個別論文

On Perception of the Verb “Give” by Japanese Learners of English

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Abstract

日本人英語学習者が give の各語義をどのように捉えているかを考察した。この調査のために，日本人学習者 74 名と英語母語話者 15 名を調査協力者として，産出テスト，類似性判断テストを行った。産出テストは，give を用いて英文をひとつ作るものである。このテストの目的は，両調査協力者グループのプロトタイプ的用例を抽出することである。これにより，「GIVER + *give* + RECIPIENT + THING (concrete noun)」が両グループのプロトタイプ的用例であることが明らかとなった。類似性判断テストは，give のさまざまな用例を，類似性に基づいてグループ分けするものである。この結果，英語母語話者の語義ネットワーク化に関しては，ネットワーク形成に作用する認知的な要因に基づく説明がある程度可能であったが，日本人グループは，give が取りうる文型も用例の分類に影響を与えており，語義ネットワーク化に妥当な説明を与えることは容易ではなかった。日本人グループは，語義ネットワーク化の基盤となっている意味拡張のメカニズムを理解していないと考えられる。

Keywords : language transfer, prototypical instances, prototypical senses, the verb “give”

1. Introduction

Lexical acquisition has been receiving growing attention in the field of second language acquisition (SLA) these days. This is because, with the growing popularity of cognitive linguistics and corpus linguistics, more importance has been placed on lexis in linguistics, which has a strong influence on SLA research. In fact, using findings obtained from cognitive linguistics, several studies on the acquisition of English polysemous words by Japanese learners of English have been conducted by several researchers (see, for example, Cho, 2002; Hayashi, 2001, 2002, 2008a, 2008b; Shirai, 1995; Tanaka, Takahashi and Abe, 1989; Yamaoka 1995, 1996). These studies, which have been conducted within a framework of language transfer and prototype theory, have generally reported that prototypicality correlates with, and L1 transfer constrains, the acquisition of polysemous words by Japanese learners of English.

However, these studies are not without their problems. One major problem is that only a few studies so far have investigated the way in which the senses of a polysemous word are represented

in Japanese learners' minds. One exception is a study done by Imai (1993) investigating how the English verb "wear" is understood by native speakers of English and by Japanese university students studying English. Another such study made by Hayashi (2008a) investigates how Japanese learners of English understand the English verb "make." In order to fully investigate the acquisition of English verbs by second language learners, we feel it is necessary to know the way learners understand each sense and how their understanding differs from that of native speakers.

Another problem is that the previous studies involved an arbitrary distinction between instances and senses of a linguistic item. These studies argue that prototypical instances are those which take a concrete noun as their object, and that prototypical senses are easier to acquire than less prototypical ones, with the degree of deviation from the prototypical sense affecting the difficulty of acquisition. However, it does not seem to be so simple a matter. For example, some prototypical sentences are easier to acquire, while some are not. As seen in Hayashi (2008b), which investigates the acquisition of the English prepositions "at," "in" and "on," a clear distinction should be made between instances and senses when we investigate the acquisition of polysemous words. In this paper a prototypical sense is considered to be made up of several prototypical instances.

Therefore, this study is undertaken to address the shortcomings of previous studies by examining how each sense of the verb "give" is understood by Japanese learners of English.

2. Review of the literature

This section describes previous experimental studies on the acquisition of English verbs by Japanese learners of English.

Tanaka, Takahashi, and Abe (1989) investigate the acquisition of the verb "make" by Japanese learners of English. In their study, the authors are concerned with the properties of the noun phrases that this verb takes as direct objects, and they examine how Japanese learners acquire the meaning potential of the verb. Three groups of Japanese learners at significantly different levels of English proficiency were asked to judge the acceptability of the sentences containing the verb "make" by using a 5-point scale. These results were compared with those of native speakers. The study found that: 1) prototypical items were accepted most frequently regardless of the proficiency level of the participants, 2) there was a strong correlation between L2 proficiency and reliance on L1, with participants at a higher proficiency level relying less on their L1, and consequently more accurately judging the distinction between prototypical and non-prototypical items, and 3) the acceptability judgment by the Japanese participants at higher proficiency levels approached that of the native speakers.

