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A Study of the Frequency and Salience of Morphosyntactic

Features in Korean EFL Input

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Abstract

Research suggests that characteristics of EFL input cause morphosyntactic features to be acquired in an order dissimilar to that found in ESL contexts. To determine whether acquisition order for Korean learners could be explained by characteristics of their EFL input, a Korean elementary school curriculum was analyzed. Morphosyntactic features that were reported to be variable in a Korean EFL context, namely, the plural –*s*, third person singular -*s*, possessive –'*s*, past regular, copula (*is/are/am*), progressive auxiliary (*is/are/am*), and phrasal verb, were examined in three steps. First, frequencies of less salient morphosyntactic features were compared to those found in native English contexts. Second, use of contraction, which may reduce the saliency of auxiliary verbs, was compared to the use of uncontracted forms. Third, phrasal verb use and the frequency of particle separation were studied. Results revealed that frequencies of the past regular, third person singular, copula, progressive auxiliary, and phrasal verb are significantly lower than those found in native English settings. Further, contractions appear to be used much more often in declarative sentences, which may lower the salience of auxiliary verbs considerably. Collectively, the results suggest that reduced frequency and salience within input have slowed the acquisition of some morphosyntactic features, which may explain why the Korean EFL acquisition order is dissimilar.

Keywords: frequency, salience, EFL, second language acquisition

Introduction

A rich corpus of SLA research reveals that learners acquire morphosyntactic features in a distinct sequence (Cook, 2001; Dulay & Burt, 1974; Dulay, Burt, & Krashen, 1982; Krashen & Terrell, 1983; Pienemann, 1999; Pienemann, 2005). Although the order of acquisition has been known for some time, it is often not considered when designing instructional input. This is because causes of the acquisition phenomenon, which must be determined before a desired instructional effect can be engineered, are still not concretely defined. Although researchers such as Pienemann (1999; 2005) and Johnston (1985; 1994) have devised a cognitive theory to explain several aspects of second language development, it often fails to accurately predict the acquisition of some morphological features (Dyson, 2009; Lee, 2006).

To further define causes of the acquisition process, Goldschneider and DeKeyser (2005) studied the influence of factors such as frequency, phonological salience, semantic complexity, morphological regularity, and syntactic category. The study concluded that the combination of aforementioned factors could, collectively, predict common acquisition orders. It further revealed that less sonorant (a smaller opening of the vocal tract), bound, and homophonic morphemes had lower levels of salience, which, in turn, were more difficult to learn. While this study identified several reasons for the acquisition phenomenon, it had one major limitation. All studies included within this meta-analysis were limited to ESL contexts. Unlike ESL contexts, EFL contexts often contain a dearth of language learning resources and provide variable input (Chen, 2007; Lee, 2005). These conditions appear to influence the language learning process, and explain the finding of a

recent research study, which found that features such as the plural -*s*, progressive auxiliary

is/are/am, past regular -*ed*, copula *is/are/am,* and third-person -*s* are acquired later within a

Korean EFL context, while the possessive –'*s* morpheme is acquired slightly earlier

(Schenck, 2010). Insufficient EFL input has also been used to explain the late emergence,

or avoidance, of the separable phrasal verb in both Korean and Chinese EFL contexts (Chen,

2007; Liao & Fukuya, 2004; Schenck, 2009).

In addition to input, salience also appears to influence the disparities between EFL

and ESL acquisition. Each variable morphosyntactic feature appears to have a very low

level of saliency. Features such as the plural –*s*, possessive –'*s*, and third person singular –*s*,

for example, are each more difficult to perceive, since they are homophonic, bound

morphemes that are less sonorant, since they that lack a vowel (Goldschneider and

DeKeyser, 2005; Yavas, 2006). While the progressive auxiliary and copula appear to be

more salient features (they are free morphemes with a vowel), extensive use of contraction

may reduce these features' salience considerably. This is because contraction may make

auxiliary verbs appear to be homophonic (e.g., with other morphemes using -*s*), bound

morphemes that lack a vowel (e.g., He's going to the store / He's a doctor). Low salience,

therefore, coupled with variable frequency in an EFL context, may explain the reported

variability of morphosyntactic structures (Schenck, 2010).

