L2 Acquisition of Number Marking in Korean and Indonesian: A Feature-Based Approach

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1. Introduction

This paper presents the findings of a bidirectional study of the acquisition of plural number marking by adult native-language (L1) Korean speakers acquiring Indonesian as a second language (L2) and by adult L1 Indonesian speakers acquiring L2 Korean within a Feature Reassembly framework (Lardiere, 2008, 2009). Previous research by Hwang and Lardiere (2013) on the L2 acquisition of plural marking in Korean by native English speakers found that certain restrictions on plural marking in Korean that do not exist in English were only gradually acquired by some of the more advanced-proficiency participants (suggesting an initial L1 transfer effect), and that the more deeply a feature that restricts or licenses pluralization was embedded in a feature co-occurrence hierarchy, the more difficult it was to acquire (suggesting a universal feature-geometry effect, following Harley & Ritter, 2002).

In the present study, we investigated the L2 acquisition of knowledge of plural number marking in two classifier languages that are somewhat more similar to each other with respect to pluralization— Korean and Indonesian. This allowed us to observe whether it was more difficult (as operationalized in terms of increasing proficiency levels) to add new syntactic and semantic restrictions in the L2 that don't exist in the L1, or to unlearn or relax restrictions that exist in the L1 but are not used in the L2. With respect to adding restrictions, we also wanted to see whether the difficulty associated with a more deeply-embedded feature restriction for L2 Korean that had been previously observed by Hwang and Lardiere (2013) for native English speakers would also show up among native Indonesian speakers, given the somewhat closer similarity between Indonesian and Korean in the kinds of restrictions on number marking. This paper is organized as follows: Section 2 briefly describes the number marking systems of Indonesian and Korean; Section 3 presents details of the two experiments that were carried out; Section 4 provides a brief summary and discussion of the results and conclusion.

2. Number marking in Indonesian and Korean
2.1. Classifiers in Indonesian and Korean

Both Korean and Indonesian are classifier languages, so both languages use classifiers when nouns co-occur with numeral quantifiers. For example, in Indonesian, the classifier *buah* is used with the numeral quantifier *tiga* ('three') as shown in (1a); in Korean, the classifier *mali* is used with the numeral quantifier *sey* ('three') as shown in (1b). Whereas classifiers are optional in Indonesian, they are obligatory in Korean. Thus, *tiga buku* 'three books' is acceptable in Indonesian with the classifier omitted , but *kangaci sey* 'three dogs' with the classifier omitted would be ungrammatical in Korean.

(1) a. John membeli tiga (buah) buku kemarin.   (Indonesian)
         John buy   three (CL)   book yesterday
         'John bought three books yesterday.'

     b. John-un   kangaci sey   mali-lul   sa-ss-ta.   (Korean)
         John-TOP dog   three CL-ACC   buy-PAST-DECL
         'John bought three dogs.'

2.2. Classifiers with quantifiers

While classifiers combine with numeric quantifiers (NQ) in both Indonesian and Korean, both languages similarly do not allow classifiers to co-occur with non-numeric quantifiers (NNQ) such as 'many', as shown in (2a) and (2b) below for Indonesian and Korean, respectively:

(2) a. John membeli dua (buah) / banyak (*buah) buku.   (Indonesian)
         John buy   two (CL)   many   (*CL) book
         'John bought two / many books.'

     b. Chimdae-ui-ey   chayk twu kwon / manhun *kwon-i   iss-ta.   (Korean)
         Bed-above-LOC book   two CL   / many *CL-NOM   exist
         'There are two / many books on the bed.'

2.3. Plural marking in Indonesian and Korean

Although Indonesian and Korean are both classifier languages, they productively use plural marking (cf. Chierchia, 1998). Indonesian uses full reduplication to indicate plurality (Carson, 2000; Loewen, 2011; Sneddon, 2010); for example, the bare noun *anak* 'child' is reduplicated as *anak-anak* 'children', as seen in (3a). Korean uses a suffix *-tul* to indicate plurality as shown in example (3b) (*chinkwu-tul* 'friends'). Unlike English, plural marking is optional in both Korean (Kwon & Zribi-Hertz, 2004; Lardiere, 2009) and Indonesian. Moreover, again unlike English, plural-marked nouns in both Indonesian and Korean are specific (Hwang, 2013; Hwang & Lardiere, 2013; Kim, 2005; Kwon & Zribi-Hertz, 2004).

