Examining the Influence of Multiple Factors on Acquisition Order in a South Korean EFL Context: A Pilot Study

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Abstract

Educators continue to have difficulty reforming English curricula in ways that better serve the needs of second language learners. This difficulty is perpetuated, in part, by the inability to predict how such changes will affect morphosyntactic development. To date, ESL research has failed to effectively ascertain how multiple causes influence the acquisition process. Because frequency of grammatical features within EFL input varies considerably from that found in ESL environments, study within this context may allow researchers to develop a more holistic understanding of cause and effect relationships, thereby allowing educators to design more effective curricula. Within the current study, five causal variables (frequency, semantic complexity, morphosyntactic complexity, morphosyntactic variability, and phonological salience) were converted to empirical values for each grammatical feature. These values were, subsequently, statistically compared to grammar acquisition rates obtained from the speech of South Korean EFL learners. Results revealed a strong correlation between EFL input frequency and acquisition, while correlations to other variables were weak and insignificant. This suggests that frequency is a substantial factor affecting the acquisition process. Based upon the results, reforms for the EFL public school curriculum are suggested.

Keywords: frequency, semantic complexity, second language acquisition, L2 morphology, L2 syntax

I. Introduction

Providing effective English instruction which promotes communicative competence has been a challenge within the South Korean EFL context. Initially, English learners were forced to learn English in large classrooms of 60 or more via a teacher-centered approach that overemphasized grammar translation and rote memorization. Due to this pedagogical practice, students were unable to apply their knowledge to practice, precluding their ability to use either spoken or written discourse (Oak & Martin, 2003).

To remedy problems associated with use of the grammar-translation approach, the sixth EFL curriculum was developed for elementary schools. This curriculum, developed in 1992 and implemented in 1995, was designed to promote communicative competence through the use of dialogues, role plays, chants, games, and other activities. It was revised, albeit slightly, in 1997 and introduced as the seventh curriculum in 2001 (Yoon, 2004).

Although these curricula are very different from their predecessors, containing visual, phonological, and written input that can assist learners to communicate in English, they have received criticism from researchers who cite that deficiencies in content may hamper the acquisition process (Goh, 2007; Kim, 2002). One notable problem with these curricula is the disproportional usage of grammatical features. Some features, such as the copula, for example, are used extensively, while other features such as the separable phrasal verb are nearly absent from the input (Schenck, 2010). These inconsistencies do not represent a deliberate attempt to design an inferior curriculum. In reality, the inability to effectively reform these curricula lies in a deficiency with SLA research, which has failed to definitively identify causes and associated effects of the acquisition of various grammatical features. Curriculum designers are unable to "engineer" a desired result through manipulation of communicative tasks, because they are unable to anticipate the consequences of their reforms. A clear understanding of the relationship between causes and effects on the acquisition process is a prerequisite to the systematic reformation of the curriculum.

II. Literature Review

Investigation of the influences that shape the acquisition process first commenced in the early 1970's, when researchers realized that language learners begin to use grammatical features in a distinct order (Cook, 1993). Brown (1973) first asserted that there were three forces controlling this phenomenon: semantic complexity, syntactic complexity, and input frequency. Following this claim, researchers attempted to discern the degree to which each proposed factor influenced the acquisition process, but conflicting opinions led to substantial disagreement (De Villiers & De Villiers, 1973; Dulay & Burt, 1974; Larsen-Freeman, 1976).

Following the exploration of causes such as syntax, semantics, and frequency, researchers began to realize that phonological characteristics of language also control the acquisition process. In the 1990's, language studies suggested that an innate system influences how phonological segments are processed (Saffran, Aslin, & Newport, 1996). Follow-up studies further confirmed this finding, showing that cognitive functions are used to process language based upon discreet phonological characteristics of the input (Gass & Selinker, 2008; Hoop & Fikkert, 2009; McCarthy, 2004; Pelucchi, Hay, & Saffran, 2009). Research now suggests that phonological characteristics such as the number of phones (distinct units of sound), the number of syllables, and the degree to which sounds of a feature are sonorant (the degree to which the vocal cord is open during articulation) influence the development of both language and morphosyntax (Goldschneider & DeKeyser, 2005; Nunez-Cedeno, 2007; Snape, 2006; Yavas, 2010).