Research Problem

Recent research reveals that some less-salient morphosyntactic features, such as the

plural -*s*, contracted progressive auxiliary, contracted copula, past regular, possessive –'*s*,

and third-person singular may be acquired differently in Korean EFL contexts (Schenck,

2010). Other research suggests that aspects of phrasal verb use, particularly the separable

particle, may also develop differently in Korean EFL contexts (Schenck, 2009). Disparities

between ESL and EFL acquisition may be a reflection of differences between their

respective inputs. Unlike input within ESL settings, that within an EFL context can be more

limited and variable (Chen, 2007; Lee, 2005). The purpose of this study is to determine if

characteristics of EFL input can be used to explain discrepancies of acquisition order. The

following questions have been posed:

1. Does frequency of less salient features in an EFL context differ significantly from

   that in an ESL context?

2. Are contractions used significantly more in EFL input?

3. How often are separable phrasal verbs used within input?

It is hoped that investigation of these questions will help both researchers and educators

better understand how input may be modified to maximize the effectiveness of instruction.

Method

To better understand the influence of input in an EFL environment, the seventh

Korean elementary school English curriculum was studied in detail. This curriculum, first

implemented in 2000, has provided EFL input on a national basis to all South Korean

students, including those that have participated in the study conducted by Schenck (2009).

Unlike middle and high school English programs, which emphasize reading comprehension

and vocabulary, the elementary program is primarily focused on communicative objectives,

suggesting that it is more likely to influence actual performance in communicative tasks such as speech and writing. Although students often obtain additional input outside the classroom, common input through the elementary curriculum may have an influence on overall performance.

For this study, input data from the sixth-grade curriculum was collected and analyzed. This curriculum was chosen because it serves as a capstone for previous years (English is taught from grades three to six). It provides grammatical features that were learned in prior years, such as the copula, which is emphasized in grades three and four, and the present progressive auxiliary and past tenses, which are emphasized in grade five. It also contains new grammatical features, such as the future tenses *will* and *going to*.

Data was obtained from both the student textbook and teacher's guide for the sixth-grade English class. From the student book, which contained sixteen chapters, input from all written dialogues, texts, songs, chants, and reading/writing activities was examined. From the teacher's guide, mandated teacher dialogues ("Hello, Class", "Let's Review", "Let's Begin", listening, and final review dialogues) were examined from each chapter. In addition to these dialogues, input from listening exercises and videos were also evaluated.

While examining the input, frequencies of various morphosyntactic features were tallied, including those of the plural -*s*, progressive auxiliary (*is/are/am*), past regular, copula (*is/are/am*), possessive –'*s*, and third-person singular -*s*. All contractible features, such as the progressive auxiliary, copula, *will* auxiliary, *going to* auxiliary, and topicalization (e.g., "That's great.") were divided into contracted and uncontracted forms. Contracted and uncontracted features were then placed into either the declarative sentence

or interrogative category. The choice to divide contracted/uncontracted features into the

sentence and interrogative categories was due to the observation by Brown (1973) that rules

for contraction differ for interrogative and non-interrogative forms.

   After data was collected, it was analyzed in three steps. First, EFL frequency

values for the plural –*s*, past regular, possessive –'*s*, third-person singular –*s*, contracted

copula *is/are/am*, and contracted progressive auxiliary *is/are/am* were compared to

frequency values within parental speech in a native English context (Brown, 1973, p. 358).

Although the parental speech data used for this study was collected by Brown (1973) in the

early 1970's, the parental exchanges with beginner learners (ages one to three) were limited

to the use of morphosyntactic features that are an essential part of basic speech, and,

therefore, would still be representative of emergent speech today. This idea is supported by

Goldschneider and DeKeyser (2005), who recently used Brown's study in their meta-

analysis, saying that "the morphemes under scrutiny are such a basic part of the language

that not too much variation can be expected from one input situation to another" (p. 55).

