FROM A CLASSIFIER LANGUAGE TO A MASS-COUNT LANGUAGE: WHAT CAN HISTORICAL DATA SHOW US?

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1. Introduction

This paper investigates the historical development and modern-day uses of the Korean morpheme *-tul* and proposes a new analysis of this morpheme based on historical data. The morpheme *-tul* is generally considered to mark plurality; this is surprising as Korean is considered to be a classifier language, which does not generally mark plurality morpho-syntactically.

Korean *-tul* has been studied extensively; however, there is little consensus as to the distribution or function of this morpheme. My research takes a new approach to the analysis of *-tul* by examining its historical development over the past 100 years. The goal of this paper is to shed light on the modern-day uses of *-tul* by illuminating its past. The general question this paper addresses is whether the development of *-tul* is consistent with the properties of a classifier language and whether, based on this development, Korean still qualifies as a classifier language. I show that this morpheme is currently undergoing change and that Korean appears to be shifting from a classifier language to a mass-count language.

This paper is organized as follows. Section 2 provides necessary background information on mass-count and classifier languages and outlines the specific research questions investigated in this study. Section 3 presents the historical corpus study which was conducted in order to investigate the historical development of *-tul*. The final section, Section 4, provides a conclusion and directions for future research.

2. Background Information

This section provides background information on the mass-count and classifier language distinction (Section 2.1) as well as background information concerning the distribution of the Korean morpheme *-tul* (Section 2.2) and discusses its historical analysis in previous literature (Section 2.3). Section 2.4 lays out the specific research questions discussed in this paper.

2.1 Mass-count and classifier languages

Languages are generally classified into one of two categories with respect to number: "mass-count" languages and "classifier" languages. In mass-count languages, such as English, a non-plural count noun generally has a singular interpretation, while plural reference requires obligatory plural marking. Classifier languages, such as Korean and Chinese, do not mark plurality morpho-syntactically while in classifier languages a bare noun can have a singular or plural reading (Cheng & Sybesma, 1999). As an example, the

bare Korean nouns *chayk* ('book') and *haksayng* ('student') can be interpreted as either singular or plural. This is illustrated in (1).

(1)   (=Nemoto's (1a))
        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.'

Source: Nemoto (2005: 384)

Another difference between classifier languages and mass-count languages is their use of classifiers. English can enumerate by using a number plus a noun (for count nouns), as in (2). However, in languages like Korean, a classifier is necessary for counting both mass and count nouns, as in (3).

(2)   three chairs

(3)   (=Shin's (2b))
        chayk   twu   **kwen**
        book   two   **CL[flat things]**
        'two books'

Source: Shin (2009: 132)

To account for differences between mass-count and classifier languages, Chierchia (2008a,b) developed a formal theory called the Nominal Mapping Parameter. While the formalities of this theory are outside the scope of the paper the typological picture which emerges is that no language is predicted to have both a generalized classifier system and plural marking. This is schematized below in (4).

(4) a.   Plural marking $\Rightarrow$ No generalized classifier system
      b.   Generalized classifier system $\Rightarrow$ No plural marking

Korean poses a problem for the typological picture in (4). Like classifier languages, Korean requires a classifier for counting; however, unlike other classifier languages, Korean makes use of an optional plural-marker, *-tul* (e.g. Kang 1994, Baek 2002, Kim 2005), as will be illustrated in detail in the following section. Thus, Korean appears to have properties of both system types.

2.2   Korean *-tul*

In Section 2.1, we saw that a bare Korean noun is argued to elicit multiple readings. Additionally, while Korean lacks obligatory singular/plural morphology, it has an

optional plural-marker *-tul* (henceforth referred to as "intrinsic *-tul*") (e.g. Kang 1994, Baek 2002, Kwak 2003, Kim 2005). The word *sakwa* ('apple') in (5a) can refer to both a single 'apple' and multiple 'apples'. In (5b), only a plural reading is possible since the noun *sakwa* is marked with the plural morpheme *-tul*.

