NORTH AND SOUTH KOREAN: A COMPARATIVE DEVELOPMENT OF THE KOREAN PLURAL-MARKER -TUL[*]

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The first goal of this paper is to investigate the historical development and modern day uses of the Korean morpheme *-tul* and demonstrate how this morpheme has undergone substantial changes in both its use and distribution over the past 100 years. A second goal is to provide a comparative analysis of North Korean (NK) and South Korean (Seoul) (SK) dialects[1] in order to explore the hypothesis that changes that have been observed in the SK dialect are primarily language-external changes.

      The outline of the paper is as follows: Section 1 is devoted to discussion on the Korean morpheme *-tul*, in particular its uses and distribution and the historical proposals for *-tul*. Section 2 outlines the specific research questions that are explored in this paper. The discussion of the corpus study including the methodology and results is presented in Section 3, followed by a discussion, conclusion, and directions for future research in Section 4.

1. Introduction

Korean, like other Eastern Asian languages such as Japanese and Chinese, is considered to be a classifier language. One of the distinguishing properties of classifier languages is that they lack plural-marking (Allen 1977, Chierchia 1998a, b); however, Korean poses an interesting problem for this claim since Korean appears to have an optional plural-marker *-tul* (Kang 1994, Baek 2002, Kim 2005). Korean *-tul* has been studied extensively; however, there is little consensus as to the distribution or function of this morpheme. This section provides background information concerning the use and distribution of the morpheme *-tul* and discusses its analysis in previous literature.

[1] A more detailed discussion on the history of North and South Korea is outside the scope of this paper. It is important to know that Pre-1945, Korea existed as one country. Since 1945 the Korean peninsula has been divided into two sovereign states: the Democratic People's Republic of Korea (commonly known as North Korea) and the Republic of Korea (commonly known as South Korea). The is limited contact between North and South Korea and between North Korea and the rest of the world. North Koreans have no access to foreign media (including media from South Korea), no opportunities to travel outside their country, and have extremely limited contact with foreign nationals. South Korea, on the other hand, has full access to foreign media, foreign travel, and have regular contact with foreign nationals.

1.1 Korean *-tul*

As stated in the introduction, Korean, similarly to other Eastern Asian languages, is considered to be a classifier language. Previous linguistic treatments of Korean (e.g. Nemoto 2005) claim that a bare noun in Korean can elicit multiple interpretations. As an example, the bare Korean nouns *chayk* ('book') and *haksayng* ('student') can be interpreted as either singular or plural and can leave the sentence ambiguous in multiple ways. This is illustrated in (1).

(1) *haksayng-un   chayk-ul   ilkessta*
     student-TOP   book-ACC   read
     'A student read a book.'
     'A student read books.'
     'Students read a book.'
     'Students read books.'   (Nemoto 2005: 384)

While Korean lacks obligatory singular/plural morphology, it is claimed that Korean has an optional plural-marker *-tul* (e.g. Kang 1994, Baek 2002, Kwak 2003, Kim 2005).

(2) a. *sakwa-ka   chayksang   wui-ey   issta*
         apple-NOM   desk   top-LOC   exist
         'There is an apple on the desk.'
         'There are apples on the desk.'

     b. *sakwa-**tul**-i   chayksang   wui-ey   issta*
         apple-**PL**-NOM   desk   top-LOC   exist
         'There are apples on the desk.'
         # 'There is an apple on the desk.'   (Kang 1994:6)

The word *sakwa* ('apple') in (2a) can refer to both a single 'apple' or multiple 'apples'. In (2b), only a plural interpretation is possible since the noun *sakwa* is marked with *-tul*.
        While the claim that *-tul* is an optional marker of plurality is widespread, it is not the only claim. The following section provides more detail on both the uses and the distribution of this morpheme.

1.2 Previous proposals on the use and distribution of *-tul*

With respect to the distribution of *-tul*, Nemoto (2005: 391) claims that *-tul* can be used with any type of noun as long as the referent is able to be individuated (or counted), as shown in (3a-c), but that it cannot be used with noun which would, in mass-count languages, be considered mass (-count) nouns.

(3) a. *haksayng-**tul*** (+count, +human, +animate)
      student-**PL**
      'students'

   b. *goyangi-**tul*** (+count, -human, +animate)
      cat-**PL**
      'cats'

   c. *chayk-**tul*** (+count, -human, -animate)
      book-**PL**
      'books' (Nemoto 2005: 291)

Kim, in addition to agreeing with Nemoto's analysis above, adds that *-tul* cannot occur with that is generally considered to be a mass noun (such as *water*), unlessit denotes 'kinds of water' or 'water in containers'. That is, *-tul* can only be used with mass nouns if *-tul* can shift a meaning into a count meaning. The example in (4) illustrate this.

