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＿＿＿study applied to English language teaching＿＿＿＿＿＿＿＿＿＿＿＿＿

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論文要旨（別様に記載すること。）

（注）1．論文要旨は、A4版とする。

　　　2．和文の場合は、4000字から8000字程度、外国語の場合は、2000語
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　　　3．「論文要旨」は、CD等の電子媒体（1枚）を併せて提出すること。

　　　　（氏名及びソフト名を記入したラベルを張付すること。）

An analysis of English verb-particle combinations: A corpus-informed study applied to English language teaching

Yutaka   IIO

This thesis focuses on English verb-particle combinations (VPCs) in Japanese EFL (English as a foreign language) learners from the standpoint of corpus linguistics and elicitation research approach.   Based on corpora representing native English speakers and Japanese EFL learners, the author considers differences in usage type and frequency as well as the syntactic and semantic problems of VPCs, such as aspectual usage and particle position.   Semantic gradience analysis is proposed as a way to account for the usage differences between native English speakers and Japanese EFL learners.   The author also reviewed some of the corpus and elicitation approaches to English phrasal verbs, presenting some major factors for the avoidance of phrasal verbs suggested by Liao and Fukuya (2004) in addition to some of the methodological problems about the previous corpus studies.

First, Chapter 1 (Introduction) stated the importance of English verb-particle combinations and objective of this study.   It showed the purpose of this study and three research questions:

Research Question 1: Do Japanese learners of English tend to use less English phrasal verbs both in number and kind than native speakers of English?

Research Question 2: Do the differences in the semantic nature of phrasal verb types (figurative vs. literal) affect the uses of phrasal verbs by Japanese learners?

Research Question 3: Are the developmental stages of the Japanese EFL learners related with the uses of phrasal verbs on the basis of the ways the learners' performance is measured?

Chapter 2 (Literature Review) took up some of the syntactic and semantic problems of the VPCs such as aspectual usage and particle position.   Then it presented semantic scale analysis. The author pointed out the importance of semantic gradience when we deal with the VPCs, by citing Gries (2000) and other cognitive grammarians.   The author also reviewed some of the corpus and elicitation approaches to English phrasal verbs, presenting some major factors for the avoidance of phrasal verbs in literature such as Liao and Fukuya (2004) in addition to some of the methodological problems about the previous corpus studies.

In Chapter 2, the author argues that the meaning of phrasal verbs cannot always be categorized as being either fully idiomatic or totally literal, citing Gries (2000).   The author has tentatively divided phrasal verbs as follows: (a) literal or directional—phrasal verbs whose meaning is a straightforward product of their semantic components: *go out, take away, come in* (b) figurative or idiomatic—in which a new meaning has resulted from a metaphorical shift of meaning and the semantic fusion of the individual components; *turn up, let down* (c) completive or aspectual—in

which the particle describes the result of the action: *cut off, burn down*.

Particles may be classified in a variety of minute ways, but syntactically they could be roughly divided into two functions, namely adverbial and prepositional ones. Semantic scale presented by Fukui (2006) may be one of the adequate analyses to judge the degree of grammaticality of VPCs. The author's proposal, following corpus research, is that prepositional verbs are semantically in the same scale-class as idiomatic phrasal verbs although they are syntactically different in many respects. Thus, this study theoretically dealt with the syntactic and semantic gradience, using corpus-based evidence.

As a result of considerable amount of literature review, this study is mainly concerned with phrasal verbs among VPCs, so that prepositional verbs and phrasal prepositional verbs were not dealt with much. Quirk et al. (1985) syntactically classified particles into three groups, that is, adverbials, prepositionals, and both of them, but they did not investigate their actual percentage. Hence, this study clarified the percentage of the adverbial and prepositional particles, using corpus research. In the course of this research, the author proposed a gradient analysis, and eventually presented a specific formulation by using the BNC as a native corpus, based on the gradience of the adverbial degree.

