

Assessing Derivational Affix Knowledge among Korean University Learners

Kevin Parent* & Nilufar Makhmudova**

(Korea Maritime and Ocean University)

Parent, Kevin & Makhmudova, Nilufar. (2024). Assessing derivational affix knowledge among Korean university learners. *The Linguistic Association of Korea Journal*, 32(1), 171-190. This study aims to investigate the difference between receptive and productive derivational affix knowledge among Korean learners of English and examine the participants' word family knowledge in different word classes. In this study, 47 Korean undergraduate students participated. Qualitative and quantitative approaches were applied to investigate their derivational affix knowledge by providing an Affix Elicitation task, a Morpheme Recognition task, and a survey with strategy- and background-soliciting questions. The findings suggest that Korean learners exhibit a relatively higher understanding of the derivational affixes at the receptive level compared to the productive level, though neither level may be said to be particularly high. The examination of the respondents' backgrounds illuminates the issue, with the majority claiming either not to have been instructed in the matter or that such instruction was more passing than thorough. The results also show that most learners do not apply affixation as a technique to expand their vocabulary or express their thoughts accurately but, rather, see the various derivational forms as separate words to be studied.

Key Words: vocabulary knowledge, morphological knowledge, derivational affixes, productive knowledge, receptive knowledge, word families

* First author

** Second author

1. Introduction

Knowledge of a 'word' is complex, encompassing different layers. According to Nation (2001), knowing a word includes knowledge about its form, including the written and spoken features and its constituent components, and the meaning of words, including the definition and associations. Another aspect of knowing a word involves an understanding of the connection of the word with other words and its usage, including grammatical functions, common collocations, and implementation restrictions. Acquiring this knowledge about a word is necessary for learners to appropriately apply words in the required context (Nation, 2001; Schmitt, 2008). Vocabulary knowledge consists of a superficial and a deeper understanding of the word, with the former aspect of this concept referring to the comprehension of a group of letters or sounds in a particular language (Nation, 2001), while the latter refers to a complex knowledge of said concepts in different contexts coupled with the competence to apply vocabulary knowledge (Schmitt, 2010).

Morphological knowledge is one of the most important components of vocabulary acquisition. This includes an awareness of inflectional affixes, which do not change the meaning of the word but convey grammatical features (e.g., *produce* → *produces* (*third-person singular*); *produced* (*past tense form*); *producing* (*gerund form*), as well as derivational affixes, which change the word class and form new words such as *produce* → *production* (*noun*), *productively* (*adverb*), *productive* (*adjective*). Derivational affixes must be understood by learners when they encounter them and can hopefully be recalled and produced when needed. Using the correct and appropriate form of a word that suits the provided context is indisputably essential for making acceptable and grammatical language (Schmitt & Zimmerman, 2002). The capacity to be able to utilize the most required form of a language, for example, putting a noun *development* in one context and a verb *develop* in another, is important. If learners of English do not possess this competence, they are likely to make excessive use of only the form they know, despite the requirement of a context (Al-Homoud, 2017). Being proficient at the word derivatives seems to be a difficult task not only for nonnative speakers of English but also for native speakers (Schmitt & Zimmerman, 2002). Derivative knowledge is also believed to develop step by step over time in the case of native speakers (Carlisle, 2000; Mochizuki & Aizawa, 2000).

The advantages of well-developed morphological knowledge in the second language are obvious, including the large increase in lexical items available to the learner, both in decoding and encoding tasks. Nonetheless, the production of such words is not an

error-free endeavor, and some questions are raised. How have learners been taught about using affixes? What strategies do they use? How are their skills with affixation in the receptive modes (listening and reading) related to their corresponding abilities in production (speaking and writing)? Examining a group of 47 university students, we examined these questions using both quantitative and qualitative methods.

2. Literature Review

2.1. Morphological Knowledge and Language Proficiency

Morphological knowledge is the competence to recognize and apply word formation rules in a language (Carlisle & Stone, 2003). This signals learners' capacity to analyze the internal structure of a word. Morphemes are the smallest meaningful components in a language (Carlisle, 2000; Lieber, 2010), forming an important aspect of morphological knowledge (Claravall, 2016; Fromkin et al., 2014; Hayashi & Murphy, 2011). These morphemes can be either inflected or derived, with inflectional affixes encompassing verb tenses, noun cases, and comparative degrees of adjectives. As an example, inflectional affixes such as *-ed* do not change the meaning of the words but change the grammatical function from present to past. On the other hand, derivational affixes assign a syntactic and semantic relationship within the word (Sukying, 2018). That is derivational affixes such as *un-* or *-able* change the meaning and frequently the category of a word, as in *unhappy* or *teachable*.