(4) *mul-**tul*** (-count)
   water-**PL**
   * 'waters'
   'many kinds of water' (Kim 2005: 49)

Kim's (2005) and Nemoto's (2005) claims regarding the type of noun which *-tul* can attach to are not, however, uncontroversial. For example, Song (1997) states that the plural-marker occurs mainly with human nouns, far less frequently with non-human animate nouns and rarely with inanimate nouns. Suh (2008:240) also asserts that pluralization is dispreferred on non-human nouns, yet her Korean L2 acquisition study showed no significant difference within the native Korean-speaking control group in producing plurals on animals and humans. With the exception of Kim (2005), who claims that when *-tul* attaches to a mass noun the meaning of the referent can shift from a mass interpretation to a count interpretation, the above mentioned authors agree that *-tul* cannot be suffixed to mass nouns. As we see, there is little consensus as to the type of nouns that *-tul* can attach to. This is shown in Table 1.

	Human	**Animate**	**Inanimate**	**Mass**
Song (1997)	✓	✓?	✗	✗
Suh (2008)	✓	✓?	✓?	✗
Nemoto (2005)	✓	✓	✓	✗
Kim (2005)	✓	✓	✓	✓

Table 1: Summary of the distribution of *-tul*

As discussed above, the most widespread claim is that *-tul* is a plural-marker. This is not, however, the only claim. As an opposing view, Park (2008) argues that Korean *-tul* is not a plural marker, but rather a marker of distributivity or collectivity. The distributive

interpretation is illustrated in (5), where Park (2008:282) claims that (5a) asserts that we, as a group, bought a car (i.e., there should be only one car that was bought), whereas the *-tul*-marked (5b) implies that 'everyone' included in the group bought their own car (i.e., multiple cars were bought).

(5) a. *wuli-nun*   *cha-lul*   *saessta*
        we-TOP   car-ACC   bought
        'We bought a car'

   b. *wuli-**tul**-nun*   *cha-lul*   *saessta*
        we-**PL**-TOP   car-ACC   bought
        'We bought a car.'/'All our members bought a car.'

(Park 2008: 282)

Park (2008) claims that this shows that *-tul* has a distributive function rather than a mere pluralizing effect, and in order to express distributivity *-tul* is required, not optional.

   In a second, non-plural-marking analysis, Song (1997) has claimed that one of the uses of *-tul* is to serve as a marker of focus and that *-tul* is only used, in certain contexts, if the speaker wants to place emphasis on a specific part of a sentence. In cases where *-tul* appeared to be used as a focus-marker, Song (1997) argues that it is fully motivated and not random.

   Finally, MacDonald (2014) proposes that the morpheme is undergoing a change in South Korean dialects. Her proposal suggests that nouns which are marked with *-tul* originally had a focused interpretation (only initially available on nouns which had a plural, human referent). Over time, *-tul* appeared to be used as an optional plural-marker (which started on human nouns and spread to other categories of nouns) which, in Modern dialects in South Korea, appears to be shifting to an obligatory marker of plurality. At the same time, bare nouns, which were originally indifferent for Number (ie. could express both singular and plural depending on context) are losing their plural interpretation and are currently retaining a singular interpretation only.

   As we can see, similar to the multiple proposals for the distribution of *-tul*, there are also multiple proposals for the modern-day use of *-tul*. The next section outlines two historical proposals for *-tul*.

1.3   Historical proposals and on the use of *-tul*

Park (2010:2) proposes that Modern Korean intrinsic *-tul* developed into an inflectional plural-marking morpheme in Middle Korean. She proposes that subsequently, the function of plural-marking *-tul* was further extended to that of an agreement marker. Park does not make use of historical data to support these claims, so her analysis appears rather speculative. If her analysis is accurate, we should expect to find *-tul* used as a plural-marker at various stages from early Modern Korean to present-day Korean. As a language-internal change, we should also expect to find to find similar developmental patterns in both the North Korean and the South Korean data.