(3) a. Anak(-anak) senang belajar Inggris.   (Indonesian)
         Child(-PL)   like   study   English
         '(The/some specific) children like to study English.'

     b. Yuna-nun ecey   tayhakkyo chinkwu(-tul)-ul manna-ss-ta.   (Korean)
         Yuna-TOP yesterday college   friend(-PL)-ACC meet-PAST-DECL
         'Yuna met (her/some specific) college friends yesterday.'

2.4. Plural marking with quantifiers

Indonesian does not allow any quantifiers, numeric or non-numeric, to appear with plural marking. Therefore, it is ungrammatical to say **dua buku-buku* 'two books' or **banyak buku-buku* 'many books'. Quantifiers can appear only with bare nouns, such as *dua buku* or *banyak buku,* as seen in (4a). In Korean, on the other hand, as shown in (4b), the plural suffix -*tul* may combine with non-numeric quantifiers but not with numeric quantifiers. For example, it is grammatical to say *manhun chayk-tul* 'many books'. But it is ungrammatical to say **ney chayk-tul* 'four books'.

(4) a. Saya membeli dua buku(*-buku) / banyak buku(*-buku).   (Indonesian)
         I   buy   two book(*-PL) / many book(*-PL)
         'I bought two books / many books.'

   b. Tosekwan-ey-nun manhun chayk-tul / *ney chayk-tul –i   iss-ta.   (Korean)
       Library-in-TOP   many   book-PL / *four book-PL-NOM exist-DECL
       'Many books / four books are in the library.'

2.5. Numeral quantifiers + classifiers with plural marking

Indonesian does not allow classifiers and plural marking to co-occur with numeral quantifiers, as shown in (5):

(5) *Tiga ekor anjing-anjing sedang bermain di kebun.   (Indonesian)
     *Three CL dog-PL   still   play   in garden
     'Three dogs are playing in the garden.'

On the other hand, Korean does allow classifiers and plural marking to appear within the same DP, but only in the case where the pluralized noun is human, such as *haksayng* 'student', as shown in (6a). If the noun is not human, such as *chayksang* 'table', as in (6b), the co-occurrence of classifiers with plural marking is not possible:

(6) a. Haksayng(-tul) payk myeng-i   i-ss-ta.   (Korean)
       Student-PL   100   CL-NOM exist-PAST-DECL
       'There are 100 students.'

     b. Chayksang(-tul) payk kay-ga   i-ss-ta.   (Korean)
       Table-PL   100   CL-NOM exist-PAST-DECL
       'There are 100 tables.'

2.6. Features needed to acquire number marking in Korean and Indonesian

The features shown in (7) are those required to describe the Korean and Indonesian number systems, following Gebhardt (2009, adapted from Harley & Ritter, 2002):

(7) [n] = noun (feature associated with nP)
    [human] = human
    [group] = plural
    [individuation]
    [q] = quantification
        [q-rel] = 'relative' = non-numeric quantifier
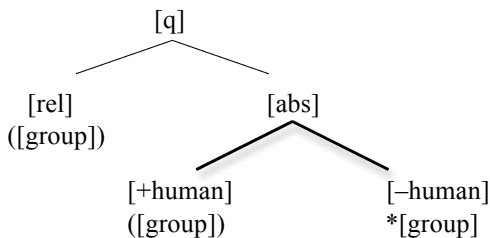   [q-abs] = 'absolute' = numeric quantifier
    [specific] = 'i.know'

Based on these features, Table 1 shows the feature bundles associated with Korean and Indonesian plural marking. Both languages share some features, but unlike Indonesian, Korean plural marking requires distinctions between [q-rel] and [q-abs], and [±human] features. Note that, following Borer (2005) and Gebhardt (2009), the feature [group] entails the feature [individuation], which is accomplished by classifiers in classifier languages.