Affix knowledge plays a key role in the rate and depth of vocabulary development (Anglin, 1993; Carlisle & Katz, 2006; Kieliszek, 2015; Kim, 2013; Laufer & Goldstein, 2004; Nation, 2013; Pacheco & Goodwin, 2013; Sasao & Webb, 2017; Stauffer, 1942; Thorndike, 1941; Wei, 2015; Wei & Nation, 2013). Familiarity with affixes assists learners in understanding unknown words by separating them into smaller units. Affix knowledge also facilitates the identification of syntactic categories of unknown words as well as the production of newly-affixed words when required in communicative contexts (Laufer, 2013, 2017; Nagy et al., 2014).

Vocabulary size and development are also affected by affix knowledge. Schmitt and Meara (1997) found a moderate correlation between vocabulary size and receptive and productive derivational knowledge, while Mochizuki and Aizawa (2000) also demonstrated

connections between vocabulary size and total knowledge of affixes. Danilovic et al. (2013), however, argue that vocabulary size is connected more with prefixes than suffixes. Hayashi and Murphy (2011) found that productive derivational knowledge was largely connected with receptive and productive vocabulary size in the case of Japanese learners of English, implying a close relationship between vocabulary size and derivational morpheme knowledge.

In recent decades, more studies have focused on the relationship between English morphological knowledge and literacy development in native and non-native speakers (Bian, 2017). Kuo and Anderson (2006) show that morphological growth is necessary for vocabulary development as morphological awareness is a predictor for reading comprehension (Choi, 2015; Foorman et al., 2012; Gilbert, et al., 2014; Kieffer & Lesaux, 2008; Lesaux et al., 2010; Nagy et al., 2006). Morphological awareness has also been shown to be connected with word-reading competence (Henry, 1989), spelling (Carlisle, 2003; Devonshire & Fluck, 2010; Nunes, et al., 1997), vocabulary development (Wysocki & Jenkins, 1987), writing skills (McCutchen et al., 2014), as well as comprehension tasks (Foorman et al., 2012; Nagy et al., 2006). Affix knowledge is important for improving different components of language mastery.

2.2. Receptive and Productive Derivational Knowledge

Receptive vocabulary is the learner's ability to understand the form and meaning of the word while listening or reading a text (Mohamad & Baharudin, 2016). Learning receptive vocabulary may require teachers to provide the meaning of a word in the sentence and then instruct the students to spell and pronounce the words (Nagy et al., 1987; Webb, 2005). Productive vocabulary knowledge is the competence to apply the meaning and structure of the word in production (Laufer et al., 2004; Webb, 2005; Webb, 2008). Previous studies (Fan, 2000; Laufer, 1998; Tschirner, 2004; Waring, 1998) concentrated on the difference between learners' receptive and productive vocabulary knowledge. Laufer & Paribakht (1998) and Waring (1997) found a frequency effect, that words used more frequently are learned both at the receptive and productive levels, while less frequent words may be understood receptively but not necessarily productively.

Bauer and Nation (1993, p. 253) point out that "as a learner's knowledge of affixation develops the size of the word family increases." Developing derivational knowledge, however, is a difficult task, and even native speakers develop this knowledge progressively

over time (Carlisle, 2000; Mochikuzi & Aizawa, 2000; Schmitt & Zimmerman, 2002).

A number of studies have focused on receptive derivational knowledge. Zyzik and Azevedo (2009), for example, conducted a study on learners' morphological awareness at the receptive level in Spanish. In this study, the learners were instructed to distinguish word classes, which proved problematic for nouns and adjectives but less so for verb and adverb forms. Collins and Nation (2015) investigated 20 first-year undergraduate students with a mean TOEFL score of 520, examining their receptive derivational knowledge by showing them a root word they were unfamiliar with followed by the translation of the word in their native language and with two English example sentences. A new target example was presented within a sentence and the participants were asked to explain the sentence containing the target word. The results showed that the participants did not face any major challenges recognizing the root form and derived forms, though they sometimes had difficulty understanding the sentence with the target word.

Other researchers included both receptive and productive knowledge. Tosun and Onur (2021) investigated 50 undergraduate English as a Foreign Language (EFL) students' knowledge of receptive and productive word-class-changing suffixes in Turkey, concluding that they had considerably better knowledge of receptive rather than productive tasks. However, they investigated the derivational affix knowledge of the undergraduate students at the individual word level rather than focusing on the words at the word family level. The results are similar to the Collins and Nation (2015) study discussed above.

Schmitt and Zimmerman (2002) used 16 target words extracted from Coxhead's (2000) *Academic Word List*. Four contextualized sentences were provided for each target word, with blanks for participants to fill with a noun, adjective, verb, or adverb form of the prompt. If the participant believed that there was a corresponding form of the word, they were instructed to indicate it. At the beginning of each sentence, the word class of the expected derivative form was provided. However, as the task provided the word class form of the expected forms, that could have suggested a strong clue for the participants to over-generalize some of the systematic derivational suffixes such as *-ly*, *-ive*, and *-ness*.