After determinants of acquisition order were all identified, a great deal of controversy arose concerning the degree to which each factor influenced grammatical development. In a meta-analysis by Goldschneider and DeKeyser (2005), both phonological and syntactic causes were found to be the most prominent predictors of the acquisition process. Rowland, Pine, Lieven, and Theakston (2003), in contrast, who examined Wh-question construction, posited that frequency was the only reliable determinant; they further asserted that a relationship between semantic complexity and acquisition was the by-product of

an incidental correlation between frequency and semantic complexity. Evers-Vermeul and Sanders (2009) downplayed the role of frequency, suggesting that semantic complexity was the most influential predictor governing the grammatical development of conjunctives.

In recent years, many researchers have strongly asserted the role of input frequency as a determinant of syntactic acquisition (Ellis & Collins, 2009; Ellis & Larsen-Freeman, 2009; Matthews, Lieven, Theakston, & Tomasello, 2005). Current research, for example, suggests that the utilization of Verb Argument Constructions (VACs), which represent formulaic, grammatical patterns of verb usage, is directly related to input frequency. A study by Ellis and Larsen-Freeman (2009), which studied three different types of VACs, the Verb Object Locative (VOL)[Subject + Verb + Object + Path], the Verb Locative (VL)[Subject + Verb + Path], and the ditransitive (VOO)[Subject + Verb + Object + Object], revealed that verbs which emerge first in each VAC are those occurring most frequently within the input. In addition, the path-breaking verb (Go for VL; Put for VOL; and Give for VOO), which is the verb most highly represented within the input for a VAC, was more frequently used with its associated VAC type than any other verb (Ellis & Larsen-Freeman, 2009).

While factors such as syntax, semantics, phonology, and frequency have all been proposed to have a role in morphosyntactic development, research has been unable to definitely discern the degree to which each factor governs the process. One factor preventing this discovery is the predominance of research conducted in ESL contexts. Within these contexts, various causal variables mutually correlate with each other, obfuscating their true significance. Semantic complexity and syntactic categories of some grammatical features, for example, are positively correlated to frequency in English-speaking countries; these variables, in turn, are collectively correlated to acquisition rates, making isolation of the predominant cause problematic (Goldschneider & DeKeyser, 2005; Rowland, Pine, Lieven, &Theakston, 2003). Because frequency of the South Korean school system is significantly different from that found in native English contexts (Schenck, 2010), valuable insights into the true causes of the acquisition phenomenon may be revealed through further inquiry. In addition to overemphasis of study in ESL

contexts, the investigation of a very small number of grammatical features is problematic. In a study by Goldschneider and DeKeyser (2005), for example, only six morphologically similar structures were examined. Such limited studies provide only a partial perspective. More comprehensive investigation of morphosyntactic features may yield a more holistic perspective of the acquisition process.

In sum, the inability of past research to identify predominant influences of the acquisition process reveals a need for further research. Holistic research in an EFL context may heighten understanding of the true influences of causal factors, since frequency of structures in EFL input may be significantly different from that of ESL contexts. The purpose of this study, therefore, is to examine how causes affect the acquisition process in a South Korean EFL context. It is hoped that such study will allow educators to more effectively predict how changes to a curriculum will affect the second language learner, thereby allowing for the development of more effective EFL or ESL instruction.

III. Method

The purpose of this study was to investigate the influence of various factors on the acquisition of grammatical features in a South Korean EFL context. To facilitate inquiry of morphosyntactic development, causal variables (frequency, morphosyntactic variability, semantic complexity, morphosyntactic complexity, and phonological salience) and the dependent variable (acquisition levels of morphosyntactic features) were operationally defined.

3.1 Operational Definition of Variables

Acquisition Level. Acquisition level refers to the degree to which a morphosyntactic feature is correctly used in communicative contexts where the feature is required. This ratio scale variable was determined using data collected from a prior study (Schenck, 2009). The average of morphosyntactic accuracy for each grammatical feature was calculated for each proficiency level (meaning the weight of each proficiency

level was equal). This prevented skewing caused by the overuse or underuse of grammatical features at different proficiency levels. An average for each proficiency level was determined by dividing observed scores (correct and misformed features, which were assigned 2 points and 1 point, respectively) by the total number of features expected (assigned 2 points each), using the technique developed by Dulay, Burt, & Krashen (1982). Scores for each of these proficiency levels were then averaged to get a final group mean for each morphosyntactic feature. The use of this technique to determine acquisition levels has been criticized by some researchers, such as Bley-Vroman (1983), because it does not identify the true nature of interlanguage development. Despite this issue, the method is still recognized as providing one valid universal "yardstick" for the measurement of grammatical accuracy (Kwon, 2004).