Imai (1993) investigates how native speakers of English and Japanese university students understand the English verb "wear" by conducting two experiments. In the first experiment, participants were given 17 sentences containing "wear," and were asked to sort the sentences into groups according to the sense of this verb. Data gained from this experiment was analyzed, with

the use of the Multidimensional scaling (MDS) procedure. The second experiment asked participants to judge the acceptability of 30 sentences containing "wear," thirteen sentences of which were unconventional, using a four-point scale. The results show that the Japanese learners of English differed from the native speakers of English in the understanding of the various senses of the verb "wear." While native speakers of English perceive the various senses of the verb as orderly and structured, the Japanese participants' understanding of the verb is extremely impoverished, and influence from the Japanese language can be seen in their understanding of the various senses of the verb.

Shirai (1995) investigates the acquisition of "put" by Japanese learners of English. He pointed out the lack of consistency found in previous studies' use of the word "prototype," and categorized prototype into 1) L1 prototype and 2) L2 prototype, which was subcategorized into native speaker prototype (NS prototype) and interlanguage prototype (IL prototype). In his study, he stressed the importance of taking into consideration the interaction between L1 prototype and L2 prototype. The participants, three groups of Japanese learners of English and one group of native speakers as a control group, were asked to produce sentences with typical uses of "put," and were asked to judge the acceptability of 20 sentences containing "put" using a 7-point scale. The results of his study show 1) the learners' IL prototype formation tended to be constrained by L1 transfer, 2) the learners had more difficulty acquiring less prototypical items within the L2, 3) the learners at higher proficiency levels had a more accurate knowledge of the meaning potential of "put," and 4) the development of the learners' knowledge about the meaning potential tended to be constrained by prototypicality and transfer.

Hayashi (2008a) investigates how Japanese learners of English acquire the English verb "make" within the framework of language transfer and prototype. For this purpose, three kinds of tests were conducted, in which Japanese university students and adult native speakers of English participated. Major findings are 1) prototypical instances of the verb were shared by both participant groups, 2) the influence of Japanese was found in the Japanese participants' production of their instances, 3) the Japanese participants were not aware of the mechanisms underlying the extension of the senses of the verb, and 4) the prototypical sense of "make" was not necessarily easy for Japanese learners of English to acquire, and the influence of the Japanese language operated at the conceptual level as well as at the lexical level.

In addition to the above-mentioned studies which investigate the acquisition of a verb based on a grammaticality judgment test, other research projects have examined how learners perceive the semantic extension of verb meanings. This study similarly investigates how learners perceive the extension of the senses of a verb.

3. The Study

Two kinds of tests were used in this study: the Production Test and the Semantic Relatedness

Test (see Appendix A).

3.1 Production Test

The purpose of this test was to elicit prototypical instances of the verb "give" for Japanese learners of English and native speakers of English. Eliciting prototypical instances served as a way to identify a prototypical sense and a lexical network for the verb "give."

3.1.1 Participants

The participants consisted of 74 Japanese learners of English and 15 native speakers of English. The Japanese participants (JSs) were 49 first-year students and 25 second-year students, all of whom majored in business administration at a Japanese private university. The control group of 15 adult native speakers of English (NSs) consisted of 14 faculty members at a university in the United States and one English instructor at a university in Japan.

3.1.2 Materials and Procedures

In this test, the participants were asked to write one sentence using the verb "give" (see Appendix A). Both the JSs and the NSs took the test individually. The participants were advised not to use dictionaries.

3.1.3 Data Analysis

The collection and treatment of the data consisted of examining and categorizing sentences written by the participants, with sentences containing an incorrect use of the verb being grouped into a separate category. The JSs' examples of the verb were later compared with those of the NSs.

3.1.4 Results and Discussion

The two groups wrote 88 sentences (see Appendix B). One of the NSs did not write a sentence. The sentences written by the two groups are categorized based on the structures the verb takes, where GIVER, THING, RECEIPIENT are placed. This categorization is based partly on Newman (1996).