Al-Homoud (2017) showed a close correlation between receptive and productive derivational knowledge and that it is possible to predict a learner's productive knowledge by their receptive knowledge. He used the same 16 words as Schmitt and Zimmerman (2002) but elicited a translation (Arabic) for each. The participants were able to produce more adjectives and nouns rather than verb and adverb forms. A substantial correlation was found between the translation task and test of the derivational forms, indicating that

the more receptive knowledge the participant had, the better they could do on the word derivative production test. Further investigation is needed to determine the difference between EFL learners' productive and receptive derivational affix knowledge.

A number of studies have been conducted on vocabulary knowledge in the context of Korean learners. Specifically, Shin and Jung (2021) measured Korean learners' receptive and productive collocation knowledge, Nam (2017) examined the gap between Korean learners' receptive and productive vocabulary knowledge, Kim (2013) investigated the productive and receptive knowledge of formulaic sequences by Korean EFL learners, and Joo (2014) examined the relationship between Korean EFL learners' vocabulary knowledge and reading speed. No study, however, seems to have been carried out on the correlation between the Korean EFL learners' receptive and productive derivational affix knowledge, and Korean learners' main difficulties regarding morphological knowledge remains unexplored. The main reason why studies on derivational affixes have not been conducted might have been less emphasis and concentration on derivational affixes and word formation. Derived words are usually recognized as one word and often the formation of the word is ignored. Thus, we decided to conduct on derivational affix knowledge of the Korean university learners since explicit understanding of derivational affixes help to ease language acquisition by expanding their vocabulary size and vocabulary knowledge of unknown words. This is the impetus for the current study, which addresses the following questions.

1. What is the difference between the participants' productive and receptive derivational affix knowledge?
2. How, and how often, has affixation been presented to them in the classroom before?
3. What strategies do learners use in the use of affixed words and in their overall morphological development?

3. Research Design

3.1. Participants and Research Design

The current study was carried out at a university in Busan, South Korea, with 47 Korean EFL learners with the following demographics: male (18) and female (29), with

ages ranging from 20 to 28. There were 22 first-year students, three second-year students, 18 third-year students, and four fourth-year students. The participants reported learning English for between three and 15 years. Their language proficiency level was assessed by using a placement test. To ensure the participants' privacy, the actual survey was formulated anonymously and participants were ensured their responses would be for research purposes only.

3.2. Instruments

Three tasks, administered in written form, were given to the students regarding their derivational affix knowledge: an Affix Elicitation (AE) task for assessing participants' productive knowledge, a Morpheme Recognition (MR) task for evaluating their receptive knowledge, and a survey containing five multiple-choice and five open-ended questions to collect information about their main difficulties and understanding about derivational affixes and word families.

3.2.1. Target Words

Twenty target words were chosen from the Nation's BNC/COCA lists. These were selected based on frequency (drawn from the first three bands) and on the number of forms associated with each word (the lowest of which was five, but most are well more than this, up to 28, though one word, *differ*, was counted different by Nation). The words, frequency band, and number of forms are given in Table 1. Note that the number of forms also includes inflected forms, so the forms associated with *use*, for example, include not only *usable*, *reusable* and *usefully*, but also *reuse*, *reuses*, *reused* and *reusing*, so some of these numbers may appear somewhat inflated. One word, *particular*, also includes British and American spelling variations (*particularise*, *particularize*).

Table 1. The Frequency Bands and Number of Forms of the Target Words

Words	Freq. Band	Forms	Words	Freq. Band	Forms
act	1	15	hope	1	13
affect	2	5	operate	2	15
agree	1	8	particular	1	18
clear	1	12	real	1	13
comfort	1	10	relate	1	19

Table 1. (Continued)

Words	Freq. Band	Forms	Words	Freq. Band	Forms
consider	1	14	structure	3	17
continue	1	13	suggest	1	10
create	2	15	support	1	8
deconstruct	3	7	system	1	8
differ	3	4*	use	1	28

*The words *differ*, *different* and *difference* (as well as *differential* and *differentiate*) are treated as separate headwords by Nation.

3.2.2. Data Analysis Tools

Cronbach's alpha analysis was calculated on the reliability of the tasks given to the participants. Descriptive and Paired Sample *t*-test were employed. All the data analysis was done by using SPSS software to measure quantitative receptive and productive derivational affix knowledge.

3.2.3. The Affix Elicitation Task

To investigate the participants' productive derivative knowledge of word classes, an AE task adapted from Nation (2001) was used. The set of words was provided, to which participants were instructed to add the suffixes and prefixes they believed formed acceptable words. The difference between inflectional and derivational morphemes was explained, with participants instructed to provide only derivational forms. To ensure the task was completed within the time limits, participants were asked to provide only five derivational words per word family since some word families were quite large. The value for Cronbach's Alpha internal consistency and reliability was $\alpha = .78$. Figure 1 below demonstrates an excerpt for the AE task.