(5)　　(=Kang's (14a,b))

    a.　*sakwa-ka*　　*chayksang*　　*wui-ey*　　　*issta*
    　　apple-NOM　　desk　　　　　top-at　　　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-at　　　exist
    　　'There are apples on the desk.'
    　　# 'There is an apple on the desk.'

<div align="right">Source: Kang (1994: 6)</div>

Kim (2005:49) and Nemoto (2005: 391) claim 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 (6a-c).

(6)　　(=Nemoto's (20a-c)

    a.　haksayng-tul　(human noun)
    　　student-PL
    　　'students'

    b.　goyangi-tul　(animate noun)
    　　cat-PL
    　　'cats'

    c.　chayk-tul　　(inanimate noun)
    　　book-PL
    　　'books'

<div align="right">Source: Nemoto (2005: 291)</div>

Kim (2005:49) adds that *-tul* cannot occur with what is generally considered to be a mass noun (such as *mul* 'water'), unless it denotes 'kinds' or 'distributions in containers'. That is, *-tul* can only be used with mass nouns if *-tul* can shift a mass meaning into a count meaning. The example in (7) illustrates this.

(7)　　　　(=Kim's (40b))
　　　　　　mul-**tul**　　　　(mass)
　　　　　　water-**PL**
　　　　　　*'waters'
　　　　　　　'many kinds of water'

<div align="right">Source: Kim (2005: 49)</div>

Kim's (2005) and Nemoto's (2005) claims as to what type of noun -*tul* can attach to are not, however, uncontroversial. Their analysis supports Song's (1997:206) findings that -*tul* can be attached to both animate and inanimate nouns; however, Song (1997) states that the plural-marker occurs mainly with human nouns, less frequently with non-human animate nouns and far less frequently with inanimate nouns (206). Suh (2008:240) asserts that pluralization is dispreferred on non-human nouns. With the exception of Kim (2005), 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. Table 1 provides a summary of the distribution of -*tul*.

Table 1: Summary of the distribution and use of intrinsic -*tul*

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

With respect to the function of -*tul*, by far the most widespread claim is that -*tul* is a plural-marker (e.g. Kang 1994, Kwak 2003, Kim 2005). 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. Park 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. A third proposal, which discusses a slightly different use of –*tul* is that of a focus particle. Song (1997:218) claims that it is not a random marker, but rather a fully motivated one. Song found that by leaving out different parts of a sentence marked with -*tul*, different emphasis or different focus was elicited. I return to discuss the various debates with respect to the function and distribution of -*tul* in Section 4.3.

2.3　Historical proposals on the use of –*tul*

Park (2010:2) proposes that Modern Korean -*tul* developed into an inflectional plural-marking morpheme from Middle Korean. She proposes that subsequently, the function of plural-marking -*tul* was further extended to be used as an agreement marker. Park does not make use of historical data to support her claims, so that her account appears rather speculative. If it is accurate, we should expect to find -*tul* used as a plural-marker at various stages from early Modern Korean to present-day Korean. We should also expect

to find cases of *-tul* where there is a clear agreement function (and not a focus function, as was proposed by Song (1997)).

In addition to Park's (2010) claim, various linguists have put forth claims that modern day Korean *-tul* was borrowed from English-language usage. 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 English plural-marker. Finally, Baik (1992:25) observes that between 1965 and 1985, Korea underwent a period of extensive contact with English and proposes that numerous grammatical borrowings, including the borrowing of the English number-marking, ensued. While a borrowing hypothesis is an interesting one, it is evident from historical sources that Korean *-tul* existed (and was used on nouns with plural reference) long before contact with and influence by the English language.

Park's (2010) proposal that *-tul* developed as a plural-marker from Middle Korean and the borrowing hypothesis, together with the previous analyses of *-tul* from Section 2.2, allow us to refine the research question introduced in Section 1.