Kennedy (1920) pointed out that the two particles *up* and *out* are the most important among phrasal verbs, but he did not present a definite reason. Uchikiba (2005) also took up these two as typical aspectual instances, but the reason was also not clarified. This study, on the other hand, clearly gives the reasons. First, the particles *up* and *out* are the most frequent in number and in percentage. Second, according to this formulation, they are more adverbial ones, that is, structurally closer to verbs, not nouns, which means that they are therefore closer to typical phrasal verbs. In other words, if particles are less adverbial or more prepositional, they will be closer to object nouns, this in turn means that they are more like prepositional verbs.

Other than completive phrasal verbs there are a few types of aspectual verbs, such as inceptive, continuative, and iterative, but most of the researchers regard only completive as aspectual phrasal verbs. This study clearly explains the reason why most researchers think of only completive as aspectual phrasal verbs. The completive notion is related to this kind of typical verbal notion of the phrasal verbs and it is less connected to the nominal features of prepositional verbs. Fukui (2006) presents semantic scale analysis on phrasal verbs, using the notion of the degree of idiomaticity, and he mainly addresses phrasal verbs and not prepositional verbs. Corpus linguists such as Liu (2011) also focus mainly on phrasal verbs so that they do not deal with prepositional verbs. This study shows that more attention is, therefore, needed to the prepositional side of the VPCs. It then shows that many researchers classify phrasal verbs into three types, but these distinctions are vague and not so clearly identified as Bolinger (1971) and Gries (2003) state.

In summary, it was shown that in phrasal verbs, there are three kinds, which are literal,

idiomatic and aspectual, although in prepositional verbs there are only two kinds; literal and idiomatic. This is because phrasal verbs are close to verbs containing aspectual features, while prepositional verbs are close to nouns which lack aspectual features. And, in the last place, it is suggested that these distinctions in question are gradient and the newly-established gradient analysis in this study has the key to clarify them.

Chapter 3 (Preliminary Survey) presents a brief overview of the results of the high school teacher survey on instructional problems related to English phrasal verbs. The description is partially related to Research Question 1 and highlights some of the teaching problems and insufficient materials in the current textbooks on phrasal verbs. To find out more about the needs of English language teachers with regard to instruction in phrasal verbs, this survey was conducted among 53 high school teachers—23 junior high school teachers and 30 senior high school teachers—in Gifu, Tokushima, Ehime, and Yamaguchi Prefectures, (thus, mostly in West Japan), in summer and autumn, 2012. Their teaching experiences varied from less than one year through almost thirty years.

The questionnaire consisted of 16 statements related to general educational topics such as the four core language skills (listening, speaking, reading, and writing) as well as rather specific ones such as grammatical problems relating to teaching English phrasal verbs. According to questionnaires to high school teachers, it is shown that phrasal verbs are thought to be not so important in curriculum, and therefore they are not taught so much in the class. Many teachers consider the content of textbooks as insufficient in dealing with phrasal verbs, and, in fact, phrasal verbs are generally not as frequent as prepositional verbs. The teacher report to the questionnaire shows that the content of textbooks is not always sufficient for language learning.

As a result of error analysis in the JEFLL corpus, it was found that errors in the use of prepositions were closely related to the learning stage of prepositions. Error analyses of VPCs reveal that not only linguistic factors but also environmental factors such as teacher instruction or the content of the textbooks have some influence on the learning of phrasal verbs, sometimes giving many problems to learn. We may reduce the problems if we can modify teaching methods and materials after the deep consideration of these data.

In addition, the proportions of phrasal and prepositional verbs as a percentage of total words in Japanese junior and senior high school English textbooks were calculated using Microsoft Excel. On average, phrasal verbs are used as often in these texts as in the native corpus LOCNESS, but there is great variation.