Frequency. Frequency refers to the number of times a morphosyntactic feature is present within input communicated to the learner (Goldschneider & DeKeyser, 2005). This ratio scale variable was obtained by tallying the number of morphosyntactic features found within Korean EFL input in elementary schools. Input was comprehensively examined from all English classes provided in Korean elementary schools, which spanned from grades 3 to 6. Review of the four textbooks from these grade levels and associated dialogues, chants, games, and other activities in the teacher's guide revealed the frequency values found in Appendix A. Unlike a previous study, which included teacher instructions found in the teacher's guide within the evaluation of elementary public school input (Schenck, 2010), the present study excluded teacher instructions from the tally. Although TEE (Teaching English in English) is the current mandate in today's Korean schools, research indicates that teachers continue to use Korean in the classroom and may lack the proficiency to conduct classes completely in English (Kook & You, 2011; Oak & Martin, 2003). As a result of this reality, the more grammatically complex teacher instructions, which include features such as cancel inversion and the past participle, were excluded from the tally to increase validity.

Although the input used for this study, which is obtained at the elementary school level, cannot be considered a complete representation

of that received by first-year university students, it is one valid source for two reasons. First, it is the most substantial communicative input received within Korean public schools. Instruction during the middle and high school years is predominantly conducted via the Grammar-Translation approach. Second, the input was extracted from a national school curriculum, which means that all participants in the study received this input.

Morphosyntactic variability. Morphosyntactic variability is a ratio scale variable that refers to the number of different forms a grammatical feature may take.

For morphological features, it was assessed by calculating the number of allomorphs. The plural ¯s morpheme, for example, which has three allomorphs, s, z, and Iz (used with nouns such as books, pens, and cages, respectively), was assigned a variability value of 3. While this method of calculation mirrored that used within the study by Goldschneider and DeKeyser (2005), some modifications were made to increase accuracy. The indefinite articles, *a* and *an*, for example, were expanded from two (e and æn) to four allomorphs (e and æn; ə and ən) because of the common use of both phonological variants within everyday speech. To estimate the total number of alternations for highly variable features such as the past irregular tense and separable phrasal verb, lists of these features from a common English textbook were tallied (Master, 1996).

Variability for syntactic features was calculated by separating the words within each syntactic feature into discreet categories and multiplying the total number of variants in each category to get a final estimate of alternations. Wh-auxiliary questions, such as those defined by Pienemann (1999), for example, were separated into three word categories: interrogative, auxiliary verb, and subject pronoun (See Table 1).

The total number of variants in each category were then multiplied to estimate the total number of Wh-auxiliary forms that could occur (8 * 11 * 7 = 616 alternations). Do-fronting, a process of acquisition whereby learners form a yes/no question that can have only one non-conjugated *do* verb, was calculated by multiplying 1 (Auxiliary) by 7 (Subject pronouns), for a total number of 7 alternations.

TABLE 1
Categories of Question Types

Interrogatives	Auxiliary	Subject Pronouns
What	Do	I
When	Does	You
Where	Did	He
Who	Will	She
Whom	Would	It
Whose	Can	They
Why	Could	We
How	Should	
	Have	
	Had	
	Has	

Phonological salience. Phonological salience refers to the ease with which a morphosyntactic feature can be heard or articulated (Goldschneider & DeKeyser, 2005). Since learners constantly utilize a phonological loop within working memory to process both verbal and written language (Baddeley, 1990; Baddeley, 1999), it may have a significant influence on the acquisition process.