In addition to Park's (2010) claim, various linguists have suggested that the use of modern day Korean *-tul* was borrowed from English plural-marking. Martin (1992:830) claims that in modern-day Korean, *-tul* is spreading and becoming more popular on analogy with foreign-language plurals, particularly due to language contact between English speakers and Koreans. Lee (1989:34-5) proposes that Koreans believe that *-tul* should function like the English plural formation and so they have recently begun to treat *-tul* as an equivalent to *-s*. Finally, Baik (1992:25) has proposed that between 1965 and 1985, Korea underwent a period of extensive contact with English and numerous grammatical borrowings, including the borrowing of the English plural, ensued. If a borrowing hypothesis is what is happening in South Korea then we should expect to find different developmental patterns in North Korean and South Korean because the two dialects will have undergone different levels of contact.

Park's (2010) proposal that *-tul* developed as a plural-marker from Middle Korean and the borrowing hypothesis described above, together with the previous analyses of *-tul* from Section 1.2, allow us to rearticulate the goals introduced in Section 1 into specific research questions.

2.   Research questions

The specific research questions that this investigation was designed to address are the following: (1) Do South Korean and North Korean dialects undergo similar developmental patterns with respect to the morpheme *-tul*? Do we see the same use and distribution in both dialects?; (2) If different patterns emerge, do differences in usage lend support for a language-internal, a language-external, or some type of hybrid change?

The corpus study presented in the following section was designed to help answer these questions.

3.   Corpus Study

To answer the questions presented in Section 2, I conducted two corpus studies: a diachronic study on South Korean and a synchronic study on North Korean. The objective of the South Korean study was to trace the developmental path of *-tul* over the past 100 years. The objective of the North Korean study was to provide a snapshot of modern North Korean data and to contrast or compare to the North Korean data with the current trends in the South Korean data.

For the South Korean study, I analyzed newspaper articles which covered an approximate 100-year period. This text type was chosen as it was easily accessible online, provided ample data to consider for this study, and allowed me to compare texts of the same type produced continuously over the time period chosen. For the North Korean study, I looked at only one time period as historical data was especially difficult to obtain. I specifically searched for data on the distribution of *-tul*, the number of instances of *-tul* in the article, the type of nouns which *-tul* attached to, as well as cases where *-tul* could have been used as a plural-marker, but was not. This section focuses on the methodology I used

to collect my data, the data that I collected, and a discussion of the implications of these findings.

3.1 Methodology

The South Korean corpus comprises 50 newspaper articles, 10 for each of the 5 years that were selected. The newspaper articles from 1924[2], 1946, 1970, and 1995 were retrieved online from the "Dong-A Ilbo" newspaper archive, while the 2011 articles were retrieved online from the "Chosun Ilbo" newspaper. Within these years, articles of similar length were chosen for analysis. The average word length for each article was between 380 and 397 words for the five time periods.
For the North Korean data, 10 articles were selected from the "Rodong Ilbo" online newspaper. All articles were from 2017 and the articles averaged 402 words.

Once the articles were selected, the occurrences of -*tul* were collected and analyzed for the distribution, the number of occurrences, and the type of noun that it attached to. Once the instances of -*tul* were highlighted, three native speakers of Korean[3] were asked to provide feedback as to their interpretation of -*tul* in each case. The data collected is summarized and discussed in the following sections.

3.2 Results

The number of occurrences of -*tul* in the 5 different time periods for the South Korean data in this study is summarized in Figure 1. The dark blue lines represent cases where -*tul* is used in the newspaper articles, and the light blue lines represent cases where the text clearly has a plural reading for a given noun, but where -*tul* is not used. In the earlier newspaper articles, there are far fewer cases of -*tul* and far more cases where a bare noun conveys a plural interpretation. In 1924, there are only 9 cases where -*tul* is used, compared to 63 cases where there is a clear plural reading but no use of -*tul*. Similar results are found for 1946, where there are 14 occurrences compared to 68 non-occurrences of -*tul*. The occurrences of -*tul* in the texts increase much more rapidly in the later years. In the articles from 1970, there are 49 instances of a noun being marked with the suffix -*tul* and only 34 occurrences of a plural reading without -*tul*. In 1995 there are 89 cases of -*tul* being used with only 18 instances of a plural reading without -*tul*. Finally, in the most recent data from 2011, there are 154 instances of -*tul* being used, and only 4 bare nouns which have a plural reading. We can clearly see in overall increase in the use of -*tul* to express plurality as well as a decrease in the non-occurrences of -*tul*.