Type 1. GIVER + *give* (Both THING and RECIPIENT unspecified)
Type 2. GIVER + *give* + THING (RECIPIENT unspecified)
Type 3. GIVER + *give* + to + RECIPIENT (THING unspecified) [2)]
Type 4. GIVER + *give* + RECIPIENT + THING
Type 5. GIVER + *give* + THING + to + RECEPIENT
Type 6. Phrase verb with *give*

Table 1 below indicates the categorization of the sentences produced by both participants based on

the patterns stated above. The category "Others" is provided for sentences which cannot be classified based on the Type mentioned above, and ungrammatical sentences produced by the JSs are also included in this category. It should be added that only sentences containing structural mistakes are grouped together as "Others." So, sentences such as "*I give you an advice" and "*I give book to Mike" are included in Type 4 and Type 5, respectively.

Table 1 Classification of Sentences Written Using the Verb "Give"

	Category							
	Type 1	Type 2	Type 3	Type 4	Type 5	Type 6	Others	Total
JSs (n = 74)	0	3	0	52	9	2	8	74
NSs (n = 14)	2	1	1	8	2	0	2	16 [3)]

The results of the NSs will be discussed first, followed by a discussion of the JSs' results. For each participant group, prototypical instances will be determined first, followed by descriptions and explanations of some characteristics found in the sentences.

The sentences produced by the NSs are classified into all the categories except Type 6, with the number of sentences in Type 4 being the largest. The instances belonging to Type 4 are prototypical. As in most of the instances, concrete nouns work as THING, an object of the verb (see Appendix B). So it is more appropriate to say that the formula "GIVER + *give* + RECIPIENT + THING (concrete noun)" is prototypical.

All the correct sentences written by the JSs belong to Type 2, Type 4, Type 5, Type 6 and Others. The number of sentences in Type 4 is much larger than that of any of the other categories. As for the NSs, the instances in Type 4 can be considered prototypical for the JSs. Also, in most of the sentences belonging to Type 4, concrete nouns work as an object of the verb (see Appendix B). It would, therefore, be more appropriate to say that instances of "give" found in the construction of "GIVER + *give* + RECIPIENT + THING (concrete noun)" are prototypical.

The following observations can be made for both of the participant groups' production of instances of the verb "give."

1) Instances that occur in the sentence pattern "GIVER + *give* + RECIPIENT + THING" significantly outnumber those in any of the categories for both the NSs and the JSs.

2) Concrete nouns tend to be THING, an object of the verb for both of the participant groups, which leads us to argue that GIVER + *give* + RECIPIENT + THING (concrete noun) is prototypical.

3.2 Semantic Relatedness Test

This test was used to determine a prototypical sense. Another purpose of the test was to investigate the ways in which English learners understand each sense of the verb "give" and how their understanding differs from that of native speakers of English.

3.2.1 Participants

The same 74 JSs and 15 NSs who participated in the Production Test participated in this Semantic Relatedness Test. However, three of the JSs did not answer this test. So we excluded them from this test.

3.2.2 Materials and Procedures

Fifteen sentences, all of which included the verb "give," were prepared for the test (see Appendix A). An attempt was made in these sentences to cover the full range of uses for the verb. Japanese instructions and Japanese translations of difficult words were given to the JSs.

The participants were asked to sort the sentences into groups depending on the meaning of the verb used. They were also asked to describe the criteria they used to make each group. They were allowed to make as many groups as they wanted. It was also possible to have only one group. They were asked not to use dictionaries. Both the JSs and the NSs took the test individually.

3.2.3 Data Analysis

Multidimensional scaling (MDS) [4] was used to analyze similarity judgments made by individual participants. In addition to MDS, a hierarchical cluster analysis [5] was used to investigate the participants' perceptions of similar uses instantiated in the sentences. This was based on the values given to each use in each dimension. In this cluster analysis, the Ward method was employed.

3.2.4 Results and Discussion

The sentences used in the test are provided below for reference (see Table 2).