Task 1. Instruction: Write five possible word family members for the words provided below!
Do not include the inflectional affixes (-s, -ed, -ing, -er, -est).
e.g., Comfort: *comfortable, uncomfortable, comfortably, discomfort, comfortless*

Figure 1. Example from the Affix Elicitation Task

3.2.4. Morpheme Recognition Task

A Morpheme Recognition task, based on one used by Ku and Anderson (2003), was

constructed to determine the participants' receptive derivational affix knowledge. The participants were given 20 target words, each followed by eight derived words, of which five were canonical English words and three were pseudo-affixed distractors. The value for Cronbach's Alpha internal consistency and reliability was $\alpha = .72$. Figure 2 below provides an example of the MR task.

Task 2. Instruction: You are given a group of word family members. There are derived words that are incorrect and do not exist in the English language. Please indicate the correctly affixed words!
 e.g. Act: *preactive action active inactive actively preactively inactively activateness*

Figure 2. Example from the Morpheme Recognition Task

3.2.5. Survey Questions

Multiple-choice and open-ended questions were given to the participants, focusing on the usage of derivational affixes and their main challenges while learning, recognizing, and using derivational affixes in their language usage.

3.3. Procedure

At the beginning of the data collection process, the participants were given a placement test on their current English level. All materials were paper-based and were administered over two weeks. In the first week, the participants were given 20 minutes to complete a placement test consisting of fifty multiple-choice questions on grammar and vocabulary. The placement test was chosen based on the students' current English language proficiency level taking the courses they have had at the university into consideration. However, since the placement test consisted of multiple-choice questions, some of the answers may have been predicted and randomly chosen by the students which is a possible limitation of the test. In the placement test, more than 58 students participated and a total of 47 of the students took part in the study based on their placement test results. In the first task, participants were instructed to write their names on their placement test papers so that the researcher could choose them for the current study. Participation was anonymous thereafter.

Participants voluntarily participated in the study outside of their general classroom time. Participation was encouraged by a professor (non-author) whose class this session

followed, thus forming a sample of convenience. During the second week of data collection, they were given the Affix Elicitation Task, for which 20 minutes were allocated. Instructions were given in English, and an example was provided. After a ten-minute break, the Morpheme Recognition Task was administered, again for 20 minutes. Since the target words for the productive and receptive tasks were the same, the researcher distributed the tasks separately to avoid any confusion and misunderstanding. After collecting the results for the Morpheme Recognition Task, a five-minute break was given, after which a questionnaire of five multiple-choice and five open-ended questions was handed out, and another 20 minutes was allocated for it to be completed. All three main tasks of data collection were carried out in one day after the participants were free from their official university classes.

4. Results and Discussion

4.1. Productive Derivational Affix Knowledge

Summary statistics for the AE are given in the top row of Table 2 below. Participants were given 100 points in total (20 words, five possible answers). The scores, from 21 to 72, imply a wide range of abilities. On average, however, the students clustered around the halfway point at 47.94 out of a potential 100, with a standard deviation of 9.66.

Among the non-standard formations were **uncontinue*, **increation*, **inreal*, **activement*. These suggest some confusion between near-synonymous prefixes (*in-*, *un-*, *dis-*) and suffixes (*-ment*, *-ity*). This does present a challenge to the learner as sometimes the only way to know which affix to add is, paradoxically, to already know the word they are attempting to form. The end result is that learners create forms that, to them, could exist but, in practice, may not or are extremely rare.

4.2. Receptive Derivational Affix Knowledge

In the second part of the study, the participants were given one point for each correctly chosen derived word. The results are shown in Table 2 (bottom row). For this task, the students' central tendency was around 60, with a deviation of around 7, with lower and upper limits of 35 and 80.

4.3. Comparison of Productive and Receptive Morphological Knowledge

To determine the significance of the difference between participants' productive and receptive derivational knowledge, the Paired Samples *t*-test was calculated from the means of the Affix Elicitation Task and Morpheme Recognition Task. As can be seen in Table 2, the results demonstrate a significant difference between the mean scores of productive knowledge ($M=47.94$, $SD=9.66$) and receptive knowledge ($M=59.96$, $SD=7.1$) of the participants ($t(46)=8.3$, $p<0.001$).

First, it must be noted that neither mean is particularly high, suggesting that affix knowledge, regardless of the receptive/productive distinction, is underdeveloped in the participants who are in the final stage of their formal education. Second, when we do factor in that distinction, we find that the participants are better able to detect erroneous instances presented to them than to determine potential errors in their efforts to create derivational forms.