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[2] Technically, 1924 is before the division of North and South Korea (and 1946 is just following the division). I have chosen to list the newspaper articles under South Korea here as the articles were taken from newspapers in Seoul, which was part of what is now South Korea.
[3] The native-speakers of Korean were 46 (male), 38 (male), and 34 (female) years of age. Each was asked to participate in this study because they both had extensive knowledge of Chinese (Mandarin). This knowledge was needed as in the earlier texts many nouns and verbs were written in *Hanja* 'traditional Chinese characters' instead of *Hangul* 'Korean characters'. In 21st century Korean, *Hanja* script is rarely used so not all native speakers of Korean are able to read and give judgments on this script.

The North Korean data is represented with red bars. There are 56 occurrences of -*tul* being used to express plurality and 44 instances of a clear plural interpretation without the use of -*tul*.
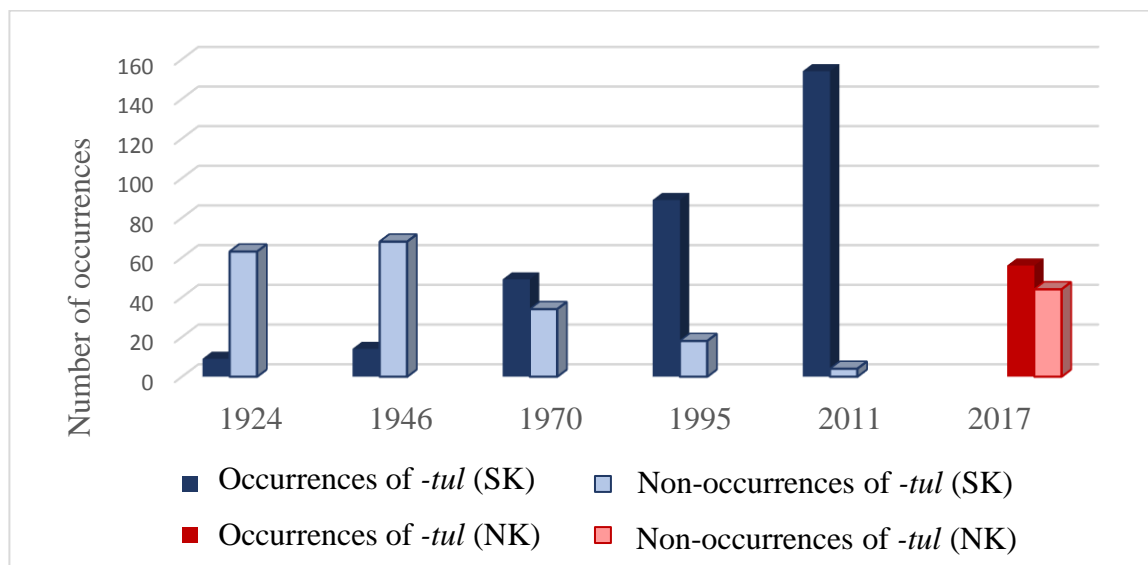

Figure 1: Instances of -*tul* in Korean newspaper data (by year)

We can observe that the pattern in the North Korean data is similar to that of the 1970 South Korean data; however, we can also observe that the changes in the North Korean data are occurring much slower than in the South Korean data. The next two sections highlight the data from South Korea (Section 3.3) and North Korea (Section 3.4).

3.3   South Korean data

In the early South Korean data (1924 and 1946), there were few cases where -*tul* was used to express plurality. These cases are interesting, however, in that my Korean consultants claim that -*tul* only appears on a noun in cases where emphasis or contrastive focus is placed on the noun as well as in examples where the noun marked with -*tul* is preceded by the demonstrative *ku* 'this/these'. In (6), the first occurrence of the noun *saram* 'people' does not take the suffix -*tul*; however, the second occurrence of *saram* 'people', which is preceded by the demonstrative *ku* 'this/these', does. Both instances of *saram* elicit a plural interpretation; however, only that preceded by the demonstrative is marked with -*tul*.

(6) *celmun-**saram**-ul*   *manhi-pulletanokho-nun*   *koun-moksori-wa*
    young-**person**-ACC   many-invited-TOP   beautiful-voice-and

    si-ro   *ku*   ***saram-tul**-ul*   *chwikheyhanun-cungita*
    poem-with   **this**   **person-PL**-ACC   make them intoxicated
    'They invited many young **people** and they are making **these people** intoxicated with their beautiful voices and poems.'