Therefore, the parental speech data from the study by Brown (1973) was deemed an

adequate measure of native English frequency for this study (See Table 1).

TABLE 1

Frequency of Morphosyntactic Features in an ESL Context

Morphosyntactic Feature	Frequency
Plural –s	147
Past Regular	44
Possessive –s	71
Third Person Singular	51
Contracted Copula	390
Progressive Contracted Auxiliary	95

Differences between the frequencies found in parental speech and Korean EFL input were evaluated using the Chi-Square formula, and results for each morphosyntactic feature were analyzed. Next, frequency values for contracted and uncontracted morphosyntactic features were compared and analyzed using the Chi-Square formula. Two Chi-Square tests were used, one for contracted/uncontracted features of the declarative category, and another for the contracted/uncontracted features within the interrogative category. An equal distribution of values for contracted and uncontracted features was assumed. Finally, all phrasal verbs, both separated and nonseparated forms, were recorded and evaluated.

Discussion and Results

Research Problem One

The frequencies of less salient features in the Korean EFL context differed

considerably from those found in a native English setting (See Table 2).

TABLE 2

Chi-Square Test for EFL Input

	Observed N	Expected N	Residual
Progressive Auxiliary Contracted	51	135.9	-84.9
Plural -S	522	210.2	311.8
Possessive -S	102	101.5	.5
Past Regular	45	62.9	-17.9
Third Person Singular	54	72.9	-18.9
Copula Contracted	443	633.5	-190.5
Total	1217		

Chi-Square	582.719
df	5
Asymp. Sig.	.000

Results of the Chi-Square test revealed that the distribution of morphosyntactic features within Korean EFL input is significantly different ($p=.0005$) from that found in a native English context. The plural –*s* appeared much more often within the EFL input. It was observed 522 times, well above its expected value of 210.2. Like the plural –*s*, the possessive –'*s* was higher than the expected value, albeit by a small margin (.5). The frequencies of the past regular (45), third person singular (54), and contracted copula (443) were significantly lower than expected values, being used 25-30% less than in native English contexts. The contracted progressive auxiliary frequency value was the most

significantly different. Its observed value, 51, was less than half the expected value of 135.9.

The significant differences between frequencies of ESL and EFL input found within this study may be used to explain several aspects of the Korean EFL acquisition process. First, the moderately high use of the possessive feature within Korean input can explain the slightly earlier emergence of this feature (Schenck, 2010). Second, the low frequencies of the third person singular and past regular tenses can explain why EFL learners acquire these features late within the acquisition process (Dulay & Burt, 1982; Schenck, 2010). Third, the most significant divergences of frequency found for the progressive auxiliary and copula verbs can explain why these features are reported to be acquired much later in a Korean EFL context (Schenck, 2010).

While the order of acquisition for most morphosyntactic features could be explained by the frequency within input, that for the plural –s feature could not. Although this feature appeared extensively within the input, it emerged very late among Korean EFL learners, appearing just before the progressive auxiliary tense (Schenck, 2010). Since the plural feature was predominantly used in teacher dialogues within the sixth-grade teacher's guide, the discrepancy may be explained by differences in actual teacher speech used during instruction. Additional research of verbal input within the classroom is needed to clarify the significance of this discrepancy.

Although transfer from the L1 may also influence the process of acquisition in a Korean EFL context, it cannot be considered the primary cause for the discrepancies observed between ESL and Korean EFL learners. Since acquisition order in an ESL setting is universal, regardless of the learner's L1 (Dulay, Burt, & Krashen, 1982; Krashen &

Terrell, 1983; Pienemann, 1999; Pienemann, 2005), factors other than the learner's L1

clearly have a more significant influence on the phenomenon. With the exception of the

plural –*s* morpheme, similarities between input frequency and the order of acquisition in a

Korean EFL context suggest that input is a more significant determinant of acquisition

order. Therefore, increasing frequency within input may be the best means of hastening the

acquisition of less salient features.