TABLE 2
Sonority Scale

Sound	Point Value	Examples
Low Vowels	12	a, æ
Mid Vowels	11	e, o
High Vowels	10	i, u
Glides	9	w, y
Flaps	8	r
Laterals	7	l
Nasals	6	m, n, ŋ
Voiced Fricative	5	v, z, ð
Voiceless Fricative	4	f, s, θ, h, ʃ
Affricate	3	tʃ, dʒ
Voiced Stop	2	b, d, g
Voiceless Stop	1	p, t, k

Phonological salience, a ratio scale variable, was calculated by determining the feature's sonority, which is the degree to which the vocal tract is open during articulation (Yavas, 2010). For this study, two scales by Laver (1994) and Hogg and McCully (1987) were integrated to provide the most comprehensive scale for analysis (See Table 2).

The sonority value for each morphosyntactic feature was calculated in two steps. First, the phones (distinct units of sound) of each variant of a morphosyntactic feature were added using the sonority scale. Second, the resulting values for each variant were added, and then divided by the total number of variants to get an average sonority value. The resulting value was used to represent the phonological salience of the target feature.

Although the number of phones and syllabicity were also included in the calculation of phonological salience by Goldschneider and DeKeyser (2005), only the sonority value was used within this study. This is because the number of phones and syllabicity are both reflected in the calculation of the sonority value. Morphemes with a larger number syllables, for example, have a higher sonority score (the vocal tract is open more when vowels of a syllable are produced).

Semantic complexity. Semantic complexity is a ratio scale variable that refers to the total number of meanings conveyed by a morphosyntactic feature (Goldschneider & DeKeyser, 2005). To calculate semantic complexity, the number of meanings conveyed for each grammatical structure were added using the method devised by Brown (1973) (See Table 3).

TABLE 3
Semantic Complexity Calculation

Morpheme	Meanings
1. Present Progressive	Temporary duration; process-state
2. Plural	Number
3. Past Irregular	Earlierness
4. Possessive	Possession
5. Uncontractible Copula	Number; earlierness
6. Articles	Specific-nonspecific
7. Third Person Singular	Number; earlierness
8. Uncontractible Auxiliary	Temporary duration; number; earlierness; process-state

New meanings were also assigned to morphosyntactic features not described by Brown. Interrogatives, for example, were assigned the semantic designation *question*. In addition to *earlierness*, *future* was added to cover any features that have a future meaning. Finally, attributes were added to articles to better explain their semantic complexity. As pointed out by Goldschneider and DeKeyser (2005), the nonspecific attribute is far too simplistic to explain article use in its entirety. Therefore, in addition to the specific-nonspecific attribute, the distinction between common and proper nouns, mass and count nouns, and use for generic statements were included, for a total semantic complexity value of four.

Morphosyntactic complexity. Morphosyntactic complexity refers to the degree of difficulty learners have acquiring a new grammatical feature. To rate each feature, a categorization system based upon an ordinal scale ranging from 1 (the least complex) to 6 (the most complex) was devised. The scale is based on the Processability Model, which suggests that less complex intra-phrasal aspects of morphology are acquired first, followed by more complex inter-phrasal and inter-sentential aspects of syntax (Pienemann, 1999).

Morphological features were considered to be less complex and, therefore, received a lower score for complexity. As in the study by Goldschneider and DeKeyser (2005), they were further divided into lexical/functional categories, which were then subdivided into the free/bound categories (Zobl & Liceras, 1994). Syntactic features, which received higher scores, were divided into inter-phrasal and inter-sentential categories to account for the complexity of information exchange between constituents such as phrases (e.g., particle separation and question inversion) or clauses (e.g., cancel inversion) (Pienemann, 1999).

According to Table 4, free lexical morphemes are hypothesized to be acquired first, while inter-phrasal features are thought to be acquired last. As in the study by Goldschneider and DeKeyser (2005), the ordinal scale in Table 4 is simply meant to rank complexity of morphosyntactic features. No claims are made concerning the degree to which complexity differs between categories. One category may simply be considered more or less complex than another based on these rankings.

TABLE 4
Complexity for Morphological and Syntactic Features

Syntactic Categories		Points
Lexical		
	Free	1
	Bound	2
Functional		
	Free	3
	Bound	4
Inter-phrasal		5
Inter-sentential		6

Participants

Spoken data from 11 participants, which was collected in a previous study, was used to calculate acquisition rates for morphosyntactic features (Schenck, 2009). All participants were freshmen from a university in a small South Korean city. They had been purposely selected in the prior study, using an ACTFL-based instrument, so that six different levels of proficiency were represented (low beginner, high beginner, low intermediate, high intermediate, low advanced, high advanced). None of the participants had studied English in a foreign country, though most had had some exposure to English through private academies. Although these participants probably had additional exposure to English through the TV, the Internet, or other media, collecting this frequency data was problematic and, therefore, had to be disregarded.