                                          (The Dong-A Ilbo 1924: June 3 (p. 3/4))

It is also worth noting that there are inanimate nouns, *moksori* 'voices' and *si* 'poems', which have a plural interpretation but which are not marked with the plural suffix *-tul.*

If we consider the type of noun that the suffix *-tul* attaches to at this time period, it almost exclusively, appears to be used with nouns which refer to humans, such as *yumulonja* 'materialist' or *saram* 'person'. However, it is not used with all human nouns which have a plural reading. There are many occasions where a noun clearly has a plural interpretation and refers to humans, but where *-tul* is not used (cf. the first occurrence of *saram* 'people' in (6)).

In the newspaper articles from 1970, there are significantly more cases of *-tul* than are found in the earlier texts. In 1970, there are 49 instances of *-tul* and 34 cases which have a plural reading but where *-tul* was not used. In both 1924 and 1946, the only examples of nouns marked with *-tul* are human nouns; however, in 1970, we also observe that while *-tul* continues to combine primarily with human nouns, it also combines with a few non-human, inanimate nouns such as *jom-**tul*** 'points (of view)' and *munjae-**tul*** 'problems'. The sentence in (7) shows an example of *-tul* appearing with an inanimate noun.

(7)   *kagaekajung-aeseo*   *jaegi-doyeon*   *munjae-**tul**-i…*
      all levels of society-LOC   raised-have been   problem-**PL**-NOM…
      'Problems have been raised from all levels of society…'
                                      (The Dong-A Ilbo 1970: Dec. 14 (p. 3/4))

The increase in number of occurrences of *-tul* is not the only change that occurred at this time. We can also observe that the range of constructions that *-tul* can attach to at this time continues to expand and it is becoming more common to observe examples that do not include uses with *ku* 'this/these' nor contexts where emphasis or focus is clearly marked. In the 1970 data, the use of *-tul* is extended to functioning as a pluralizing morpheme. In the cases where it occurs, there is a clear plural interpretation; however, if no longer appears to be marking focus. At this time, it appears that the use of *-tul* is in a period of transition. While we see a few cases where *-tul* seems to extend to include non-human, inanimate nouns, there are still various cases where *-tul* is not used with human or inanimate nouns, but where these nouns have a plural interpretation in the text.   In the data from 1995, we can observe many cases of *-tul* being used on both nouns denoting humans and inanimate nouns. Both these time periods also have a noticeably lower number of non-occurrences of *-tul*. In the 1995 data, almost all nouns denoting humans which have a plural interpretation take the suffix *-tul* and many inanimate nouns also do. In example (8), the noun *giep* 'enterprise' takes the suffix *-tul*, but the word *eryeum* 'difficulty' in the same sentence has a plural interpretation without *-tul*.

(8) *giep-**tul**-i*   *yejemhi*   *manhun*   **eryeum**-*ul*   *gyekko*   *issda*
enterprise-**PL**-NOM   still   many   **difficulty**-ACC facing   are
'Enterprises are still facing many difficulties.'

<div align="right">The Dong-A Ilbo 1995: Dec. 14 (p. 3/24))</div>

At this point, *-tul* is functioning more like a plural marker and there appears to be no trace of it marking focus or emphasis on the noun to which it attaches.

In the most recent data from 2011, there are 154 cases of *-tul* while there are only 4 instances where there is a plural-reading but no *-tul*. Of these, all nouns which denote humans use *-tul* when a plural interpretation is intended, while the large majority of nouns which denote inanimate and abstract nouns do so likewise.

Of the entire set of data from 2011, according to my Korean consultants, only four nouns had a plural interpretation but did not use the suffix *-tul*. These examples were similar to the examples from 1995, in that the nouns are modified with words like *manhun* 'many' or *jeonchae* 'all'. There are also many examples where the modified noun is marked with *-tul*, as in the example in (9).

(9) *Gaegu-jieok*   *jeonchae*   *haksaeng-**tul**-i…*
GeaGu-region   all   student-**PL**-NOM…
'All the students in DeaGu region…'

<div align="right">(The Chosun Ilbo 2013: April 19)</div>

The South Korean data is summarized in Table 2.

Time	Animate (Human)	Inanimate	Abstract
1924/1946	• few instances • appears focused	• not attested in the data	• not attested in the data
1970	• no longer appears focused	• few inanimate nouns	• not attested in the data
1995	• most human nouns	• most inanimate nouns	• not attested in the data
2011	• all human nouns	• most inanimate nouns	• includes most abstract nouns

Table 2: Summary of uses of *-tul* in the South Korean newspaper data

Here we can see that in the earlier time periods, *-tul* was only used in a few instances (which appeared to be focused) and it was only used on animate nouns. In the data from 1970, *-tul* no longer appeared to be focused and, in a few cases, it was occurring on inanimate nouns. In 1995, it appeared on most human and inanimate nouns. Finally, in the 2011 data, it appears on all categories on nouns.