Research Problem Two

Analysis of contracted auxiliary verb use in EFL input indicates that it is

significantly different from uncontracted auxiliary verb use (See Table 3).

TABLE 3

Chi-Square Test for Contractions within Sentences

	Observed N	Expected N	Residual
Progressive Contracted	27	20.5	6.5
Progressive Non-contracted	14	20.5	-6.5
Topicalization Contracted	68	63.5	4.5
Topicalization Non-contracted	59	63.5	-4.5
Copula Contracted	342	243.0	99.0
Copula Non-contracted	144	243.0	-99.0
Will Contracted	99	67.0	32.0
Will Non-contracted	35	67.0	-32.0
Going To Contracted	31	21.5	9.5
Going To Non-contracted	12	21.5	-9.5
Present Perfect Contracted	24	26.5	-2.5
Present Perfect Non-contracted	29	26.5	2.5
Total	884		
Chi-Square	124.861		
df	11		
Asymp. Sig.	.000		

Results of the Chi-Square test reveal that distributions of contracted/uncontracted auxiliary

verbs within sentences are significantly different (p=.0005). With the exception of the

present perfect tense, frequency of contraction was higher for each morphosyntactic feature.

This suggests that contracted auxiliary verbs are used significantly more within the Korean

EFL input than their uncontracted counterparts. Observed frequencies of contraction for the

present progressive (27), copula (342), *will* (99), and *going to* (31) were each more than

double those of their uncontracted counterparts, which were 14, 144, 35, and 12,

respectively. Contraction of topicalization, observed 68 times in the EFL input, was only

slightly more common than its uncontracted counterpart.

The significantly higher use of contraction has important implications for the EFL

acquisition process. Since extensive use of contraction can lower the saliency of a verbal

auxiliary, by removing the vowel and lowering its sonority, acquisition of this feature may

be slowed. Learners who have not yet acquired the uncontracted form may have difficulty

hearing or identifying the morphosyntactic feature in either verbal or written input. More

explicit emphasis of highly salient, uncontracted auxiliaries could promote more timely

acquisition.

In contrast to contraction use within declarative sentences, contraction use within

questions was more limited. It was only found within questions that contained either the

copula (e.g., "What's his job?") or the progressive auxiliary (e.g., "What's happening?")

(See Table 4).

TABLE 4

Chi-Square Test for Contractions of Interrogatives within Input

	Observed N	Expected N	Residual
Progressive Questions Contracted	24	33.5	-9.5
Progressive Questions Not Contracted	43	33.5	9.5
Copula Questions Contracted	101	189.0	-88.0
Copula Questions Not Contracted	277	189.0	88.0
Total	445		

Chi-Square	87.335
df	3
Asymp. Sig.	.000

Results of the Chi-Square test reveal that contracted forms of auxiliary verbs are used

significantly less in interrogative structures ($p=.0005$). The contracted copula and

progressive auxiliary were used less than half as much as uncontracted forms within

questions.

In contrast to declarative sentence contraction, the frequency of interrogative

contraction was extremely limited, suggesting that the verbal auxiliary is much more salient

within questions. Higher salience may, in turn, ensure that features associated with question

construction (e.g., auxiliary inversion) are acquired in a timely fashion, explaining why

features of interrogative use in a Korean EFL context (do-fronting, copula inversion, Y/N

inversion, and auxiliary 2nd/do 2nd) appear to be acquired in a sequence identical to that

found for ESL learners (Pienemann, 2005; Schenck, 2010).