Table 2 Sentences used in the Semantic Relatedness Test

1. How much can you give?
2. The floor might give if we put that much weight on it.
3. Terry gave Dan a new computer.
4. She gave a little smile at the news.
5. Give me a chance to prove myself.
6. We gave a graduation party for the seniors.
7. The senator is giving a speech on TV.
8. The symphony gave a concert last night.
9. Loud music gives me a headache.
10. Michelle gave $125 for her outfit.
11. Freddie gave the guard a punch in the mouth.
12. You gave me to understand that you would support us.
13. The judge gave the criminal 30 days in jail.
14. It is sweet and right to give your life for your country.
15. Marvin gave his whole life to the cause of justice.

Based on the stress value and the RSQ value that each matrix of each solution by the two groups of participants yielded, it was decided that a two-dimensional solution be adopted for MDS conceptualization of the verb. As for the cluster analysis, a three-cluster solution was adopted, [6] which means the verb "give" is assumed by both groups to have three senses. Each cluster solution by the two groups is provided in Appendix C.

The MDS representations of the verb perceived by the two groups are shown below (see Figures 1 and 2). The results of the NSs will be discussed first, followed by a discussion of the JSs' results.

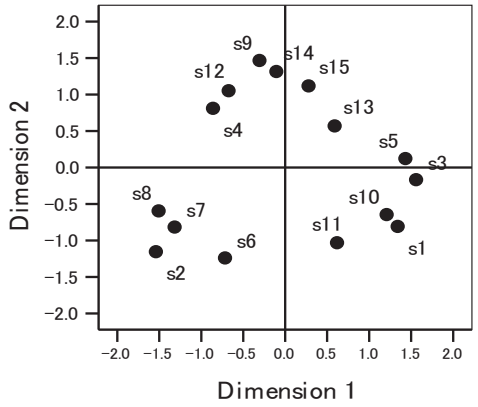

Figure 1 Results of JSs

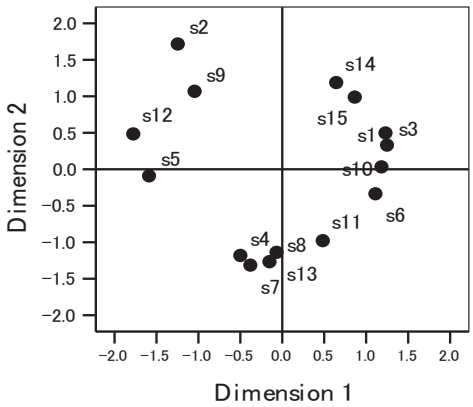

Figure 2 Results of NSs

Let us look at the configuration of the NSs first (see Figure 2). A quick glance reveals that at one end of the first dimension (the X axis) are the instances "gave Dan a new computer" (s3),"how much can you give" (s1), and "gave $125 for her outfit" (s10), and at the other end are the instances "gave me to understand" (s12), "give me a chance" (s5), "the floor might give" (s2), and "gives me a headache" (s9). So the first dimension can be characterized as representing a continuum between "concrete THING (object)" and "abstract THING (object) / THING and RECIPIENT unspecified" (see the categorization shown in 3.1.4 above), with the categorization of "gave me to understand" (s12) itself being difficult to define. The interpretation of the second dimension seems to be somewhat difficult here. At one end are the instances "the floor might give" (s2), "give your life for your country" (s14), and "gives me a headache" (s9). Just by looking at this, we may conclude that "abstract THING (object)" plays a role here, as in the case of the first dimension. At the other end of the second dimension, however, are the instances "giving a speech" (s7), "gave a concert" (s8), and "gave a little smile" (s4). So it is better to say that "give a noun (RECIPIENT unspecified)" plays some role here in the configuration for the second dimension.

The instances for the NSs are grouped into the following three clusters (senses) (see Appendix C). Now let us look at what instances make up each cluster (sense) they formed.