Table 1. Korean vs. Indonesian plural marking

Korean PL: *-tul*	Indonesian PL: *-REDUP*
[n]	[n]
[group]	[group]
[specific]	[specific]
[q-rel]	
[q-abs, human]	

We further adopt the feature co-occurrence hierarchy proposed by Hwang and Lardiere (2013), who argue that the [±human] feature restricting pluralization on quantified nouns is dependent on the [q-abs] feature in Korean. As shown in Figure 1, numeric (= [abs]) quantifiers in Korean require an additional distinction depending on whether the numerically-quantified noun is human. With respect to L2 acquisition, the more embedded [±human] distinction was predicted to be acquired latest, as was found by Hwang and Lardiere (2013) for L1 English learners of Korean, as this distinction also does not exist in L1 Indonesian.

Figure 1. Feature co-occurrence hierarchy for quantified noun phrases in Korean (based on Hwang & Lardiere, 2013).

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                    [q]
              /            \
        [rel]              [abs]
       ([group])          /      \
                 [+human]          [–human]
                 ([group])          *[group]
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The feature-reassembly approach predicts that L2 learners will have less difficulty where the L1 and the L2 feature bundles are the same; that is, both L2 Korean and Indonesian learners should appropriately produce classifiers with a NQ. (Note, however, that L1 Indonesian speakers will have to learn that classifiers are obligatory with NQs in Korean, rather than optional as they are in Indonesian.) On the other hand, L2 learners will face more difficulty where the L1 and the L2 feature bundles differ; for instance, L2 Indonesian learners must learn the restriction prohibiting plural marking with NNQ. That is, L1 Korean speakers must abandon or unlearn the distinction between [q-rel] and [q-abs] (and by entailment, the [±human] distinction required for plural marking in their L1 Korean). L1 Indonesian learners of L2 Korean, on the other hand, must learn that plural marking in numeral-classifier constructions is allowable, but only on human nouns, requiring them to acquire featural distinctions that do not exist in their L1. Since the [±human] feature is the most deeply-embedded feature in the feature co-occurrence hierarchy in Korean, we predicted that the acquisition of knowledge of this restriction on plural marking would be delayed until advanced stages of L2 development.

In sum, this study addressed the following three research questions: (1) Do Korean-speaking learners of Indonesian make correct judgments regarding the different restrictions applying to the L2 Indonesian number system? (2) Do Indonesian-speaking learners of Korean make correct judgments regarding the different restrictions applying to the L2 Korean number system? (3) Which direction appears to present a greater learning challenge to L2 learners during feature reassembly?

3. Experimental Study

To begin to answer our research questions, two experiments were conducted: Experiment 1 tested L1 Indonesian speakers' knowledge of pluralization in L2 Korean, and Experiment 2 tested L1 Korean speakers' knowledge of pluralization in L2 Indonesian. Participant information is provided in the following subsection.

3.1. Participants

Participants for Experiment 1 were 70 L1 Indonesian speakers learning L2 Korean and 40 native Korean-speaking (NS) controls. The L2 Korean learners were grouped into three different proficiency levels—Low Intermediate (Low-Int), High Intermediate (High-Int), and Advanced (Adv)—on the

basis of results from the proficiency test.[1] Table 2 provides information on the participants in Experiment 1.

Table 2. Information for participants in L2 Korean study (Experiment 1)

Group	Mean age (Range)	Length of stay in Korea (months)	Mean age of first exposure (months)	Proficiency
Low-Int (n=22)	24.0 (20-33)	25 (6-48)	21.2 (18-38)	57.9
High-Int (n=22)	22.5 (20-35)	29.4 (6-84)	19.5 (18-23)	70.8
Adv (n=26)	23.7 (20-39)	34.9 (6-132)	20.0 (18-28)	80.8
NS (n=40)	25.1 (19-45)	n/a	n/a	91.4

For Experiment 2, there were 61 L1 Korean speakers learning L2 Indonesian and 39 native Indonesian-speaker controls (NS). The L2 Indonesian learners were also grouped into three different proficiency levels—Low Intermediate (Low-Int), High Intermediate (High-Int), and Advanced (Adv)—on the basis of the results from the proficiency test, as shown in Table 3.