Table 2. Comparison of Productive and Receptive Morphological Test Scores

	<i>n</i>	M	SD	<i>t</i>	df	<i>p</i>
Productive Knowledge (AE)	47	47.94	9.66	8.3	46	.000**
Receptive Knowledge (MR)	47	59.96	7.1			

Note. ** $p<0.001$

4.4. Multiple-choice Questions

The first multiple-choice question was designed to assess the participants' previous training in lexical derivation. A slight majority of participants, 53%, expressed they had only limited classroom exposure to English morphology, while 34% who said they had been instructed in this field claimed to experience challenges navigating the complexities of the derivational affix tasks, possibly suggesting inadequate practice with word formation techniques. A small percentage of the participants in the study (13%) claimed they had gained sufficient guidance in derivational affixes throughout their academic studies.

Regarding the frequency of using derivational affixes they use, over two-thirds of the participants, 68%, do not deliberately focus on derived forms in productive modes. Less

than a quarter of the respondents at 21% stated that they consciously observe the formation of the derived words they produce.

The third question asked about the difficulties faced during the performance of the morpheme recognition task. Only 2% of the respondents claimed to have experienced no problem here. All others expressed difficulty in analyzing complex word forms in terms of affixes or in determining the word class of a given word.

The fourth question solicited the learning technique while learning word families. Nearly half of the participants (49%) claimed they acquired individual words rather than acknowledging the prefixes and suffixes. A smaller proportion (38%) of the participants claimed they had acquired the most frequent words in a given family but not all, while 13% declared that they had acquired words individually while observing the procedure of word derivations.

Finally, participants were asked about the biggest difficulties experienced in using affixes. Some 53% admitted to facing problems defining the proper derivational forms of the words and, thus, avoided creating novel words. A sizable percentage of participants at 36% found gathering the most frequently applied derivational word forms challenging.

4.5. Open-Ended Questions

The first open-ended question assessed their understanding of word families: *What is your opinion as a learner about prefixes and suffixes?* Responses indicate that some participants have limited familiarity with word families. 'I don't pay close attention about word families, so I don't have any thoughts' wrote one participant [P5], while another replied, 'I've never thought deeply about word families. I just think that they are the words that are easy to remember because of their similarity' [P13].

A second question asked about their classroom experience: *Have you received any lessons about prefixes and suffixes in your classes?* One respondent [P6] replied, 'I did not learn about prefixes and suffixes in class', which was echoed by other participants.

The third question asked how affixed words should be introduced. *When students are taught words like possible, should they be taught words like impossible, possibly, impossibly at the same time?* Most participants considered this an unnecessary or impossible task to learn all the family members, but, as one student [P10] wrote, 'Just three to four words [is a] good idea, but too many words are [...] too much to remember.'

The next question asked was *How attentive are you when encountering affixed words?*

One learner [P12] responded, ‘[···] I use this word [*development*] as a word without paying attention to the word building form.’. Another [P15] wrote of serial affixes triggering awareness: ‘Most of the time, I do not pay attention to simple words with one affix, but when I have words with more than one affix, I pay attention to the construction.’

For the final question, learners were asked to discuss their biggest difficulty regarding affixes. One [P23] wrote, ‘It is difficult for me to choose the right affix for the word.’ Another [P20] wrote, ‘We cannot use the same affixes for all words. So sometimes, it is confusing to choose the right word.’ (We interpret this as referring to some near-synonymous affixes like *-ity* which attaches to only certain nouns, and *-ness* which affixes to others. See Bauer and Nation (2020) for classroom guidelines on this and other similar instances). Another respondent [P17] mentions avoidance as a strategy: ‘They make me [confused]. [···] I think that I can’t use those very well. So I avoid using them.’

The patterns that emerge from these responses are consistent throughout most, though not all, respondents. First, while students are aware of the ability of affixes to create new words, they self-report that, in their classroom experience, curricula have not addressed the issue to a point where students feel comfortable using them—only 13% said they had. This implies that, at the risk of overstatement, words like *concept*, *conceptual*, *conceptualise*, *conceptualisation* and *conceptually* may represent five different learning experiences at separate points in the learner’s timeline rather than just one or two.

Indeed, the self-report of an outright avoidance strategy, while perhaps not surprising, should give cause for alarm. If at least some students are not using derivational forms—or, more accurately, using them only if they have learned them as separate words—then we have at least three possible outcomes. First, they may be using other, morphologically simpler and perhaps less accurate words to convey their messages—for example, producing *empty* when *unoccupied* would have a greater effect. Second, they may be using more words to express their thoughts (*apply again* instead of *reapply*, *participating people* instead of *participants*). When this is a recurring issue throughout a text, the resulting wordiness may make the language less clear and more taxing for the reader to process. Third, it may simply result in errors, with the learners using words in wrong syntactic slots (*enthusiasm person* instead of *enthusiastic person*), or even the right slot but with less accuracy (*our collaborating* rather than *our collaboration*).

