneath it. This forces that conclusion that an Agree relation holds between K and the categorial feature of the predicate (See Rezac, 2004, for a similar phenomenon in

Breton). K and V are present only in questions, and V indicates the kind of question (We capture this with the following lexical entries and the following Vocabulary Items (δ = categorial feature). Recall that K appears in questions only, so must be specified as [iQ]. V also appears in questions only, so is also specified [iQ]. V preferentially agrees with a *wh*-feature. However, if no *wh*-feature is found, Agree fails (in the sense of Preminger, 2014), and [$u$wh] is deleted.

(3)   K [iQ, $u\delta$:]   V [iQ, $u$wh]

/k/ $\leftrightarrow$ [Q, δ:n]   /a/ $\leftrightarrow$ [Q, wh]

/n/ $\leftrightarrow$ [Q, δ:v]   /o/ $\leftrightarrow$ [Q]

We assume that K and V are distinct probes in the C layer on Int and Force, respectively (Rizzi, 1997, 2001), although the precise location is not vital. In the core cases K probes for the closest lexical category and finds either *n* or *v*, giving rise to the forms above. Here are the derivations for (1)a. and c, respectively. We assume the DP inside the copular construction contains the full range of DP-internal functional material, including *n*P. The [$u$wh] Probe on Force, failing to enter into an Agree relation, is simply deleted. Crucially, [$u$wh] is deleted before Spell-Out, while [$u\delta$:n/v] survives at PF for Vocabulary Insertion.

(4)   a.   [$_{\text{ForceP}}$ [$_{\text{IntP}}$ [$_{\text{TP}}$ [$_{\text{DP}}$ you]$_i$ [$_{v\text{P}}$ t_i [$_{\text{VP}}$ rice [$_{\text{V}}$ eat]] v] T] Int[iQ, $u\delta$:v]] Force[iQ, $u$wh]]

        b.   [$_{\text{ForceP}}$ [$_{\text{IntP}}$ [$_{\text{TP}}$ [$_{\text{DP}}$ that man]$_i$ [$_{\text{RP}}$ t_i [$_{\text{DP}}$ Mincwu] [$_{\text{R}}$ COP]] T] Int[iQ, $u\delta$:n]] Force[iQ, $u$wh]]

Unexpected Cases: Recall that predicate noun constructions in the past tense give rise to verbal agreement on the complementizer. We argue that overt tense marking requires a (phonologically null), active *v* for T to be licensed. It well known in the traditional literature on Korean grammar that putting past tense on a non-active verb gives rise to active properties (Yeon and Brown, 2011). Thus, we assume an active (but non-agentive) *v* appears in past tense copular constructions. (See Harley, 2013 on the separation of the external argument introducing property from *v*.) Now, when K probes for a categorial feature, it finds *v* and selects the /n/ allomorph. Here is the derivation for (2)a.

(5)   [$_{\text{ForceP}}$ [$_{\text{IntP}}$ [$_{\text{TP}}$ [$_{\text{DP}}$ that man]$_i$ [$_{v\text{P}}$ [$_{\text{RP}}$ t_i [$_{\text{DP}}$ Mincwu] [$_{\text{R}}$ COP]] v] T$_{\text{PST}}$] Int[iQ, $u\delta$:v]] Force[iQ, $u$wh]]

Note that the future forms are built with the copula plus a nominalized form of the verbal predicate. Consider the following future form of the verbal predicate in (2)b.

(6)   eat-IRR-NMZ-COP- Kn-V$_Q$ IRR = irrelis; NZM - nominalizer

When K probes for a categorial feature it find the nominalizer *ke* (a reduced form of the noun *kes* 'thing'). Thus, both unexpected cases fall out from general properties of Korean grammar—namely, that past tense requires an active *v* and that the future is constructed from a nominalized form of the verb.

Conclusion: We have investigated a typologically rare form of allomorphy in BK interrogative complementizers and have proposed that it is derived by an Agree relation with the closest categorial feature. We have provided an analysis of these complementizers that is consistent with general properties of Korean grammar.

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