1. Introduction

The aim of this paper is to investigate L2 knowledge of the generic use of bare plural noun phrases (BP) in English. In particular, we investigate whether or not Korean speaking learners of English are able to attain the knowledge of Generic BPs where their distributional properties represent a poverty of stimulus problem (PoS).

Genericity has seen growing interest in recent L2 studies. Their main focus has been on the investigation of L2 knowledge of the use of different articles to express genericity in L2 English (Ionin & Montrul, 2010; Ionin et al., 2011; Snape, 2013; Snape & Yusa, 2013; Park, 2013, 2014). These studies test L2 knowledge of the two kinds of Generics in English: Sentence level and NP level generics (Krifka et al., 1995). In the sentence level generics, the generic reading is generated at the sentence level and all three following NP forms are allowed - indefinite singular (1-a), bare plural (1-b), and definite singular (1-c):

(1) a. A dog barks.
    b. Dogs bark.
    c. The dog barks.

In the NP level generics, on the other hand, the generic reading is ascribed to the fact that the subject NP of a kind selecting verb must be able to denote a kind. The distribution of NP forms, therefore, is more restricted as a result, as shown in (2):

(2) a. #A dinosaur is extinct.
    b. Dinosaurs are extinct.
    c. The dinosaurs is extinct.

The singular indefinite (2-a) is not allowed under the NP-level generic reading, while both the bare plural and definite singular are possible ((2-b)-(2-c)). These two kinds of generics are also used to test L2 learners’ knowledge on the use of articles in English. For instance, Ionin et al. (2011) reports that Korean and Russian speaking learners of English are sensitive to the two distinct types of English generics and that they recognise the use of indefinite singulars better than definite singulars. In testing Japanese speaking learners of L2 English, Snape & Yusa (2013) also reports more difficulties with definite singulars than with indefinite singulars. The common observation in these studies is that BPs in English generics pose relatively little difficulties to L2 learners, especially for those whose L1 does not have an article system. This observation may be obvious since BPs are allowed in both the sentence level and the NP level generics in English, and thus their distribution is more available in L2 input. Further, for L2 learners whose L1s do not have the article system and their BPs can also express generics such as Korean, BPs would be the easiest form of genericity for those learners to choose to use. This then leads to a question as to whether the reported success in BPs in English generics represents the true acquisition of the relevant syntax and semantics involved in English generics.

Regarding this question, this paper focuses on L2 knowledge of the use of bare plurals (BP) in the NP-level generics in English. It specifically investigates whether L2 learners are able to acquire the
semantic constraints associated with BPs in different syntactic positions. BPs are always interpreted as generics in subject position as in (1) and (2) above, while in object position, the generic interpretation of BPs is normally allowed only with specific types of predicates: their generic interpretation is allowed after stative verbs such as *like* and *hate*, while this is not possible after kind-selecting verbs such as *invent* and *exterminate* (Carlson & Pelletier, 1995).

This asymmetric pattern of generic BPs is subject to a poverty of stimulus problem, because no direct evidence is available in L2 input regarding the infelicitous generic reading of BPs, nor are learners taught about it. Furthermore, the asymmetric distributional pattern does not arise in the learner’s L1, Korean. The present study further tests this POS property in order to investigate whether Korean learners with additional naturalistic input will be able to acquire the generic property of BPs and thus overcome the POS problem, in comparison with Korean learners with classroom input only. Two different subject groups were recruited in this study: Korean learners with classroom input only (KK, n=44), and Korean learners with subsequent and additional naturalistic input (via average 4.5 years residence in the UK) (KE, n=33). A timed-acceptability judgment task (TAJT) and a translation task were conducted.

This paper is organised as follows: Section 2 discusses how genericity shows an asymmetric pattern between different syntactic positions in English and Korean. Section 3 presents the experimental design and participants. Section 4 reports the results of the experiment and discusses the main findings. Finally, Section 5 concludes.