Table 3. Information for participants in L2 Indonesian study (Experiment 2)

Group	Mean age (Range)	Length of stay in Indonesia (months)	Mean age of first exposure (months)	Proficiency
Low-Int (n=18)	36.6 (19-60)	108.8 (4-300)	27.3 (13-55)	61.9
High-Int (n=20)	48.4 (22-70)	225.6 (11-492)	27.7 (19-23)	76.9
Adv (n=23)	42.9 (18-67)	176.1 (9-504)	27.7 (13-47)	88.9
NS (n=39)	22.9 (21-25)	n/a	n/a	95.3

3.2. Materials and Procedures

Participants in both experiments completed the same three tasks (in the language of the L2): a sentence completion task (SCT), a grammaticality judgment task (GJT), and a multiple choice task (MCT). The format was the same and and the task items were translational equivalents of each other in both experiments.

The SCT was an elicited production task consisting of 9 test items and 9 distracters each requiring participants to formulate a sentence that described a picture involving quantified nouns, using vocabulary prompts that were provided. The main purpose was to examine the extent to which learners correctly supplied classifiers (optionally overt in Indonesian, but required in Korean) and plural marking (optional in both languages, but subject to the co-occurrence restrictions described in Section 2). Due to time/space constraints and the optionality of plural marking, we limit our report here to only a couple of main points of interest for this task.

For the GJT, participants were asked to judge 60 sentences (30 test items and 30 distracters) and to provide a correction for any item they rejected. The test items were designed to probe knowledge of the various restrictions on plural marking in each language as sketched in Section 2 above.

Finally, for the MCT, participants were given 22 questions (12 test items and 10 distracters), designed to focus on the areas where the number systems differ between Korean and Indonesian. Each task item contained two sentences (a) and (b) and, somewhat similar to the GJT, participants were asked to choose from among four options: 'only (a) is correct'; 'only (b) is correct'; 'both (a) and (b) are correct'; 'both (a) and (b) are incorrect'.

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[1] The proficiency tests for both experiments were made up of a set of 49 distracter items taken from the (same) three tasks in each experiment. See Lee (2015) for greater detail.

3.3. Results for Experiment 1 (L2 Korean)
3.3.1. Sentence completion task (SCT)

Recall that classifiers are optional in Indonesian but required in Korean for nouns NQs; therefore, we examined the percentage of classifiers supplied in the sentences formulated by participants for the SCT. The results show that the L2 Korean learners did become aware of the obligatoriness of classifiers with NQs as their Korean proficiency increased. Both the Low-Int and High-Int groups significantly differed from the NS group in supplying classifiers, whereas the Adv group did not significantly differ from the NS group. The number and percentage of classifiers supplied is given in Table 4:

Table 4. L2 Korean number and percentage of suppliance of classifiers with NQs

Group	Number of classifiers supplied (Percentage)
Low-Int	75 (60.8%)
High-Int	95 (72.0%)
Adv	120 (76.9%)
NS	205 (85.8%)

The other result of the SCT we are interested in is L2 Korean learners' production of plural marking on NNQ nouns. Though NNQ plural marking is optional in Korean (and, thus, does not need to be supplied for a DP to be grammatical), recall that NNQ plural marking is disallowed in the learners' L1 Indonesian. Therefore, suppliance of plural marking in this condition would suggest that learners have managed to acquire the distinction between the [q-rel] and [q-abs] features of Korean as described in Section 2. The results show that there is a jump in suppliance of (optional) plural marking between the High-Int and Adv proficiency levels, such that the Adv group does not differ from the NS group, as shown in Table 5:

Table 5. Production of (optional) PL marking on NNQs (disallowed in L1 Indonesian)