2.4 Research questions

The specific research questions that the historical investigation was designed to address are the following:

1. What does the historical data tell us about the use and development of *-tul*? How has this morpheme evolved over time?
2. Is *-tul* really an optional plural-marker (or does it mark some sort of information structure)?
3. Is there evidence in the data to account for a borrowing hypothesis?
4. What is the status of Korean with respect to the mass-count/classifier language dichotomy?

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 2.4, I analyzed newspaper articles[1] from an approximate 100-year period. I specifically searched for data on the distribution of *-tul*, the number of instances of *-tul* in each 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.

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[1] 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.

3.1 Methodology

The corpus was comprised of 125 newspaper articles, 25 for each of the 5 years that were selected. The newspaper articles from 1924, 1946, 1970, and, 1995 were retrieved online from the "Dong-A Ilbo" newspaper archive, while the 2011/13 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.

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 this suffix attached to. Once the instances of -*tul* were highlighted, two native speakers of Korean[2] 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 Data

The number of occurrences of -*tul* in the 5 different time periods investigated in this study is summarized in Figure 1 below. The dark gray lines represent cases where -*tul* is used in newspaper articles, and the light gray lines represent cases where the text clearly has a plural reading for a given noun, but where -*tul* is not used. We can see that in the earlier newspaper articles, far fewer cases of -*tul* appeared in the texts and far more cases where a bare noun conveyed 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 in 1946, where there are 14 occurrences of   -*tul* 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.

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[2] The native-speakers of Korean were 46 (male) and 34 (female) years of age. Both Koreans were asked to participate in this study as 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'. As Korean rarely uses *Hanja* script in Modern Korean, not all native speakers of Korean are able to read and give judgments on this script.
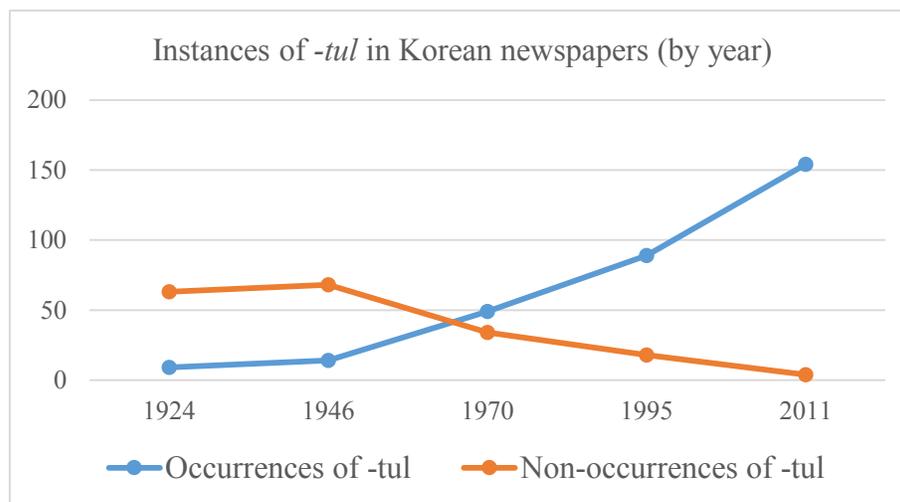
Figure 1: Instances of *-tul* in Korean newspapers (by year)

The remainder of this section focuses on the specific data broken down by years.

4.2.1 Data: 1924

As we see in Figure 1 there are only 9 cases of *–tul* in the data from 1924. Of these 9 cases, there were 8 cases where *-tul* is 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 and in examples where the noun marked with *-tul* is preceded by the demonstrative *ku* 'this/these'. In (8), -*tul* appears to be used in a case of contrastive focus. Here, the emphasis is placed on the word 'materialists' (as opposed to some other group of people).

(8)   *yumulonja-**tul**-un   malha-rira…*
         materialist-PL-TOP   say-would…
         'Materialists would say…'

<div align="right">Source: Dong-A Ilbo (1924: Jan 2 (p. 2/4))</div>

In example (9), we see that the first occurrence of the noun *salam* 'people' does not involve the suffix *-tul*; however, the second occurrence of *salam* 'people', which is preceded by the demonstrative *ku* 'this/these', does. Both instances of *salam* elicit a plural interpretation; however, only that preceded by the demonstrative is marked with -*tul*. We can also see that the nouns, *moksori* 'voices' and *si* 'poems' (nouns which do not refer to humans), have a plural interpretation but are not marked with the plural suffix -*tul*.