2. Generics in L2 English and L1 Korean

BPs are the most commonly used NP forms for generic reference in English alongside with definite singulars (Carlson & Pelletier, 1995). In addition, BPs are the default form of generics both in English and Korean, though bare singular forms are preferred for non-human nouns (Ionin et al., 2011; Park, 2013, 2014). This then leads to an assumption that generic BPs in L2 English are easy to acquire for Korean speaking learners since the same form is readily available in L1. However, English generic BPs are subject to subtle semantic restrictions, resulting in an asymmetric distributional pattern across different syntactic positions.

2.1. English Generic NPs

BPs, when appearing in subject position, can be used with generic reference in subject position with both stative verbs (3-a) and kind-selecting verbs (3-b). Further, BPs in object position are allowed following the stative verb in (3-a).

(3)  a.  *Cats* like *dogs*.
    b.  *Pandas* will soon become extinct.

(Carlson & Pelletier, 1995:p.65)

In contrast, the generic reading of BPs is not allowed or become more marginal in object position after kind selecting verbs in (4).

(4)  a.  *Shockley* invented the *transistor/ ??transistors*.
    b.  The *Summerians* invented the *pottery wheel/ ??pottery wheels*.
    c.  The *French settlers* in *Mauritius* exterminated the *dodo/ ??dodos*.

(Carlson & Pelletier, 1995:p.70-71)

Carlson & Pelletier (1995) observes that BPs in the object position are not normally accepted as kind-requiring after kind-requiring verbs, as indicated with question marks in (4). However, definite singulars can occur in the same position as in (4-a), (4-b), and (4-c). The BPs (4) are only possible under the taxonomic reading whereby BPs denote subclasses of kinds. For example, in (4-a), *transistors* can refer to the subkinds of the transistor. Carlson & Pelletier (1995) maintains that some English native speakers would interpret BPs in (4-a), (4-b), and (4-c) as generics, thus not taxonomic. However, those speakers sharing such intuitions might be interpreting the kind-selecting verbs as object-selecting verbs. For
instance, they might be interpreting *invented* as *constructed* and *exterminated* as *killed* where the generic reading of BPs become more acceptable. The precise nature of these subtle differences is outside the scope of this paper. However, it is important to point out that the distribution of BPs in object position is subject to subtle semantic restrictions. Coupled with the asymmetric pattern with BPs in subject position, this would represent a serious challenge for L2 learners.

2.2. Korean Generic NPs

Korean generic NPs are expressed with bare singular or bare plural NPs. With the plural marker *-tul* being optional, bare singular forms would surface most frequently. The following examples show that the noun *kay* (‘dog’) appears in subject position, and both bare singular and bare forms are possible under the generic reading.

   Dog-PL-GEN bark-PRS-DEC
   ‘The dog barks: Dogs bark’

b. Kay-(tul)-un cecmeki-tongmwul-i-ta.
   Dog-PL-GEN mammal-be:PRS-DEC
   ‘The dog is a mammal: Dogs are mammals’

The subject NP appears with the topic marker *-(n)un*. Unless the subject is focalised, the nominative case marker *-i* is replaced with the topic marker *nun*. In (6), the NPs in object position, appear with the accusative marker *-ul*. As with (5), the generic NPs in object position (6) are expressed both in the bare singular and bare plural form.

    Shockley-SUB transistor-ACC invent-PAST-DEC
    ‘Shockley invented the transistor’

b. Sumayruin-i nokro-lul balmyeong-hass-ta.
    Summerians-SUB potterywheel-ACC invent-PAST-DEC
    ‘The Summerians invented the pottery wheel’

c. Phurangsujeongchakmin-i dodosay-(tul)-ul myeljongsikye-ss-ta.
    French-settlers-SUB dodo-PL-ACC exterminate-PAST-DEC
    ‘The French settlers exterminated the dodo’

Between bare singular and bare plural forms, it is the bare singular form that is preferred in Korean generics and this is not unrelated with the fact that the plural marker *-tul* in Korean is largely optional. Important to note here is that neither of these forms is subject to any restrictions by syntactic positions (subject vs object): the same forms can be used in both syntactic positions, which contrasts with the asymmetric pattern observed in English.