Chapter 4 (Methodology), gives us the combinations of two research methods, namely, corpus approach and elicitation test research. Corpus approach is the main method in this study to obtain objective data to explain the characteristics of the VPCs, but it also needs more evidences to look further into objectivity. Thus, elicitation tests are used in this thesis as a means of experimental

approach. The integration of the corpus approach and elicitation research can be found in the recent corpus studies to an extent.

Chapter 4 also presents the research methods used to investigate three research questions, including specifics of the elicitation test technique for English phrasal verbs. This thesis conducts these to compare the results with those of corpus analysis and the previous studies.

The elicitation test for English phrasal verbs was administered to both university and high school students. The instrument used was based on that used by Liao and Fukuya (2004), who investigated the use and avoidance of English phrasal verbs by Chinese learners. In their study, six groups of intermediate and advanced learners took one of three tests (multiple-choice, translation, or recall) that covered both literal and figurative phrasal verbs, and 15 native speakers also took the multiple-choice test. The results show that three factors (proficiency level, such as intermediate and advanced, phrasal-verb type, such as literal and figurative, and test type, such as multiple-choice, translation, and recall) affected the learners' avoidance of phrasal verbs. It may also be pointed out that the differences between first and second languages and the semantic difficulty of phrasal verbs may lead to this avoidance.

The evidence suggested by Waibel (2007) implies that learners such as Japanese EFL learners who lack phrasal verbs in L1 tend to avoid using phrasal verbs in English, while those such as German-speaking EFL learners who have phrasal verbs in their L1 do not avoid using these in English. The data from JEFLL and the BNC were compared to test this idea empirically. Further, Japanese learners' avoidance of English phrasal verbs was investigated by conducting the same kind of elicitation tests used in Liao and Fukuya (2004) in order to compare non-native speakers with English native speakers.

Fifteen pairs of phrasal and one-word verbs were selected based on native speaker preference: a multiple-choice test was composed on the basis of the 15 short dialogues from the test of native speakers. In each dialogue, the verb in question was left blank. The participants were asked to fill in the blank with one of the four verbs presented below the dialogue: a phrasal verb, an equivalent one-word verb, and two distractor verbs. The participants had about 10 minutes to complete the test. Because each item actually contained two correct answers, the participants received instructions to choose the one they considered most suitable to complete the dialogue.

In this study, the author compares several corpora, including Japanese leaner corpora such as JEFLL and NICE, as well as native speakers' corpora, such as BNC and COCA, to show how phrasal verb usage patterns of native English speakers differ from those of Japanese learners of English. In addition, it seems important to compare not only the usage patterns of Japanese learners with those of native speakers, but also the usages of novice and advanced English learners. To that end, the author compares the JEFLL, which contains data from beginning English language learners, and other Japanese learner corpora, such as PERC and NICE, which contain more advanced

data.

The findings in this study show that the uses of phrasal verbs are strongly influenced by topics or themes, developmental stages of learning, and spoken or written registers. In addition, it was also shown that phrasal verbs are less used than prepositional verbs in every corpus.

Chapter 5 (Results) shows the results of the corpus analysis and elicitation research. As for the corpus research, it was shown that Japanese learners underused phrasal verbs in number and kind, compared to native speakers of English. And it was claimed that it was significant to investigate and compare the data of the various corpora in order to know the objective uses of the phrasal verbs. As for the elicitation research, the above-mentioned three research questions were answered.

With regard to Research Question 1, a number of corpus and elicitation evidence shows that Japanese learners of English avoid phrasal verbs. Concerning Research Question 2, elicitation tests have shown that this avoidance is affected by differences in semantic type (figurative vs. literal) and that these learners tend to avoid phrasal verbs with figurative meanings more than those with literal meanings. Finally, with regard to Research Question 3, multiple-choice tests showed greater avoidance of figurative phrasal verbs than literal phrasal verbs in Japanese advanced learners of English. This finding is in accordance with previous findings using different measures, such as those of Liao and Fukuya (2004), who found that literal phrasal verbs were manifested in translation test alone among Chinese learners, or those of Dagut and Laufer (1985), who found greater avoidance of figurative than of literal phrasal verbs in all three tests (multiple-choice, translation, and memorization) in the case of intermediate Hebrew learners of English, whose native language lacks the phrasal verb structure.