The extent to which such learners (those who claim insufficient classroom attention and/or deliberate attempts at avoiding affixes) can process affixed words when encountered in reading and listening, and how they do so, is beyond the scope of this

study but is an interesting inquiry. The learner may not need conscious knowledge that *-ness* forms nouns from adjectives to construct the meaning of a sentence containing, for example, *eagerness*, provided they at least know the base and can identify it in analyzing the parts of the word.

There is an interesting aspect that arose during the analysis but which could not be tested with the data at hand, and this regards which suffixes were used the most and, in turn, which word classes they formed. Rodgers (1969) claimed that nouns and verbs are the most easily learned word class, though this claim is not without dispute (Laufer, 1990), so it could be that nouns and verbs are also more easily formed, or that noun-forming suffixes like *-er* or *-ness*, or verb-forming ones like *-ize* are more easily acquired and/or more readily available to the learner. While the 20 words chosen for this study were controlled for frequency and number of forms, they were not controlled for word class; most of the unaffixed forms supplied to the participants were verbs, either unambiguously (*agree*) or ambiguously (*act*, which could also be a noun), and as such, learners would be likely to produce fewer verbs (which, in fact, they did). This is a limitation of the current study that could be examined with data designed to examine this.

5. Conclusion

This study has examined the knowledge of affixation among students nearing the end of their formal education. While we would not expect learners to have native-like mastery of affixes (by virtue of being learners), the results show that as far as the majority of students are concerned, insufficient classroom attention paid to affixes has resulted in inadequate preparedness for using English outside the classroom and in their careers, with only 13% of the respondents self-reporting an adequate background. Affix use, then, is not seen as a strategy in vocabulary acquisition, and affixed words are simply more words to be studied.

There are some very real implications to this. If some students avoid creating words with affixes when the resulting word is one they are unfamiliar with, then the only real option for them is to use a different word with a different base, resulting in texts of morphologically simple words or, if the reader pardons the recourse into subjective terminology, a lack of morpho-lexical sophistication. That is, if the learner knows the *concept* but cannot produce *conceptualise*, they may be forced to use more basic words like *think*.

The self-reported inadequate amount of classroom time devoted to affix use, then, may seriously hinder their ability to express their ideas with subtlety and accuracy, and intended meanings get filtered through elementary word choices. If nothing else, it is hoped that this study highlights the need for, and importance of, further study in this matter.

References

- Al-Homoud, F. (2017). EFL learners' receptive and productive knowledge of word derivatives. *International Journal of English Language and Linguistics Research*, 5(2), 43-56.
- Anglin, J. (1993). Vocabulary development: A morphological analysis. *Monographs of the Society for Research in Child Development*, Serial No. 238, 58(10), 1-165.
- Bauer, L., & Nation, P. (2020). *English Morphology for the Language Teaching Profession*. Routledge: New York.
- Bauer, L., & Nation, P. (1993). Word families. *International Journal of Lexicography*, 6(4), 253-279.
- Bian, X. (2017). *Morphological awareness and advanced EFL learners' listening comprehension* [Unpublished doctoral dissertation]. Seattle Pacific University.
- Carlisle, J. F. (2000). Awareness of the structure and meaning of morphologically complex words: Impact on reading. *Reading and Writing*, 12(3), 169-190.
- Carlisle, J. F. (2003). Morphology matters in learning to read: A commentary. *Reading Psychology*, 24(3-4), 291-322.
- Carlisle, J. F., & Katz, L. (2006). Effects of word and morphemic familiarity on reading of derived words. *Reading & Writing*, 19(7), 669-693.
- Carlisle, J. F., & Stone, C. A. (2003). The effects of morphological structure on children are reading of derived words in English. *Reading Research Quarterly*, 38(4), 428-449.
- Choi, Y. H. (2015). Roles of L1 and L2 derivational morphological awareness in L2 reading through the mediation of L2 vocabulary knowledge. *The Journal of Asia TEFL*, 12(3), 81-114.
- Claravall, E. B. (2016). Integrating morphological knowledge in literacy instruction: Framework and principles to guide special education teachers. *Teaching Exceptional Children*, 48(4), 195-203.