2.3. English Generic BPs as POS

We argue that the observed pattern of English generic BPs represents a POS issue for Korean speaking learners of English for the following reasons: (i) L2 input does not provide evidence for the unavailable generic interpretation of BPs after kind-requiring verbs in object position; (ii) L2 learners are not taught about the restriction on generic BPs in object position (English Generics in general, are not normally featured in classroom instruction or textbooks); (iii) such a restriction does not arise in learners’ L1 where the same forms are allowed across different syntactic positions. This leads us to predict that with the lack of evidence, L2 learners may not be able to discriminate the asymmetric patterns of generic BPs between subject and object position. However, despite the lack of evidence, if learners are able to show knowledge of the restrictions on generic NPs in object position, we can infer that their knowledge results from acquiring underlying syntactic/semantic restrictions of generic BPs and overcoming the POS, which in turn, will lend strong support for access to Universal Grammar.
3. The Experiment

In order to measure L2 knowledge of generic BPs by Korean speaking learners of English, we have employed a production task (translation task) as well as a judgment task (timed-acceptability judgment task).

3.1. Translation Task

The translation task was conducted to examine how learners choose to use different NP forms to express genericity. In this task, participants were given Korean sentences and asked to translate them into English sentences using the vocabulary provided. As the aim of this task is to elicit L2 learners’ choice of NP forms, relevant lexical words (e.g., nouns, verbs, adjectives, and adverbs) were provided in the task, but functional words such as articles were not given to them. We have included 8 sentences one of which is provided in (7) below.

(7) Kind referring generics in object position (n=8)
   a. Shockley-ka transistor-lul balmyeonghaessta.
      Shockley-NOM transistor-ACC invented
      (Shockly, invent, transistor)
   Possible Target Responses: Shockley invented the transistor/??transistors.

The translation task was also administered to native English controls. However, since the same translation task cannot be used for the English controls, the task was modified. The English controls were given a list of English sentences which correspond to possible target sentences above, but which were made incomplete or ungrammatical. Their task was to complete or correct the given sentences, as exemplified in (8) below:

(8) *Shockley invent transistor.
    Possible Target Responses: Shockly invented the transistor/??transistors.

3.2. Timed Acceptability Judgment Task

In this task, the participants were given 8 sets of English sentences. Each set comprises a couple of sentences, where the second sentences are not always correct. The participants were asked to judge the acceptability of the second sentences, given the first sentences, as exemplified below:

(9) a. Tom has never seen a dodo. French settlers exterminated the dodo.
    b. Tom has never seen a dodo. French settlers exterminated ??dodos.

Each set of sentences was shown online for 7 to 10 seconds only, depending on the length of the test sentences.

3.3. Participants

3 groups of participants took part in the experiment: two experimental groups of Korean speaking learners of English and a control group of English native speakers. Korean participants were adult learners of L2 English: they had not been exposed to English in English speaking countries before puberty. In addition, they had all received formal English instruction in middle schools and high schools in Korea. 77 Korean participants were recruited and they were split into two groups depending on whether they had been exposed to naturalistic input in an immersion setting (e.g., residence in English speaking countries). This was to test the role of naturalistic input.

44 participants fall into the category of no naturalistic input. These learners had been learning English for more than 10 years in Korea and had not been exposed to naturalistic input at the time of testing (henceforth, KK). The participants in KK were comprised of undergraduate students and postgraduate students at universities in Korea. In the other group with naturalistic input (henceforth,
KE) were 33 Korean adults who had been learning English for at least 10 years. Additionally, they have lived in English speaking countries after puberty and they were residents in the U.K. at the time of testing. The participants in this group were comprised of undergraduate students and postgraduate students in the U.K. The proficiency level was controlled between KK and KE. Participants’ proficiency levels were all between IELTS overall 7.0 and 7.5 (equivalent score of TOEFL(CBT230-270) or TOEIC(785-850)). The relevant background information of participants is summarised in Table 1 below.