From a statistical point of view, the author conducted the Kolmogolov-Smirnov and Leven tests on these scores to identify normal distribution and homogeneity of variance. The results suggested that they did not distribute normally, nor was their homogeneity of variance clearly shown. Therefore, this study conducted nonparametric statistic tests including Kruskal-Wallis and Steel-Dwass test. The Kruskal-Wallis test showed significant differences between these three participant groups, that is, native speakers of English, Japanese university students, and Japanese high school students. The multiple comparison Steel-Dwass test also identified significant differences between them, except for the case of particle position between Japanese university students and Japanese high school students.

For analyzing corpus results, the author conducted correspondence and log-likelihood analyses. Through correspondence analysis, the strength of relationships among topics and phrasal verbs, and frequent particles across corpora can be clearly seen in the by-plot chart. Log-likelihood analysis showed close relationships between some distinctive phrasal verbs and their corresponding corpora correctly.

In Chapter 6 (Discussion), the author discussed the avoidance of phrasal verbs by Japanese

EFL learners. The evidence presented in Waibel (2007) implies that learners, who lack phrasal verbs in their L1, such as Japanese EF learners, tend to avoid using phrasal verbs in English, while those who have phrasal verbs in their L1, such as German learners, do not avoid using these in English. To test this claim, the author assessed the frequency of phrasal verbs in Japanese EFL corpora, and compared it with native corpora. In addition, the author investigated the Japanese learners' avoidance of English phrasal verbs by employing the same kind of elicitation tests used in Liao and Fukuya (2004) in order to compare non-native speakers with English native speakers.

In Chapter 6, the author also dealt with the semantic analysis of the verb: *make*, referring to the previous studies. Using the JEFLL corpus, it was revealed that Japanese learners were apt to use more of core meanings of verbs; they tended not to focus on their abstract (e.g., delexical, causative) meanings. On a related note, phrasal verbs are regarded as one of the more abstract types of verbs, and they tend to be underused more by non-native English speakers than native English speakers. Another finding shows that it is easier for Japanese learners to use literal phrasal verbs than figurative phrasal verbs, but that conversely, native speakers tend to prefer using figurative phrasal verbs to literal phrasal verbs.

Chapter 7 (Pedagogical Implications) showed some of the pedagogical implications of the teaching of phrasal verbs. Some previous research findings on teaching vocabulary were reviewed. According to the research on L2 vocabulary acquisition in Japanese high school education, Japanese learners are likely to have been exposed to limited vocabulary learning strategies. Characteristic examples include a predominance of rote learning, and shallow cognitive strategies such as verbal repetition. To address these issues, Takahashi and Matsuya (2012) suggest a systematic learning system for English phrasal verbs that draw on the framework of cognitive grammar advocated by Langacker (1987). Chujo (2006, 2012) also presented a data-driven learning (DDL) syllabus design combining a Japanese-English parallel corpus with a CALL program to produce a set of corpus-based lexico-grammatical learning activities for beginning EFL learners. Their experimental methods demonstrated the effectiveness of systematic teaching of phrasal verbs with the help of visual images. Thus, this study presented some teaching materials of VPCs, including *live with* and *get through*, for the students, using example sentences from native speakers' corpora such as COCA, and Project Gutenberg. In this way, Japanese EFL learners can learn the literal and figurative usages of the target VPCs through these example sentences, drawing on corpora showing discourse of native speakers of English