Group	(Bare) NNQ Noun	NNQ Noun + PL
Low-Int	51 (89.5%)	6 (10.5%)
High-Int	59 (89.4%)	7 (10.6%)
Adv	61 (78.2%)	17 (21.8%)
NS	95 (79.2%)	25 (20.8%)

3.3.2. Grammaticality judgment task (GJT)

Table 6 shows the overall mean scores of the GJT:

Table 6. L2 Korean mean percentage accuracy scores (GJT)

Group	Mean %	SD
Low-Int	50.1%	11.75
High-Int	53.3%	12.24
Adv	60.3%	13.34
NS	90.8%	7.69

A one-way ANOVA indicated that there was a significant difference between groups ($F(3, 47.35) = 118.88$, $p < .001$). The post-hoc Games-Howell analyses indicated that all learner groups were significantly different from the NS group ($p < .01$). In addition, the Low-Int group also significantly differed from the Adv group ($p < .01$).

In addition, Table 7 shows the percentage accuracy scores for the grammatical and ungrammatical categories. The results indicate that, while learners performed well at accepting grammatical sentences, they were much worse at rejecting ungrammatical sentences.

Table 7. L2 Korean mean percentage accuracy scores for grammatical and ungrammatical sentences

Group	Grammatical		Ungrammatical	
	Mean	SD	Mean	SD
Low-Int	90.1	12.49	17.9	15.76
High-Int	84.7	20.73	26.0	16.71
Adv	84.4	18.11	38.2	23.83
Native	94.0	5.93	85.7	15.05

As shown in Table 7, there was a dramatic difference in accuracy between grammatical and ungrammatical categories for all learner groups. A one-way ANOVA showed that only the ungrammatical scores showed a significant effect ($F(3, 51.25) = 118.67$, $p < .001$) for grammaticality category. The post hoc analysis showed that all three learner groups were significantly different from the NS group for the ungrammatical category ($p < .001$). Furthermore, the Low-Int group was also significantly different from the Adv group ($p = .005$).

Finally, taking a closer look at those particular GJT items that tested whether learners had acquired knowledge of the role of the [±human] feature in licensing pluralization on NQ nouns in L2 Korean, we observed that, although scores increased with increasing proficiency, none of the learner groups performed anywhere near NS range. That is, learners failed to reject plural marking on ungrammatical NQ nouns, over-accepting them despite the fact that these would also be ungrammatical in their L1. Those results are presented in Table 8:

Table 8. L2 Korean mean percentage accuracy scores for NQ [±human] pluralization

Group	NQ[+human]+PL (grammatical)	NQ[–human]+PL (ungrammatical)
Low-Int	86.1	13.5
High-Int	87.9	19.5
Adv	78.6	26.8
NS	90.8	81.5

For all learner groups, accuracy on grammatical vs. ungrammatical categories significantly differed, as well as their performance relative to the NS group. Even at advanced-proficiency levels, learners were not fully aware that plural marking is restricted to human nouns in NQ constructions.

3.3.3. Multiple choice test (MCT)

The overall mean percentage scores for the MCT are presented in Table 9:

Table 9. L2 Korean mean percentage accuracy scores (MCT)

Groups	Mean	SD
Low-Int	61.0	22.97
High-Int	61.5	10.81
Adv	69.6	13.57
Natives	79.8	12.92

A one-way ANOVA was performed to see whether there was a significant group effect on percentage scores for the MCT. The results showed that all learner groups significantly differed from the NS group ($F(3, 51.42) = 813.05$, $p < .001$). These results indicate that L2 learners had not reached nativelike performance in judging sentences containing Korean classifiers and plural marking.

3.4. Results for Experiment 2 (L2 Indonesian)
3.4.1. Sentence completion task (SCT)

The only result of (limited) interest to report here is whether L2 Indonesian learners produced plural marking on NNQ nouns, which is allowed in their L1 Korean but prohibited in their L2 Indonesian. Table 10 shows that learners, correctly, did not produce such pluralization. Though these results are compatible with knowledge of the restriction on pluralization for NNQs in Indonesian, other possible causes for this result (e.g., a tendency to omit pluralization more generally) cannot be ruled out. We therefore turn to the results of the GJT and MCT to better discern whether knowledge of the NNQ restriction has been acquired.