(9) *celmun-**salam**-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-are
'They invited many young **people** and they are making **these people** intoxicated with their beautiful voices and poems.'
<div align="right">Source: Dong-A Ilbo (1924: June 3 (p. 3/4))</div>

If we consider the type of noun that the suffix *-tul* attaches to, at this time, it only appears to be used with nouns which refer to humans, such as *yumulonja* 'materialist' or *saram* 'people'. However, it is not used with all human nouns that 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 (one example was the first occurrence of *saram* 'people' in (9)).

4.2.2 Data: 1946

In the 1946 data, there are 14 cases of *-tul* which show a similar pattern to what we see for 1924. The nouns with which *-tul* occurred are also similar to the pattern which we observe for 1924. One of the differences between the data from 1924 and the data from 1946 is that not all nouns which are marked with *-tul* are preceded by *ku* 'this/these' or seem to express some kind of emphasis or focus; in the 1946 data, there are two cases which have a plural reading (and use *-tul*) which do not appear with *ku* 'this/these' or seem to be focused. One of these examples is shown in (10).

(10) *gyengchalkwan-tayphyo-**tul**-i*   *samshipul-ul*   *kyeongKyo-dong*
police-representative-PL-NOM   31-on   KyeungKyo-district

imshijengpu-lul   *pangmunhako…*
provisional government-ACC   visit…
'**Police representatives** visited the provisional government in KyeunKyo-district on the 31st…'
<div align="right">Source: Dong-A Ilbo (1946: Jan 1 (p. 2/2))</div>

However, as we observe with the data from 1924, there are also many occasions in which nouns referring to humans have a plural reading, but where *-tul* is not used. A subset of these nouns is shown in (11).

(11) *adong*   'children'
dongji   'friends'
kisulja   'engineers'
<div align="right">Source: Dong-A Ilbo (1946: various dates)</div>

The nouns which are not marked with *-tul* appeared in contexts which require a plural interpretation, as in (12), where we see an example of a sentence clearly referring to more than one child and in (13) where the noun *shimin* 'citizen' is modified by the word *baekman* 'many' (lit. 'one million').

(12)   *man   yuk   sae-ui   adong-un…*
             complete   six   year-of   child-TOP…
             '…children under six years old…'
             (Context: From this year on, children under six years old should, by law, be accepted into schools.)

Source: Dong-A Ilbo (1946: Jan. 12 (p. 1/4))

(13)   *sori   nophi   weychinun   baekman-shimin-un*
             sound (voice)   high   cry (shout)   million-citizen-ACC
             'Many (lit. a million) citizens who cry out at the top of their lungs (lit. voice).'
Source: Dong-A Ilbo (1946: Jan. 1 (p. 2/2))

4.2.3 Data: 1970

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 (14) shows an example of *-tul* appearing with an inanimate noun.

(14)   *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…'
Source: 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 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* seems to take on the use of functioning as a plural marker, and not as a way of placing focus on emphasis on a noun.

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 cases where *-tul* is not used with human or inanimate nouns, but where these nouns have a plural interpretation in the text. One of these nouns, *gusang* 'idea', is illustrated in (15).

(15)   *sae-chae-gaehyen-ui   kibong-pangchim-irago   palsu   issnun*
tax-system-reform-GEN   basic-policy-as   regarded   be

myekgachi   gusang-ae
several   idea-DAT
'Several ideas that can be regarded as basic policy for tax system reform…'
<div align="right">Source: Dong-A Ilbo (1970: Dec 14 (p. 3/4))</div>

4.2.4 Data: 1995

The data from 1995 contains 89 cases of *-tul* being used on both nouns denoting humans and inanimate nouns. This time period also has a noticeably lower number of non-occurrences of *-tul*. In this data, almost all nouns denoting humans which have a plural interpretation take the suffix *-tul* and many inanimate nouns also do. In example (16), we see the noun *giep* 'enterprise' which takes the suffix *-tul*, but we also see in the same sentence that the word *eryeum* 'difficulty' has a plural interpretation, but does not take the suffix *-tul*.