3.4   North Korean data

In the North Korean data, *-tul* primarily occurs with a human referent on nouns such as *jeok* 'enemy' and *inmin* 'person'. However, *-tul* does not occur on all human nouns with a plural referent. There are many examples in the data where there is a clear plural interpretation, but no use of *-tul*. In (10), we see a case of the noun *inmin* 'person' being marked with *-tul*, while in (11), we see the same noun (*inmin*) used to discuss a plural referent, but without the use of *-tul* to express plurality.

(10) *bogojanun*   *jogok.**inmin-tul**-i*   *gyeongyaehanun*   *chogoreongdoja*
     presenter   NK.**person**-PL-NOM   admire   superior leader

     kimjeongeunwonsuminkkeseo   *sinnyeonsaeseo*   *jeshihashin*
     Kim, Jung Eun   new year speech   show

     jeontujeokguhulul   *nopi*   *batdeulgo*
     battle slogans   highly   follow
     'The presented said that NK **people** will follow the battle slogans that Superior Leader, Kim Jung-Un, showed in the New Year's speech.'

(11) *geunun*   *uidaehan*   *janggunnimui*   *hansaengun*   *oroji*   *jogukgwa*
     he   great   general   whole life   only   his country

     ***inmin**-ul*   *wihayeo*   *jashinio*   *modeulgeotul*   *kkanggeuri*   *beultasushin*
     people-ACC   for   his   everything   entirely   burn
     '(The presenter said) the Great General, (Kim Jung-Il), spent his whole life for this country and the **people**.'

We can clearly see that the use of *-tul* with animate (human) referents is not used consistently in the North Korean data. This is unlike what we observed for the latest South Korean data.

       With respect to inanimate nouns in the North Korean data, we saw some examples of inanimate nouns being marked with *-tul*, such as *haengsa-**tul*** 'ceremonies' and *janggapcha-**tul*** 'tanks', but this was observed no where near the extent that we saw in the South Korean data, nor the extent that was observed on human nouns in the North Korean data.

       The data from North Korea is summarized in Figure 2 below.
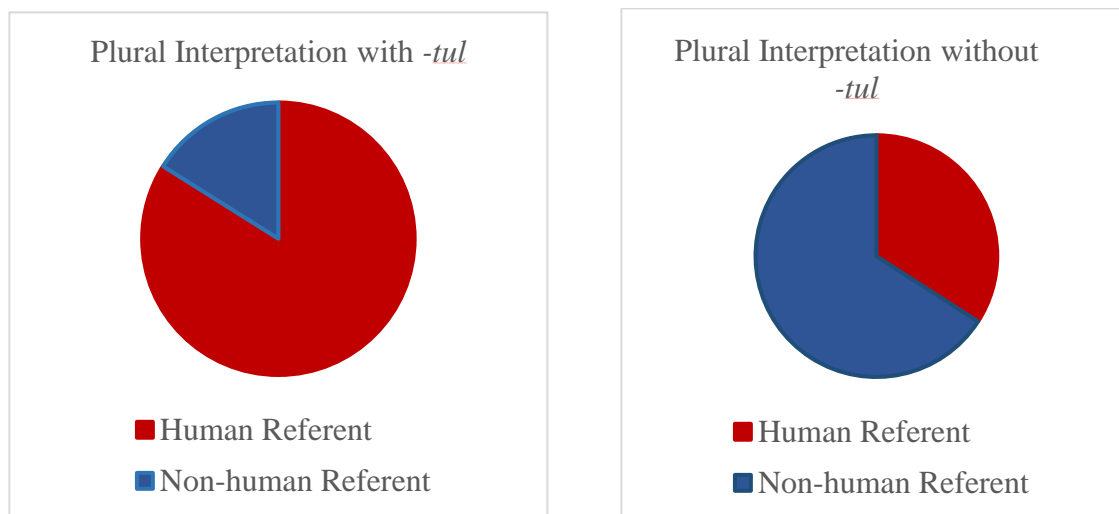
Figure 2: Instances of *-tul* in the North Korean data by type of referent

As can be observed in Figure 2, the occurrences with *-tul* are much more likely to have a human referent (47 cases) than a non-human referent (9 cases). In the data where there was a clear plural interpretation without *-tul* the reverse is true. It is more likely, in the absence of *-tul*, that the referent will be a non-human (29 cases) over a human referent (15 cases).