Table 10. Number and percentage of suppliance and omission of plural marking (SCT)

Groups	NNQ N	NNQ N+PL
Low-Int	51 (98%)	1 (2%)
High-Int	59 (98%)	1 (2%)
Adv	69 (100%)	0
Natives	117 (100%)	0

3.4.2. Grammaticality judgment task (GJT)

Table 11 shows the overall mean scores of the GJT:

Table 11. L2 Indonesian overall mean percentage accuracy scores (GJT)

Group	Mean %	SD
Low-Int	51.6%	15.55
High-Int	78.1%	22.15
Adv	88.3%	11.40
NS	90.6%	6.61

As shown in Table 11, scores increased with proficiency. A one-way ANOVA revealed a significant effect for Group ($F(3, 36.98) = 34.88$, $p < .001$). A post-hoc Games-Howell analysis showed that the Low-Int group significantly differed from all the other groups ($p < .01$). Neither the High-Int nor the Adv group differed significantly from the NS group ($p > .05$), indicating that these groups accurately judged the restrictions on Indonesian plural marking.

Additionally, Table 12 shows the percentage accuracy scores for the grammatical and ungrammatical categories. The results indicate that, while all learner groups performed well at accepting grammatical sentences, performance on ungrammatical sentences increased with proficiency level.

Table 12. L2 Indonesian mean percentage scores for grammatical and ungrammatical sentences

Group	Grammatical Mean	SD	Ungrammatical Mean	SD
Low-Int	89.2	14.88	36.3	22.11
High-Int	92.7	7.11	76.1	22.08
Adv	88.5	13.20	87.8	20.40
Native	86.0	12.96	92.0	10.14

A one-way ANOVA indicated a significant effect of Group for the ungrammatical category ($F(3, 37.90) = 34.82$, $p < .001$); the post-hoc Games-Howell analysis indicated that the Low-Int group significantly differed from the other three groups ($p < .001$), and that the High-Int group differed from the NS group ($p = .044$). Although these results show that the lower-proficiency learners had difficulty rejecting ungrammatical sentences, advanced-proficiency learners did not differ from the NSs in sensitivity to the restrictions on plural marking in Indonesian.

Let us turn next to learners' acquisition of restrictions on two categories that are ungrammatical in L2 Indonesian but that are permissible in L1 Korean: NNQ with pluralized nouns and numeral+classifier (NQ) constructions with pluralized [+human] nouns. In feature-reassembly terms, these are categories for which L1 Korean speakers must acquire new restrictions by neutralizing the [q-rel] vs. [q-abs] and the [+human] vs. [–human] distinctions that exist in their L1. These results are shown in Table 13:

Table 13. L2 Indonesian mean percentage accuracy scores for two ungrammatical categories

Group	NNQ+PL (ungrammatical)	NQ[+human]+PL (ungrammatical)
Low-Int	18.4	16.5
High-Int	63.3	64.9
Adv	72.3	82.6
NS	85.3	90.4

Table 13 shows that the Low-Int group performed poorly, but that performance markedly improved as proficiency rose. One way ANOVAS showed significant effects for Group for both ungrammatical categories shown above: $(F(3, 40.11) = 17.94, p < .001)$ for the NNQ+PL category and $(F(3, 39.50) = 47.30, p < .001)$ for the NQ[+human]+PL category. Post-hoc Games-Howell analyses showed that the Low-Int group significantly differed from the other three groups for both categories ($p < .01$); the High-Int group significantly differed from the NS group on the latter category ($p = .043$).

The overall results from the GJT indicate that, although the Low-Int group performed poorly on rejecting ungrammatical sentences, learners by the High-Int stage had successfully restructured their L2 grammar with the exception of neutralizing the [+human] distinction that licenses pluralization on NQ+classifier nouns in their L1. However, the results from the Adv group suggest that at this proficiency level all restrictions related to the L2 Indonesian number system had been successfully acquired.