Research Problem Three

　　Examination of phrasal verb frequency revealed that this morphosyntactic feature was rarely used. Separable phrasal verbs, for example, were used only three times within the input (*make it up*, *hold the flag up*, and *cheer them up*), and occurred exclusively in mandated teacher dialogues within the teacher's guide. Like separated phrasal verbs, non-separated phrasal verbs (*wrap up the lesson*, *take off your shoes*, *pick up the card*, or *write down the answer*) occurred within the teacher dialogues. Intransitive phrasal verbs (*get up*, *go over*, *come in*, *sit down*, *stand up*, or *go back*), in contrast, were more often used within listening activities and student dialogues. The frequency of non-separated and intransitive phrasal verbs, which collectively totaled 44, was insufficient to justify acquisition of this morphosyntactic feature. Further, the repeated use of only a few select phrasal verbs limited the efficacy of the input. Such problems with phrasal verb use within the input can explain why Korean EFL learners are reported to avoid this feature (Schenck, 2009).

　　Since phrasal verbs are such a prevalent part of informal speech and written discourse, more examples of this morphosyntactic feature should be infused within the curriculum. This may be done by increasing both the frequency and variety of phrasal verbs used. Literal phrasal verbs concerning daily activities would be the best choice, since they represent essential elements of basic communication within native English contexts.

Conclusion

In EFL environments, where input may diverge from that found in native English contexts, the order of acquisition can be significantly different. Analysis of EFL input

suggests that acquisition order may be influenced in four ways by input design. First,

lowering the frequency of less salient features can slow the acquisition process. The past

regular tense, third person singular, contracted progressive auxiliary, and contracted copula,

for example, which were not covered as extensively as in ESL contexts, emerged late for

Korean EFL learners. The possessive –*s*, in contrast, which appeared in a frequency similar

to that found in ESL contexts, was acquired in a timely fashion. Although frequencies of

these features support the argument that input is affecting the acquisition of less salient

features, the frequency of the plural –*s* feature does not. Although this feature appeared

with a very high frequency, acquisition of this feature occurred later in the Korean EFL

context (Schenck, 2010). Since the plural -*s* was predominantly used within teacher

dialogues, further examination of speech in the classroom is needed. This can help clarify

the significance of this discrepancy.

Second, the extensive use of contraction within sentences may significantly reduce

saliency, impeding students from acquiring features such as the copula or progressive

auxiliary. This reduction in saliency may help to explain why the copula and progressive

auxiliary are acquired late in a Korean EFL context (Schenck, 2010).

Third, the absence of contraction within questions may increase saliency, ensuring

that associated grammatical features (e.g., auxiliary inversion and auxiliary use) are

acquired in a timely fashion. High saliency values may explain why both auxiliary verb use

and auxiliary inversion in questions tended to follow patterns predicted by ESL acquisition

orders (Schenck, 2010).

Fourth, a lack of both frequency and variety of input for the phrasal verb appear to

be promoting avoidance and slowing the acquisition process. Since these features are an essential aspect of informal spoken and written discourse, they should be emphasized more within the curriculum.

Collectively, the issues of frequency, saliency, and variety of morphosyntactic features reveal a need to enhance Korean EFL input. First, less salient morphosyntactic features, such as the contracted copula, contracted progressive auxiliary, third person singular, and past regular tense, should be used and explicitly emphasized more often. Increasing the frequency of such features will ensure that the learner notices and incorporates them within their lexicon. Second, the use of contractions should be accompanied by extensive use of uncontracted forms. Frequent use of the uncontracted form, coupled with frequent explicit instruction emphasizing the connection between contracted and uncontracted forms, will help increase saliency of the auxiliary and foster timely acquisition. Third, a larger variety of past tense and phrasal verbs should be infused within the input.

Although adding frequency and diversity to a curriculum with time limitations is a difficult task, it may be accomplished through making listening activities more sophisticated, and simultaneously reducing the size of some of the highly redundant tasks. While needed to some degree, the redundancy of language in the current curriculum has been overemphasized, limiting the potential of the curriculum to speed up the acquisition process. Listening dialogues and associated student activities may be expanded, and other redundant activities such as chants may be slightly reduced in size to accommodate the inclusion of additional morphosyntactic features.