4.   Discussion and conclusion

This section returns to the research questions asked in Section 2 and provides a discussion of the findings of this study, a conclusion, and directions to pursue for future research.

4.1   Discussion

What this data from South Korea shows was that in both 1924 and 1946, there were very few cases of *-tul*. The cases that did occur were limited to use with human nouns. From the data collected, the use of *-tul* was not necessary to express plurality (since a plural reading was possible, and in fact most often occurred, without *-tul*), and *-tul* did not seem to be functioning as a plural marker alone in these early newspaper articles. Instead, the attachment of *-tul* seemed to be functioning as a way to place emphasis or focus on a noun with plural reference.

　　In the later data (from 1970, 1995, and 2011), *-tul* is used more frequently and its use is extended to include non-human nouns, and later abstract nouns. After 1970, *-tul* does not yet appear on all nouns which have plural referents; however, it is used much more often with human nouns and there are very few cases where it is absent on human nouns if there is a plural interpretation. In this period, we also find instances of *-tul* being used with quantifiers. It is also worth noting that in the data from 1970, *-tul* is, for the first time, being extended to be used on certain, but not all, inanimate nouns. In the data from 1995, *-tul* is used on almost all human and animate nouns and on most inanimate nouns. At this time, -

tul still was not used with inanimate nouns. Finally, in 2011, we see the extension of *-tul* being used with abstract nouns and with all inanimate nouns.

As we saw in Section 1.2, there is significant variability among researchers working on Korean *-tul* with respect to its use and distribution. The South Korean data presented in Section 3.3 perhaps helps to explain this variability. At different time periods, we observed different patterns with respect to the use of *-tul*. Even given a short period of 16 years (between 1995 and 2011) we saw an extension in the use of this morpheme to include a larger number of inanimate nouns and abstract nouns. Given the fact that this morpheme is currently undergoing development and constantly seems to be expanding in terms of both distribution and use, it is not surprising that there is no clear consensus among linguists as to its use.

In the data from North Korea, we see a different story. *-tul* is not necessarily used to express plurality on nouns in North Korean as there were many clear cases of a plural interpretation without the use of *-tul*. When *-tul* is used to mark plurality on nouns, it occurs primarily with nouns with a human referent, as there were only a few instances of inanimate nouns being marked with *-tul*. However, *-tul* was not used to mark plurality on all human nouns.

One trend worth noting with respect to the North Korean data is the pattern that was found in the data. If we return to the bar graph in Figure 1, the pattern of occurrences and non-occurrences of *-tul* match the pattern observed in the South Korean data from 1970. While it is clear that the use of *-tul* to express plurality in North Korea has not yet become as widespread as in the South Korean data, the developmental pathway seems to be following a similar trajectory to what occurred in South Korea.

We can now attempt to account for the changes that we have observed in the newspaper data. If we reconsider some of the claims discussed in Section 1.3, Lee (1989), Baik (1992), and Martin (1992) have all made claims that the scope of the use of modern *-tul* was borrowed from English. Baik (1992:25) claims that during the period 1965 – 1985 there was a period of extensive contact between English and Korean. This proposed period fits in well with the period where we see an increased use of *-tul*. This is perhaps due to the influence of the US military presence in South Korea at this time (Stueck 1997), and the use of the plural-marker *-tul* could be a grammatical borrowing which parallels the English plural-marker *-s* as Martin (1992), Baik (1992) and Lee (1989) propose.

However, as Harris & Campbell (1995:120) discuss, syntactic (or grammatical borrowings) are considered by many to be extremely rare occurrences which only occur between already similar language systems. Comrie (2008: 15) points out that the borrowing of inflectional morphology is rare cross-linguistically and claims that "inflectional borrowing is generally, and I believe correctly, held to be one of the least borrowable parts of a language's structure." Allen (1977:380) claims that, "as a hypothesis, we would expect syntactic influence only when the two languages had a good deal of syntactic similarity to begin with." While many consider grammatical borrowings to be quite rare, many different types of grammatical borrowings (between languages that belong to the same language families and languages which differ in numerous respects) have in fact been documented (see Harris & Campbell 1995: 142-149 for discussion). Harris & Campbell end up concluding, following Thomason & Kaufman (1988: 14) that

"as far as the strictly linguistic possibilities go, any linguistic feature can be transferred from any language to any other language." So, the question arises, is it possible that the new distribution and use of Korean *-tul* were borrowed from English? If syntactic borrowing is possible and is more common than we would expect, what are the chances of the distribution and use of *-tul* being borrowed?