3.4.3. Multiple choice task (MCT)

The overall mean percentage scores for the MCT are presented in Table 14:

Table 14. L2 Indonesian mean percentage accuracy scores (MCT)

Groups	Mean	SD
Low-Int	47.3	25.43
High-Int	65.4	19.20
Adv	80.1	16.93
Natives	84.6	10.27

As shown in Table 14, learners' performance gradually improved with increasing proficiency. A one-way ANOVA showed a significant effect for Group $(F(3, 38.32) = 15.89, p < .001)$. The post-hoc Games-Howell analysis indicated that both the Low-Int and High-Int groups significantly differed from the NS group ($p < .01$) and the Low-Int group also differed from the Adv group ($p < .001$). However, the Adv group did not differ from the NS group, suggesting that they had successfully acquired knowledge of the restrictions on number marking in L2 Indonesian.

4. Summary and Conclusion

Although Indonesian and Korean share many similarities in their number marking systems, the results from both Experiment 1 and Experiment 2 suggest an asymmetry in their acquisition by L2 learners. On the one hand, the overall results from Experiment 1 indicate that L2 Korean learners improved with increasing proficiency; nonetheless, all three learner groups, even the Adv learners, significantly differed from the NS group on all three tasks. On the other hand, the overall results from

Experiment 2 indicate that the L2 Indonesian learners, though they performed rather poorly at lower proficiency levels, performed within the same range as the NS controls by the time they had reached an advanced proficiency level, suggesting that they had acquired the Indonesian number system.

Recall that L2 Korean learners had to add the [q-rel], [q-abs] feature distinction to the feature bundle associated with plural marking in Korean; as in their L1 Indonesian, NNQ nouns do not co-occur with classifiers but, unlike their L1, these may be pluralized in Korean. All three tasks suggest that L2 Korean learners have acquired this distinction. However, for NQ nouns, L2 learners must also add the more deeply-embedded [±human] feature to the [q-abs] feature. Our findings show that not even the Adv learner group managed to do this, similar to the developmental difficulty pattern observed previously by Hwang and Lardiere (2013) for L1 English learners acquiring L2 Korean number marking.

For the L2 Indonesian learners, their main feature-reassembly task was to eliminate the [q-rel], feature that allows them to pluralize [q-rel] nouns in their L1 Korean number system but disallows this in Indonesian. Although low-proficiency learners performed poorly on this, the High-Int and Adv groups performed within the range of the NS group.

Returning to our original research questions: (1) Do Korean-speaking learners of Indonesian make correct judgments regarding the different restrictions applying to the L2 Indonesian number system? Our findings indicate the answer is 'yes', at least by advanced-proficiency levels. (2) Do Indonesian-speaking learners of Korean make correct judgments regarding the different restrictions applying to the L2 Korean number system? Our findings suggest a qualified 'no', at least for most learners, even advanced ones, when it comes to acquiring a more deeply-embedded co-occurrence contingency. However, 'difficult to acquire' should not be taken as 'impossible to acquire'. An analysis of individual results for the L2 Korean GJT revealed that 6 learners from the Adv group performed within the NS range and, for the MCT, 2 Adv learners achieved 100% accuracy (ten additional Adv learners achieved a score higher than 70% correct on this task, which was also within NS performance range). This finding suggests that the successful acquisition of the Korean number marking system is certainly at least possible. (3) Which direction appears to present a greater learning challenge to L2 learners during feature reassembly? The results suggest that the more complex featural co-occurrence conditions for licensing plural marking in L2 Korean were more difficult for L1 Indonesian speakers to overcome than was unlearning or relaxing the restriction against pluralizing NNQ nouns in L2 Indonesian by the L1 Korean speakers.

In sum, the differences in performance between the two language groups are at least in part attributable to the differences in the features and co-occurrence conditions required for restructuring feature bundles associated with number marking in each language, with the most deeply-contingent feature distinction posing the greatest difficulty, even for two languages that include many similarities in their number marking systems.

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