- Collins, B., & Nation, I. S. P. (2015). Testing receptive knowledge of derivational affixes. *Journal of Second Language Teaching and Research*, 4(1), 6-23.
- Coxhead, A. (2000). A new academic word list. *TESOL Quarterly*, 34(2), 213-238.
- Devonshire, V., & Fluck, M. (2010). Spelling development: Fine-tuning strategy-use and capitalizing on the connections between words. *Learning and Instruction*, 20(5), 361-371.
- Fan, M. (2000). How big is the gap and how to narrow it? an investigation into the active and passive vocabulary knowledge of L2 learners. *RELC Journal*, 31(2), 105-119.
- Foorman, B. R., Petscher, Y., & Bishop, M. D. (2012). The incremental variance of morphological knowledge to reading comprehension in grades 3-10 beyond prior reading comprehension, spelling, and text reading efficiency. *Learning and Individual Differences*, 22(6), 792-798.
- Fromkin, V., Rodman, R., & Hyams, N. (2014). *An Introduction to Language* (10th ed). South Melbourne, VIC: Cengage Learning.
- Gilbert, J. K., Goodwin, A. P., Compton, D. L., & Kearns, D. M. (2014). Multisyllabic word reading as a moderator of morphological awareness and reading comprehension. *Journal of Learning Disabilities*, 47(1), 34-43.
- Hayashi, Y., & Murphy, V. (2011). An investigation of morphological awareness in Japanese learners. *Language Learning*, 61(1), 105-120.
- Henry, M. K. (1989). Children's word structure knowledge: Implications for decoding and spelling instruction. *Reading and Writing*, 1(2), 135-152.
- Joo, H. (2014). Investigating Korean high school students' receptive vocabulary knowledge and reading speed. *중등영어교육(Korean Journal of Secondary English Education)*, 7(3), 99-120.
- Kieffer, M., & Lesaux, N. (2008). The role of derivational morphology in the reading comprehension of Spanish-speaking English language learners. *Reading and Writing*, 21, 783-804.
- Kieliszek, M. (2015). *Vocabulary through affixes and word families: A computer-assisted language learning program for adult ELL students*. (Master's thesis, The City University of New York).
- Kim, C. (2013). Vocabulary acquisition with affixation: Learning English words based on prefixes & suffixes. *Second Language Studies*, 31(2), 43-80.
- Kim, J. H. (2013). Productive and receptive knowledge of formulaic sequences in

- English by L2 learners. *Language and Linguistics*, 59, 23-42.
- Ku, Y. M., & Anderson, R. C. (2003). Development of morphological awareness in Chinese and English. *Reading and Writing: An Interdisciplinary Journal*, 16(5), 399-422.
- Kuo, L.-J., & Anderson, R. C. (2006). Morphological awareness and learning to read: A cross-language perspective. *Educational Psychologist*, 41(3), 161-180.
- Laufer, B. (1990). Why are some words more difficult than others? some intralexical factors that affect the learning of words. *International Review of Applied Linguistics in Language Teaching*, 28(4), 293-307.
- Laufer, B. (1998). The development of passive and active vocabulary in a second language: Same or different? *Applied Linguistics*, 19(2), 255-271.
- Laufer, B. (2013). Lexical thresholds for reading comprehension: What they are and how they can be used for teaching purposes. *TESOL Quarterly*, 47(4), 867-872.
- Laufer, B. (2017). From word parts to full texts: Searching for effective methods of vocabulary learning. *Language Teaching and Technology*, 21(1).
- Laufer, B., & Goldstein, Z. (2004). Testing vocabulary knowledge: Size, strength and computer adaptiveness. *Language Learning*, 54(3), 399-436.
- Laufer, B., & Paribakht, T. (1998). The relationship between passive and active vocabularies: Effects of language learning context. *Language Learning*, 48, 365-391.
- Laufer, B., Elder, C., Hill, K., & Congdon, P. (2004). Size and strength: Do we need both to measure vocabulary knowledge? *Language Testing*, 21, 202-226.
- Lesaux, N. K., Kieffer, M. J., Faller, S. E., & Kelley, J. G. (2010). The effectiveness and ease of implementation of an academic vocabulary intervention for linguistically diverse students in urban middle schools. *Reading Research Quarterly*, 45(2), 196-228.
- Lieber, R. (2010). *Introducing morphology*. Cambridge: Cambridge University Press.
- McCutchen, D., Stull, S., Herrera, B. L., Lotas, S., & Evans, S. (2014). Putting words to work: Effects of morphological instruction on children's writing. *Journal of Learning Disabilities*, 47(1), 86-97.
- Mochizuki, M., & Aizawa, K. (2000). An affix acquisition order for EFL learners: An exploratory study. *System*, 28(2), 291-304.
- Mohamad, Z., & Baharudin, H. (2016). Receptive vocabulary knowledge or productive vocabulary knowledge in writing skill, which one important?