<table>
<thead>
<tr>
<th>Group</th>
<th>Korean adults in Korea(KK)</th>
<th>Korean adults in the U.K.(KE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender(Female/Male)</td>
<td>31/13</td>
<td>23/10</td>
</tr>
<tr>
<td>Average Age(Range)</td>
<td>29(22-39)</td>
<td>35(23-40)</td>
</tr>
<tr>
<td>Length of learning L2</td>
<td>19yrs(13-26yrs)</td>
<td>21yrs(13-30yrs)</td>
</tr>
<tr>
<td>Average Length of exposure to naturalistic input (range)</td>
<td>Not applicable</td>
<td>9yrs(3-27yrs)</td>
</tr>
</tbody>
</table>

The main difference between KK and KE is whether or not the learners had been exposed to naturalistic L2 input. In addition, for both the KK and KE groups, linguistics majors were excluded from the experiment. The reason was to control for possible differences in responses from people who have a linguistics degree or a non-linguistics degree. Furthermore, it is likely that people who studied linguistics may be familiar with certain linguistic phenomena and it would prevent them from relying on their intuition in judging experiment sentences.

Lastly, 22 native English speakers served as controls (henceforth, EC). They comprise of 7 undergraduate students, 12 graduate students, and 3 teaching staff at the University of Sheffield. For the same reason presented above, subjects whose expertise is in linguistics were excluded from the experiment.

4. Results and Discussion

4.1. Translation Task Result

Table 2 displays the results in the translation task, comparing the performance across the different groups. The reported rates in each group show the rates of each type of NP forms used in response to the translation task. Recall that the NPs in this task are those in object position after kind-requiring verbs, thus the expected target-like response is the+singular.

Table 2: Usage rates of different NP forms in object position after kind requiring verbs

![Graph showing usage rates of different NP forms](image-url)
First, the result of the control group (EC) was as expected: they used the definite singular form almost exclusively, while BPs are used marginally at around 10%. This rate of BPs may reflect the native speakers’ usage of BP under the possible taxonomic reading discussed in Section 2.1. For the learner groups (KK and KE), neither of them showed a target-like performance in terms of the usage rates of the target form ‘the+singular, which at 15% (KK) and 39% (KE) remain far lower than EC. Instead, both learner groups used a wide range of different NP forms in this position, and yet we observe some important differences between KK and KE in their performance on one hand, and similarities between KE and EC on the other hand.

In order to investigate the significant differences in the translation task, both Chi-square test and Fishers Exact Test were conducted. According to the statistical data, KE used the correct ‘the+singular’ NPs considerably more often than BPs. (p value=0.024). Also their most frequently used NP form was the correct ‘the+singular’ NP, like EC. In contrast, KK considerably preferred using the ungrammatical ‘*a+singular’ and ‘*bare plural’ NPs to the correct form of ‘the+singular’ NPs (p value=0.0002, p value=0.0002, respectively). Their usage rate of the correct ‘the+singular’ only remains at (15%). As for BPs, their rates in KK and KE are not as low as what is shown in EC. However, it should be noted that in KE, the rate of BPs (25%) is much lower than ‘the+singular’ (39%), while this pattern is reversed for KK: the rates of BPs (22%) is higher than ‘the+singular’ (15%). This shows that KE, unlike KK, chose to use the correct ‘the+singular’ form at a significantly higher rate than the incorrect BP form.

Given the nature of the translation task (L1-to-L2), the learners may be affected by the L1 priming effect, i.e., the overuse of ‘*bare singular’. However, this affected KK only, but not KE. Overall, the result of this task suggests that unlike KK, KE followed the pattern shown by EC by showing their most preferred form to be ‘the+singular’ and steering away from the L1 form. This observation is more clearly demonstrated in the following TAJT results.

4.2. Timed Acceptability Judgment Task Result

In order to report L2 knowledge of the asymmetric distribution of generic BPs in subject vs object position, Table 3 compares the rates of how much each group accepted/did not accept BPs in each syntactic position.