While a borrowing hypothesis is possible, it is important to remember that Korean *-tul* existed (and was used on plural nouns) long before contact with and influence by the English language. However, it is also important to note that in the newspaper articles from 1970 and later (the claimed period of extensive language contact between English and Korean) we see a substantial increase in the use of *-tul*. While it is highly likely that language contact with English may have influenced the development of *-tul* since the extensive period of language contact, more evidence is needed to be able to claim that the uses of the Korean plural-marker were borrowed from English. This hypothesis appears to be partially supported by the addition of the North Korean data. In the North Korean data we found some increase in use since the earlier time periods of 1924 and 1946, but no where near the same extent as what we found in South Korean. This suggests that a language-external factor, such as contact with English, may be at play here.

One more question with respect to borrowing that we can ask is the following: What, if anything, is actually being borrowed? Gardani, Arkadiev, and Amiridze (2015), using the terminology of Sakel (2007) and Matras and Sakel (2007), distinguish between two types of borrowing: the borrowing of concrete phonological matter (MAT-borrowing); and the borrowing of functional and semantic morphological patterns (PAT-borrowing). They claim that both types of borrowings are compatible with borrowing derivation and borrowing inflection. If plural-marking is being borrowed from English into Korean, then it corresponds much more closely to PAT-borrowing than MAT-borrowing. The recipient language, in this case Korean, seems to have undergone reanalysis to become semantically closer to the patterns available in the source language, English. However, it is not the case that any form is being borrowed from English into Korean.

If we return to Park's proposal that *-tul* was an inflectional plural-marker that developed from Middle Korean, as discussed in Section 1.3, it is difficult to make a claim as to the development of *-tul* from Middle Korean, as I did not analyze texts from that period. However, if Park's (2010) analysis were accurate, then we would expect to find instances of *-tul* functioning as a plural-marker in the texts from 1924. This was not the case; rather, the occurrences of *-tul* in these texts seemed to mark focus and *-tul* was only used with a limited number of nouns in the early texts. It certainly does not appear to be inflectional as she claimed, at least if inflectional means obligatory and systematic. That being said, Park (2010) proposes a language-internal change, as opposed to a language-external borrowing story, and we do find that while the development in North Korean is not as advanced as it is in South Korean, there is still a noticeable difference between the use and distribution of *-tul* in Modern-day North Korean and the earlier time periods from the South Korean data (1924 and 1946). It would not be advisable, without further investigation, to dismiss the hypothesis that the changes in the use and distribution of *-tul* could be partially due to a language-internal change outright.

4.2   Conclusion

While borrowing of inflectional morphology (Comrie 2008) and syntactic structure (Allen 1997, Harris and Campbell 1995) are rare cross-linguistically, if a borrowing hypothesis is accepted for Korean, the findings of this study support Gardani's (2012) claim that Number is the most likely inflectional category to be borrowed. The findings also support Gardani et. al (2015) that pattern, not form, is being borrowed, if anything.

The North and South Korean dialects' use of -*tul* seem to follow a similar path which provides support for a language-internal change. However, they do not have the same rate of change and the use of -*tul* in the North Korean data is not as progressed as in South Korean. I propose that -*tul* started as a language-internal change in Korean; however, the extent of the change in the South Korean data may be, at least partially, due to contact with English, a language-external change.

4.3   Directions for future research

This study proposed a preliminary comparative investigation between the use and distribution of -*tul* in North and South Korean. To date, I have not been able to access older newspaper sources from North Korea. Ideally, one of the directions for future research for this study would be to find and analyze more North Korean texts from the period between 1970 and 2017. This would provide a more complete pathway of development in North Korea and we may be able to observe more clearly whether North Korean is developing along a similar pathway, but at a slower rate, than South Korean.

Another direction for future research is to investigate more closely the occurrences and non-occurrences of -*tul* with certain case-markers. Much of the data appears with the nominate case-marker, but we do see occurrences with a variety of other case-markers as well. I would like to look more closely at the statistical distribution of -*tul* with the various case-markers.

Finally, the study I conducted was a corpus study which examines data from one type of printed source, newspapers. Newspapers tend to be more formal than many other print sources and than spoken language. A next step in this research would be to capture real-time production data from different generations of Korean speakers in order to investigate whether a change can also be observed with different types of written media (e.g. Twitter) and in oral production.

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