The author showed some example teaching materials based on their frequency and semantic classification such as literal and figurative. As more and more corpus-based materials or texts become available, teachers can use them to provide students with information that will help them achieve their goals of L2 fluency. Corpus-based materials, which draw on the results of the corpus research, also help teachers brush up their own skills by allowing them to have ready access to

examples of language use and variation in context. Other corpus-based teaching materials and task activities, such as *give up* and *put on*, are shown as additional examples. *Give up* is frequently used in negative contexts with emphatic adverbs such as *completely, entirely,* or with subjective adverbs such as *easily*. *Put on* and *take off* are neutral expressions but there are a variety of other synonymous expressions such as *pull on, throw on, slip on,* or *pull off, throw off,* and *slip off*. Corpus-based teaching materials like these provide students with examples of real language use, helping learners to identify and use language that is appropriate in different contexts. However, because corpus-based materials or texts are examples of real language use, they may sometimes be rather difficult for beginners. In that case, then, we should make judicious use of corpus-based materials, carefully considering the proficiency of the students. And it may be very useful for non-native learners to learn English phrasal verbs in the same learning process of L1, which expands their vocabulary from concrete to abstract by using natural human cognitive process.

In Chapter 8 (Conclusion), the results showed that Japanese learners of English used phrasal verbs less frequently than did native speakers of English, that they used the verbs in their core meanings more often than native speakers, and that they had a tendency to use more concrete expressions and fewer abstract expressions (e.g., light verbs or delexical verbs, which have little semantic content of their own and need additional specific nouns, for example, *make a decision*, or phrasal verbs such as *make up*). To fix the semantic borders between these meanings clearly, minute corpus research using native corpora such as the BNC and COCA was conducted. This corpus research also built on the present research to show why Japanese learners of English use phrasal verbs less than native speakers—whether it is only because of the influence of their L1 or whether roles are also played by different English teaching methods or materials. The results indicated that both of them influenced the underuse of phrasal verbs by Japanese learners of English.

Questionnaires for high school teachers assessed teachers' opinions regarding four language skills—listening, speaking, reading and writing—and the importance of factors affecting the learning of grammar and vocabulary, with a focus on phrasal verbs. The results show that teachers find the teaching of phrasal verbs difficult because of various time and resource constraints. In the course of the study, the author compared high school textbooks with the learner corpora to show the relationships between teaching materials and learners' developmental stages. Additionally, it was revealed that they were somewhat correlated with each other as far as a number of prepositional misuses of the JEFLL corpus, such as *to, with*, and others, were concerned.

Thus, it should not be surprising that the corpus research shows that Japanese learners of English use phrasal verbs with lower frequency than native speakers, because Japanese learners tend to prefer the core meanings of verbs. In other words, they learn phrasal verbs by rote, with one meaning for each, and thus these verbs have less utility for them than they do for native speakers, who use them in a wider range of meanings, from concrete or literal to abstract or figurative.

Japanese learners are weak at idiomatic phrases. Phrasal verbs have a wide range of meanings, so it is difficult for non-native speakers such as Japanese learners of English to choose suitable particle combinations. In addition, the choice of particles is not an issue that is emphasized in English textbooks in Japan because of the low frequency of the appearance of phrasal verbs.

As for corpus analysis, the statistical techniques of log-likelihood and correspondence analyses were used. The study showed that both log-likelihood analysis and correspondence analysis worked well for the purpose of identifying the relationships of items such as phrasal verbs, or different corpora.

In this study, the author combined corpus data with the other type of linguistic data using an elicitation technique. In language studies, corpus analyses make it possible to study the properties of the linguistic output of language users, while elicitation research or experimental technique gives access to the properties of the mental processes and structures underlying language production and comprehension. Quite a few researchers, therefore, have been involved in these experimental techniques, and these two combinations seem to give us a more holistic view of language education.

As for the pedagogical implications of teaching phrasal verbs, Japanese learners should focus more on figurative meanings than literal meanings because they are weaker at using and understanding abstract aspects of language meanings.