In conclusion, within EFL contexts, issues of frequency and salience become more significant. In the future, investigations of EFL input should be expanded to include other morphosyntactic features commonly considered in SLA models, such as those included within the Appendix. They must also further examine both verbal input within the public-school classroom and additional sources of extracurricular input. Such research will help educators learn how to engineer input in ways that accelerate the acquisition of various grammatical features.

References

Brown, R. (1973). *A first language*. Cambridge, MA: Harvard University Press.

Chen, J. (2007). On how to solve the problem of the avoidance of phrasal verbs in the

    Chinese context. *International Education Journal, 8*(2), 348-353. Retrieved from

    ERIC database. (EJ834272)

Cook, V. (2001). *Second language learning and language teaching* (3ʳᵈ ed.). London:

    Arnold.

Dulay, H.C., & Burt, M.K. (1974). Natural sequences in child language acquisition.

    Language Learning, 24(1), 37-53.

Dulay, H.C., Burt, M.K., & Krashen, S. (1982). *Language two*. New York, N.Y.: Oxford

    University Press.

Dyson, B. (2009). Processability theory and the role of morphology in English as a second

    language development: A longitudinal study. *Second Language Research, 25*(3),

    355-376. doi: 10.1177/0267658309104578

Goldschneider, J., & DeKeyser, R. (2005). Explaining the "natural order of L2 morpheme

    acquisition" in English: A meta-analysis of multiple determinants, *Language*

    Learning, 55, 27-77. doi: 10.1111/j.0023-8333.205.00295.x.

Johnston, M. (1985). *Syntactic and morphological progressions in learner English*.

    Commonwealth Department of Immigration and Ethnic Affairs: Canberra.

Johnston, M. (1994). *Second language acquisition: A classroom perspective. Australian*

    studies in language acquisition no. 1. Retrieved from ERIC database. (ED411701)

Krashen, S.D. & Terrell, T.D. (1983). *The natural approach*. New York: Alemany Press.

Lee, C. (2005). *Different types of English to which Korean college students are exposed outside the class*. Retrieved from ERIC database. (ED490770)

Lee, J. (2006). Korean children's acquisition of English interrogatives. *Korean Journal of English Language and Linguistics, 6*(3), 637-653.

Liao, Y. & Fukuya, Y.J. (2004). Avoidance of phrasal verbs: The case of Chinese learners of English. *Language Learning, 54*(2), 193-226. Retrieved from Education Research Complete database.

Pienemann, M. (1999). *Language processing and second-language development: processability theory*. Amsterdam: John Benjamins Publishing Company.

Pienemann, M. (2005). *Cross-linguistic aspects of processability theory*. Amsterdam: John Benjamins Publishing Company.

Schenck, A. (2009). Discovering the efficacy of explicit grammar instruction through holistic analysis and the application of theory to practice. *TESOL Review, 1*, 95-118.

Schenck, A. (2010). Analysis of the effects of saliency, EFL input, and L1 transfer on the order of acquisition. Manuscript submitted for publication.

Yavas, M. (2006). *Applied English phonology*. Malden, MA: Blackwell Publishing.

Appendix

Feature		Sentence	WH question	Y/N question
Progressive	Contracted	27	24	0
	Not	14	41	2
Copula	Contracted	342	101	0
	Not	144	232	45
Will	Contracted	99	0	0
	Not	35	30	34
Can		30	23	89
Do		0	174	113
Other Auxiliary		6	0	27
Going To	Contracted	31		
	Not	12		
Present Perfect	Contracted	24		
	Not	29		
Topicalization	Contracted	68		
	Not	59		
Article		977		
Negation		92		
Plural		522		
Possessive –s		102		
Past regular		45		
Past Irregular		40		
Phrasal verb	Separated	3		
	Not separated	44		
Cancel Inversion		47		
Would		6		
Third Person Singular		54		

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