As with studies by Johnston (1985; 1994) and Pienemann (1999; 2005), which also analyzed a limited number of learners from 11 to 12, the objective was to holistically analyze the language of a few individual learners, rather than provide superficial analysis of only a select number of grammatical features. Therefore, data from intensive 60-minute interviews, which formed a corpus of nearly 10,000 words, was used from a select number of participants to calculate acquisition rates for all of the morphosyntactic features studied within this paper. Due to the small, purposeful sample used within this study, non-parametric methods of data analysis were used. These methods do not assume the existence of a normal distribution of acquisition rates, which would

be expected within a normal population. Although data obtained from these participants is insightful, more research with a larger number of participants is needed if general conclusions are to be made about the entire population of EFL learners in South Korea.

Since participants were all university freshmen in South Korea at the time of the interview, they had participated in the 7th curriculum, which was used as one causal variable within this study. To further increase the validity of this frequency variable in future studies, middle school EFL learners in South Korea, who have just completed the elementary school curriculum, should be selected. Because this pilot study relied on acquisition data obtained from prior research, the ideal participants could not be selected.

Procedure

After values for causal variables (frequency, semantic complexity, morphosyntactic complexity, morphosyntactic variability, and phonological salience) and effects (acquisition of morphosyntactic features) were calculated (Appendix B), each causal variable was correlated to acquisition percentages using the nonparametric Spearman rank correlation formula. Grammatical features which were not covered either in the input or the spoken output were excluded from analysis. Following the correlation between causal variables and acquisition, relationships between the causal variables themselves were calculated using the same Spearman rank correlation formula. After all calculations were complete, a matrix was constructed to summarize all of the relationships between acquisition and causal variables.

IV. Results and Discussion

Results of the study reveal relationships between causal variables and acquisition in the South Korean EFL context that are unlike those found within ESL contexts (See Table 5).

Like the study by Goldschneider and DeKeyser (2005), some causal variables showed significant correlations to each other. Phonological

salience, for example, was significantly correlated to both morphosyntactic complexity and morphosyntactic variability, yielding correlation values of r = .531 and .692, respectively. These correlations appear to reflect the fact that more complex syntactic features (e.g., questions, cancel inversion, and phrasal verbs) generally have more components that make them more sonorant. Frequency was also significantly correlated to semantic complexity (r = .508). Unlike other studies in an ESL context (Goldschneider & DeKeyser, 2005; Rowland, Pine, Lieven, & Theakston, 2003), however, only frequency significantly correlated to acquisition rates. The strong correlation, r = .625, was significant to the .01 probability level, suggesting that frequency is a major predictor of acquisition in the South Korean EFL context.

TABLE 5
Correlation Matrix with Causal Variables and Acquisition Rates[a]

		Acquisition Percentages	Morphosyntactic Frequency	Morphosyntactic Complexity	Morphosyntactic Variability	Semantic Complexity	Phonological Salience
Acquisition Percentages	r	1.000	.625**	.079	-.172	.265	.162
	Sig.	.	.006	.756	.495	.287	.521
Morphosyntactic Frequency	r	.625**	1.000	-.217	-.045	.508*	.032
	Sig.	.006	.	.387	.860	.031	.899
Morphosyntactic Complexity	r	.079	-.217	1.000	.314	.073	.531*
	Sig.	.756	.387	.	.205	.773	.023
Morphosyntactic Variability	r	-.172	-.045	.314	1.000	.327	.692**
	Sig.	.495	.860	.205	.	.186	.001
Semantic Complexity	r	.265	.508*	.073	.327	1.000	.355
	Sig.	.287	.031	.773	.186	.	.148
Phonological Salience	r	.162	.032	.531*	.692**	.355	1.000
	Sig.	.521	.899	.023	.001	.148	.