- International Journal of Academic Research in Business and Social Sciences*, 6(11), 261-271.
- Nagy, W. E., Anderson, R. C., & Herman, P. A. (1987). Learning word meanings from context during normal reading. *American Educational Research Journal*, 24, 237-270.
- Nagy, W. E., Berninger, V. W., & Abbott, R. D. (2006). Contributions of morphology beyond phonology to literacy outcomes of upper elementary and middle-school students. *Journal of Educational Psychology*, 98(1), 134-147.
- Nagy, William E., Carlisle, Joanne F., & Goodwin, Amanda P. (2014). Morphological knowledge and literacy acquisition. *Journal of Learning Disabilities*, 47(1), 3-12.
- Nam, H. (2017). Korean L2 learners' vocabulary gap between receptive and productive knowledge and the factors affecting the gap. *The New Studies of English Language and Literature*, 67, 281-304.
- Nation, I. S. P. (2001). *Learning Vocabulary in Another Language*. Cambridge: Cambridge University Press.
- Nation, I. S. P. (2013). *Learning Vocabulary in Another Language* (2nd ed). Cambridge: Cambridge University Press.
- Nunes, T., Bryant, P., & Bindman, M. (1997). Morphological spelling strategies: Developmental stages and processes. *Developmental Psychology*, 33(4), 637-649.
- Pacheco, M., & Goodwin, A. P. (2013). Putting two and two together: middle school students' morphological problem-solving strategies for unknown words. *Journal of Adolescent & Adult Literacy*, 56(1), 541-553.
- Rodgers, T. (1969). On Measuring Vocabulary Difficulty. An analysis of Item Variables in Learning Russian-English Vocabulary Pairs. *International Review of Applied Linguistics in Language Teaching*, 7(4), 327-344.
- Sasao, Y., & Webb, S. (2017). The word part levels test. *Language Teaching Research*, 21(1), 12-30.
- Schmitt, N. (2008). Instructed second language vocabulary learning. *Language Teaching Research*, 12(3), 329-363.
- Schmitt, N., & Meara, P. (1997). Research vocabulary through a word knowledge framework: Word associations and verbal suffixes. *Studies in Second Language Acquisition*, 19(1), 17-36.
- Schmitt, N., & Zimmerman, C. B. (2002). Derivative word forms: What do learners know? *TESOL Quarterly*, 36(2), 145-171.

- Schmitt, N., 2010. *Researching vocabulary: A vocabulary research manual*. Palgrave Macmillan.
- Shin, Y., & Jung, Y. (2021). Measuring receptive and productive collocational knowledge of Korean learners of English. *Foreign Languages Education*, 28(3), 77-102.
- Stauffer, R. (1942). A study of prefixes in the thorndike list to establish a list of prefixes that should be taught in the elementary school. *The Journal of Educational Research*, 35(6), 453-458.
- Sukying, A. (2018). Investigating receptive and productive affix knowledge in EFL learners. In D. Hirsh (Ed), *Explorations in Second Language Vocabulary Research* (Vol. 254, pp. 183-218). Bero. Peter Lang.
- Thorndike, E. L. (1941). *The Teaching of English Suffixes*. New York: Teachers College, Columbia University.
- Tosun, S., & Esek Onur, F. (2021). An investigation of receptive and productive morphological knowledge of derivational suffixes in Turkish learners of English. *The Journal of Language Teaching and Learning*, 11(1), 17-28.
- Tschirner, E. (2004). Breadth of vocabulary and advanced English atudy: An empirical investigation. *Electronic Journal of Foreign Language Teaching*, 1(1), 26-38.
- Waring, R. (1997). A comparison of the receptive and productive vocabulary sizes of some second language learners. *Immaculata [occasional papers of Notre Dame Seishin University, Okayama]*, 1, 53-68.
- Waring, R. B. (1998). *Tasks for Assessing Second Language Receptive and Productive Vocabulary*. University of Wales Swansea.
- Webb, S. (2005). Receptive and productive vocabulary learning: The effects of reading and writing on word knowledge. *Studies in Second Language Acquisition*, 27, 33-52.
- Webb, S. (2008). Receptive and productive vocabulary sizes of L2 learners. *Studies in Second Language Acquisition*, 30(1), 79-95.
- Wei, Z. (2015). Does teaching mnemonics for vocabulary learning make a difference? putting the keyword method and the word part technique to the test. *Language Teaching Research*, 19(1), 43-69.
- Wei, Z., & Nation, P. (2013). The word part technique: A very useful vocabulary teaching technique. *Modern English Teacher*, 22(1), 12-16.

- Wysocki, K., & Jenkins, J. R. (1987). Deriving word meanings through morphological generalization. *Reading Research Quarterly*, 22(1), 66-81.
- Zyzik, E., & Azevedo (2009). Noun, verb, or adjective? L2 learners' sensitivity to cues to word class. *Language Learning*, 59(1), 147-164.

Kevin Parent

Professor, Department of English Language and Literature
Korea Maritime and Ocean University
727 Taejong-ro, Dongsam-dong, Yeongdo-gu,
Busan, South Korea
Phone: +82 51-410-4593
Email: parent@kmou.ac.kr

Nilufar Makhmudova

Graduate student, Department of English and Literature
Korea Maritime and Ocean University
727 Taejong-ro, Dongsam-dong, Yeongdo-gu,
Busan, South Korea
Email: nilufarm597@gmail.com

Received on February 20, 2024

Revised version received on March 29, 2024

Accepted on March 31, 2024