(16)   *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">Source: 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 1995 data, we also find that most cases which have a plural reading but which do not use *-tul* involve inanimate or abstract nouns (such as *eryeum* 'difficulties' in (16) above). In this data set, there is only one case of *-tul* not being used with a noun referencing humans (*pohaengja* 'pedestrians') and this example is used with a classifier. It is worth noting that amongst the nouns that do not have the plural-marker *-tul*, many of these nouns occur with quantifiers such as *modun* 'all' (see (17)) or *manhun* 'many' (see (16)).

(17)   *modun   iljong*
all   schedule
'all schedules'
<div align="right">Source: Dong-A Ilbo (1995: July 1 (page 7/20))</div>

4.2.5 Data: 2011/2013

In the most recent data, 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 expressing a plural reference, 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 noun modified by quantifiers is marked with *-tul*, such as the example in (18).

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

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

The other examples where there are plural-readings but no *-tul* were found in examples with classifier constructions. One such construction is shown in (19). (19a) has no classifier, only a numeral and a noun, while the second construction (19b) has a numeral and a plural-marked noun. Neither of these classifier constructions appear to fall under the "grammatical" classification for Korean classifier constructions that we saw in Section 2.1, with the exception of (19a) being attested under Kim's (2005) proposal that highly frequent nouns which refer to humans can appear without a classifier.

(19)　a.　*du　saram*　　　　　　b.　*du　saram-**tul***
　　　　two　people　　　　　　　two　people-**PL**
　　　　'two people'　　　　　　　'two people'

<div align="right">Source: Chosun Ilbo (2011: various dates)</div>

Another unique construction from the most recent data is the use of *-tul* with a mass noun. As we saw in Section 2.1, mass nouns cannot normally take the suffix *-tul*. In this case, *mul-tul* 'water-PL' is interpreted as 'bottles or cups of water' by my Korean consultants. This is the only instance of *-tul* appearing with a mass noun in my texts; however, it appears that *-tul* can also be used in some cases to force an individual interpretation of a mass noun.

4.3　Discussion

In both the 1924 and 1946 data, there were very few cases of *-tul*. The cases I did find 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, *-tul* seemed to be functioning as a way to place emphasis or focus on a noun with plural reference to which it attached.

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, at later time periods its use becomes more and more frequent and in the 2011/13 data it appears to be

used consistently in the newspaper data. Table 2 summarizes the uses and development of this morpheme over an almost 100 year period.

Table 2: Summary of uses of *-tul*

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

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 2.2, Lee (1989), Baik (1992), and Martin (1992) have all made claims that modern *-tul* was borrowed from English. Baik (1992:25) claims that during the period 1965 – 1985, which fits in well with the period where we see an increased use of *-tul*, there was a period of large contact between English and Korean. This is perhaps due to the influence of the US military presence in South Korea at this time, 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. Allen (1980 [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* was borrowed from English language usage? 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 say that the Korean plural-marking was borrowed from English. My study could not reveal any direct evidence for such a claim and direct evidence may well be hard to come by.

If we return to Park's proposal that *-tul* was an inflectional plural-marker that developed from Middle Korean, as discussed in Section 2.2, 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 by inflectional one means obligatory and systematic. As there were no cases of extrinsic *-tul* in the corpus, it is not possible to assess Park's (2010) claims that extrinsic *-tul* represents an extension of intrinsic *-tul* as an agreement marker (cf. Section 2.2).