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Other causal variables had only weak, insignificant correlations to acquisition rates. Acquisition was positively correlated to phonological

salience (r = .162), morphosyntactic complexity (r = .079), and semantic complexity (r = .265). It was negatively correlated, in contrast, to morphosyntactic variability (r = -.172). The stronger, albeit insignificant, correlation between semantic complexity and acquisition may be a reflection of its correlation to frequency, rather than a true correlation to acquisition, as was posited by Rowland, Pine, Lieven, and Theakston (2003). Overall, the strong correlation between frequency and acquisition, coupled with weak correlations between other causal variables and acquisition, suggest a major influence of input frequency on the linguistic development Korean EFL learners.

Since statistical analysis suggests that there is a strong correlation between frequency in EFL input and the acquisition process for South Korean EFL learners, further examination of the causal relationship was conducted. Table 6 compares frequency to acquisition rates by ranking each variable from the highest (bottom) to the lowest (top) value. Morphosyntactic features that are highly disparate (more than two ranks different) have been highlighted in grey.

TABLE 6
Rank order for Acquisition and Frequency

Acquisition Order	Frequency
Phrasal Verb Separated	Phrasal Verb Separated
Third Person Singular	Possessive –S
Past Regular	Past Regular
Past Irregular	Third Person Singular
Wh Auxiliary Questions	Past Irregular
Article	Wh Do Questions
Possessive –S	Do Questions
Negation	Wh Auxiliary Questions
Progressive Auxiliary	Progressive –ING
Will Auxiliary	Progressive Auxiliary
Wh Do Questions	Will Auxiliary
Plural –S	Negation
Yes / No Auxiliary Questions	Yes / No Auxiliary Questions
Wh Copula	Topicalization
Do Questions	Plural -S
Topicalization	Wh Copula
Is Copula	Article
Progressive –ING	Is Copula

Within the table, articles, the possessive *–s*, and progressive *–ing* morphemes were acquired differently than predicted by the output. Articles were acquired much later than frequency would suggest, which may be a reflection of their semantic complexity. The possessive *–s* and progressive morphemes, in contrast, were acquired earlier than predicted by input. Unlike articles, these features are semantically less complex, which may make them easier to acquire.

In addition to morphological features such as the possessive *–s* and progressive *–ing*, *do* questions were acquired early. Like the aforementioned morphological features, these syntactic features are more semantically simple, since they do not require the use of future tense, past tense, or conjugation.

V. Summary and Conclusions

Analysis of causal variables and acquisition rates has yielded valuable insights into the SLA process within a South Korean EFL context. Results indicate that there is a strong correlation between EFL input and morphosyntactic development, which may indicate that frequency is the most substantial factor affecting the acquisition process. In a contrasting view, the similarities between input and acquisition may also reflect language proclivities of the curriculum designers, who may, themselves, be second language learners in South Korea. In any circumstance, the analysis reflects a need to change input in ways that may enrich or hasten the acquisition process. Through combined analysis of empirical results and the frequency values in Appendix A, two main curricular recommendations can be made.

First, more sophisticated grammatical features should be introduced. Currently, the elementary school English curriculum in South Korea lacks grammatical features such as the present perfect tense and cancel inversion (Appendix A). A lack of grammar types such as these will leave students ill-equipped to communicate effectively. Both features serve distinct sociolinguistic functions in communicative contexts. Cancel inversion, for example, which is used when making embedded questions (e.g., “May I ask where the post office is?”), provides a means to

ask polite questions, while the present perfect tense allows students to discuss experiences and socialize with peers. Because of their sociolinguistic significance, more grammatical features such as these must be provided within input, along with information concerning the sociolinguistic contexts in which they are used.

Second, the degree of frequency of grammatical features within input should be adjusted based upon semantic characteristics of the feature. As revealed by comparison of frequency and acquisition in Table 6, morphosyntactic features that are more semantically simplistic and have few lexical variants (e.g., Progressive *–ing*, Possessive *–s*, do questions, *is* copula) appear earlier than curricular frequencies. This phenomenon suggests that less coverage of these semantically simple features may be possible. Covering 975 examples of the is copula over a four year period may be a misappropriation of class time (See Appendix A). This time may be better spent on more semantically or syntactically complex concepts such as the past irregular tense, present perfect tense, or auxiliary questions.