Table 3: Acceptability rates of bare plural NPs in object position after kind

<table>
<thead>
<tr>
<th></th>
<th>Acceptable</th>
<th>Not-Acceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>KK (SUB)</td>
<td>37%</td>
<td>63%</td>
</tr>
<tr>
<td>KK (OBJ)</td>
<td>30%</td>
<td>70%</td>
</tr>
<tr>
<td>KE (SUB)</td>
<td>26%</td>
<td>74%</td>
</tr>
<tr>
<td>KE (OBJ)</td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>EC (SUB)</td>
<td>2%</td>
<td>98%</td>
</tr>
<tr>
<td>EC (OBJ)</td>
<td>2%</td>
<td>98%</td>
</tr>
</tbody>
</table>

First, EC performed as expected, showing a clear asymmetric pattern: they accepted BPs in subject position 90% of the time, while the rates reduced to 30% in object position. KE’s performance follows closely that of EC: they accept BPs in subject position 84% of the time, but this goes down to 35% in object position. The acceptance of BPs shows a clear asymmetric pattern between subject and object position in both EC and KE. In contrast, there was no such asymmetric pattern shown in KK(63% in subject position and 70% in object position). If anything, KK accepted BPs in object position more than...
in subject position - a pattern reversed from KE and EC. This clearly suggests that KE, unlike KK, shows sensitivity to the subtle semantic constraints on generic BPs.

5. Conclusion

The results of the two tasks (TT and TAJT) suggest that Korean learners with naturalistic input (KE) are able to acquire the semantic constraints on the use of generic bare plural NPs, despite the POS, thus showing support for access to Universal Grammar. In addition, the results of the translation task also provide an interesting observation regarding L2 knowledge of definite singular forms in English generics. As discussed above, recent L2 studies have reported learners’ difficulties with the definite singular forms in English generics, where the NP forms tested are in subject position. The current study, on the other hand, tested NPs in object position. In our translation task, KE showed the highest usage rate of correct ‘the+singular’, preferring this form to BPs with a significant difference. This indicates that KE are able to discern the correct use of definite singulars from incorrect use of BPs in object position - contra the observed difficulties with definite singulars in recent L2 studies.

This result of KE in the translation task also suggests a facilitative role of naturalistic input. Given the support for the facilitative role of naturalistic input and that the semantic constraints on generic NPs in question is acquirable, this has further implications on what support can be provided for the learners whose input are largely bound within the classroom. In the L2 study of the generic use of articles in English, Snape & Yusa (2013) tested the effect of the perception training via a transcription task using the spectrogram of English sentences. They report an advantage of such training in acquiring different NP forms in English generics, which proved to be more efficient than the traditional grammar instruction. Putting this with our results together, the perception training employed in Snape & Yusa (2013) would provide an interesting case to be tested to supplement the naturalistic input that KK is deprived of.

Regarding the asymmetric distribution of generic BPs in different syntactic positions, it has been proposed that the default interpretation of BP is indefinite, and thus the definite kind-referring interpretation is not possible after the kind requiring predicates as shown in (10) (Carlson & Pelletier, 1995; Cohen & Erteschik-Shir, 2002).

(10) The French settlers in Mauritius exterminated ??dodos. (repeated from (4-c))

However, the definite kind-referring interpretation is made possible by movement to subject position (e.g., passivization) which is a default topic position. (Carlson & Pelletier, 1995; Cohen & Erteschik-Shir, 2002).

(11) Dodos were exterminated by the French settlers in Mauritius.

(Carlson & Pelletier, 1995:p.65)

In the current study, we have not tested a minimal pair such as (10) and (11). Such a test would further elucidate whether or not the knowledge attained by KE represents the sensitivity of kind referring BPs to topichood. If it proves to be so, it would lend stronger support not only for the acquirability of the syntactic and semantic restrictions of kind referring BPs, but also their dependence on other syntactic operations such as NP-movement (e.g., passivization).

References