It appears from the data that in the early 1920s, *-tul* was used to mark focus or emphasis on nouns with plural reference. Extrapolating from that data, I speculate that at some point (before *-tul* lost its focus function), the intrinsic *-tul* use extended to mark focus extrinsically (as Song 1997) proposes. At the time when the extension took place, this would leave us with both uses of *-tul* having the same primary function: that of marking focus. While the focus function is maintained on extrinsic *-tul* nouns in Modern Korean, the primary function of intrinsic *-tul* of marking focus will over time have shifted to one of marking plurality.

Next, if we return to the research questions from Section 2.3, we can see that the historical data does, in fact, shed light on the modern uses of *-tul*. Over time, and perhaps due to language contact with English, the distribution and use of *-tul* has drastically expanded. Even though this study focused on an approximately 100-year period, the increase in the use of *-tul* is extremely clear even in this short timeframe.

As we saw in Section 2.1, there is significant variability among researchers working on Korean *-tul* with respect to its use and distribution. We saw variability with respect to the noun type that *-tul* could attach to. Remember for example that Kim (2005) proposes that *-tul* can be used with human, animate, inanimate, and mass nouns, while Nemoto (2005) claims that it cannot be used with mass nouns and Suh (2008) claims that it is dispreferred on non-human 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 as to its use.

5.   Conclusion & directions for future research

5.1   Conclusion

To conclude, Park (2010) claim that *-tul* developed from an autonomous noun which grammaticalized to an inflectional affix. I propose rather that in Early Modern Korean, *-tul* was originally used to mark focus on nouns with plural reference, rather than functioning as a uniquely plural-marking morpheme in an inflectional Number category.

From this perspective, *-tul* would not have been optional, but would have been used only in certain specific contexts, and thus in a sense obligatory. This would establish *-tul* as highly motivated and not a random morpheme, as would be the case in the earlier texts under Park's analysis.

I also propose, following Martin (1992), Baik (1992), and Lee (1989) that if *-tul* functions like an optional plural-marker today, this is not entirely due to the development from Middle Korean; rather, it is due, at least in part, to language contact.

5.2 Directions for future research

This study provides an initial examination of the historical development of *-tul*, and sheds light on the changes of use of this morpheme over the past 100 years. However, it still leaves many questions unanswered and this section provides various directions for future research.

An extension of this study will also include texts from earlier time periods. Park (2010) claim that *-tul* was used as a plural-marker in Middle Korean; however, it would be interesting to re-examine this claim. Perhaps *-tul* was used in Middle Korean to mark focus on nouns with plural reference instead. This is one of the predictions that my proposal would make, since I suggest, following Martin (1992), that *-tul* was only being used on a regular basis as a plural-marker following intensive contact with English.

I would also like to investigate data from North Korean newspapers. The North Korean language has not had the contact with English that South Korean dialects of Korean have had and it would be interesting to investigate what, if any, changes have occurred in the North Korean data. If North Korean changes with the use of *-tul* were observed similar to the changes in the South Korean data then we could speculate that this is a language-internal change. If, on the other hand, *-tul* follows a different pattern in North Korean dialects, it is possible that there were language-external changes taking place.

A final plan for future research would involve investigating different text-types. Newspapers are a formal source of data where colloquial language is rarely used. In order to gain a more complete understanding of the evolution of *-tul* it would be interesting to investigate text-types such as letters, or spoken language.

The loss of classifiers from classifier constructions in Korean, the obligatoriness of the plural-marking *-tul* in certain constructions, the interpretation of a bare noun as 'singular', and the use of *-tul* on mass nouns as a form of individuating raises questions as to the changing status of Korean with respect to Number-marking typology and helps explain the difficulties that linguists encounter when working on Korean plural-marking data. It appears that Korean started out as a classifier language, not unlike other typical classifier languages, but the changes that the language is undergoing are causing it to shift more towards becoming a mass-count language. Addressing the issue from a historical perspective is something that has not been done before, and has led me to make new insights. It would appear, then, that change of this kind is gradual, rather than discrete, contrary to what Chierchia (2008a, b) would predict. Only time will tell what

will eventually happen with the Korean classifier system and with the interpretation of Korean bare nouns.

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