In addition to introducing more grammatical features and adjusting frequency based upon semantic characteristics, lexical variety of grammatical features should also be considered. Although not revealed directly through empirical results within this study, qualitative analysis of morphosyntactic features in the school curriculum reveals a general lack of lexical variety. The curriculum, for example, presents only a limited number of forms for morphosyntactic features with a large number of variants. Lessons focusing on the past irregular tense, for example, are limited to the words "got", "had", "went", "ate", "met", and "bought," for a total of six variants. Auxiliary questions, likewise, have very few forms represented within the input. Variants are primarily limited to "can", "may", "will" and "would". As for the separable phrasal verb, only one form, "write me back," is provided in one circumstance. Overall, the paucity of lexical variation and frequency within input severely limits the contexts in which learners can converse, leaving them ill-prepared to communicate effectively. Increased variation of grammatical features within the curriculum may significantly increase the efficacy of instruction.

In conclusion, the strength of EFL input as a predictor of acquisition,

coupled with a dearth of linguistic complexity and variability within input, may limit the potential of public schools to effectively educate young Korean EFL learners. Curriculum designers may improve the curriculum by presenting grammatical features in proportions that are commensurate with the features' morphosyntactic complexity, semantic complexity, morphosyntactic variability, and phonological salience. While the results within this study are intriguing, further research must be conducted to confirm the accuracy of the results. Limitations, such as a small number of participants and partial frequency measures, make further research necessary.

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Appendix A

Frequency of Morphosyntactic Features
within Korean Elementary School EFL input

Morphosyntactic Feature	Frequency
Plural -s	242
Possessive -s	23
Sing/Plural Progressive Auxiliary Total	108
Are Progressive Contracted	2
Are Progressive Not Contracted	22
Is Progressive Contracted	48
Is Progressive Not Contracted	9
Am Progressive Contracted	26
Am Progressive Not Contracted	1
Progressive -ing	108
Article	488
Negation	186
Topicalization Total	203
Topicalization Contracted	135
Topicalization Not contracted	68
Copula Total	1365
Are Copula Contracted	30
Are Copula Not Contracted	126
Am Copula Contracted	228
Am Copula Not Contracted	6
Is Copula Total	975
Is Copula Contracted	556
Is Copula Not Contracted	419
Will Total	113
Will Contracted	25
Will Not Contracted	88
Do Questions	80
Wh Do Questions	47
Past Regular	28
Past Irregular	43
Past Participle Regular	0
Past Participle Irregular	0
Past Participle	0
Phrasal Verb Separated	1
Phrasal Verb Not Separated	77
Third Person Singular	33
Would (Like)	25
Yes/no Auxiliary Questions	197
Wh Auxiliary Questions	98
Adverbs of Frequency	15
Wh Copula	400
Cancel Inversion	0

Appendix B

Scores for Causal Variables and Acquisition Rates

Feature	Acquisition Percentage	Morphosyntactic Frequency	Morphosyntactic Alternations	Semantic Complexity	Sonority	Morphosyntactic Complexity
Plural -s	79.27	242.0	3.0	1.0	8.00	4.0
Possessive -s	69.05	23.0	3.0	1.0	8.00	4.0
Sing/Plural Progressive Aux	75.54	108.0	8.0	2.0	11.83	3.5
Progressive -ing	91.23	108.0	1.0	2.0	16.0	4.0
Article	64.78	488.0	6.0	4.0	14.66	3.0
Negation	81.25	186.0	2.0	1.0	13.0	4.0
Is Copula	83.61	975.0	4.0	1.0	10.17	3.5
Do Questions	91.07	80.0	7.0	1.0	29.86	5.0
Wh Do questions	83.33	47.0	56.0	1.0	52.61	5.0
Past Regular	60.34	28.0	3.0	1.0	5.00	4.0
Past Irregular	64.95	43.0	132.0	1.0	22.78	1.0
Phrasal Verb Separated	0.0	1.0	81.0	1.0	41.01	5.0
Third Person Singular	28.21	33.0	3.0	1.0	8.00	5.0
Yes/no Aux Questions	74.39	197.0	77.0	2.0	35.95	5.0
Wh aux questions	62.5	98.0	616.0	2.0	58.7	5.0
Topicalization	100.0	203.0	4.0	2.0	35.25	5.0
Wh Copula	88.89	400.0	448.0	3.0	55.98	5.0