Cluster 1

This cluster consists of the instances of "give" in "gave a concert" (s8), "gave the criminal 30

days" (s13), "gave a little smile" (s4), "giving a speech" (s7), and "gave the guard a punch" (s11). What links these five instances? In this cluster, "gave a concert" (s8) and "gave the criminal 30 days" (s13) are first merged into a cluster, joined by another cluster including "gave a little smile" (s4) and "giving a speech" (s7). At the last stage, "gave the guard a punch" (s11) joins to make Cluster 1. What links "gave a concert" (s8) and "gave the criminal 30 days" (s13) is not clear here. The clustering of "gave a little smile" (s4) and "giving a speech" (s7) can be explained by the fact that in both instances RECIPIENT is unspecified and THING is abstract. Also, "giving a speech" (s7) is attached to "giving a concert" (s8) through "performance for an audience" (Newman, 1996, p. 142). As Newman (1996) puts it, the audience is not necessarily overtly expressed in the sentence (ibid.). The reason why the similar instance "gave a graduation party" (s6) is not clustered with "gave a concert" (s8) and "giving a speech" (s7) will be explained later.

For the sake of convenience, let us call the sense represented by this cluster "Sense-A."

Cluster 2

The instances in "give your life for your country" (s14), "gave his whole life" (s15), "how much can you give" (s1), "gave Dan a new computer" (s3), "gave a graduation party" (s6), and "gave $125 for her outfit" (s10) form this cluster. In this cluster, "how much can you give" (s1) and "gave Dan a new computer" (s3) are first clustered. This cluster is then clustered with another cluster including "gave a graduation party" (s6) and "gave $125 for her outfit" (s10) to form a larger cluster. This larger cluster is merged with another cluster consisting of "give your life for your country" (s14) and "gave his whole life" (s15).

How can we explain the fact that the instances "how much can you give" (s1) and "gave Dan a new computer" (s3) are clustered? Based on the results of our Production Test and other studies, the instance of "give" in "gave Dan a new computer" (s3) is considered to be prototypical. The instance "how much can you give" (s1) is clustered with "gave Dan a new computer" (s3). It may be that the NSs understand "how much" as "how much money" and treat it as concrete. The attribute of THING (a direct object) links these two instances. This also explains why "gave $125 for her outfit" (s10) is merged with them. Transference of a concrete thing is implied in these three instances. However, the reason "gave a graduation party" (s6) is clustered with them is not clear here. This was supposed to be clustered with "gave a concert" (s8) and "giving a speech" (s7). The only difference between them is that, as Newman (1996) puts it, "the audience is not just present to enjoy the entertainment but actively participating in it" (p.143).

The instances "give your life for your country" (s14) and "gave his whole life" (s15) are linked because they have similar objects ("your life" and "his whole life"). However, the reason why they are clustered with the other instances is not clear.

Since this cluster is formed by centering it around the prototypical instance, let us call the sense represented by this cluster "Sense-Proto" for convenience.

Cluster 3

This cluster consists of four instances. They are "give me a chance" (s5), "gave me to

understand" (s12), "the floor might give" (s2) and "gives me a headache" (s9). The instances "give me a chance" (s5) and "gave me to understand" (s12) are first merged into a larger cluster. Then, the instance "the floor might give" (s2) is clustered with "gives me a headache" (s9), forming another larger cluster. These two larger clusters are linked together to form Cluster 3.

What links "give me a chance" (s5) and "gave me to understand" (s12)? According to Newman (1996), the construction "give someone to do" means "enable another person to have access to some knowledge or information" (p.186). So, the expression "gave me to understand" can be paraphrased as "gave me a chance to understand." The NSs seem to link these two instances exclusively semantically. The instances "the floor might give" (s2) and "gives me a headache" (s9) are clustered also through similar attributes of THING. Although the instance "the floor might give" has no specified THING, it can be thought to have an object "itself" in the position of THING. So, in this clustering, too, the attributes of THING seem to play a role in this clustering.

For the sake of convenience, let us call the sense represented by this cluster "Sense-B."

Regarding the relationships among the three senses, the following can be observed. Sense-Proto and Sense-A are close to each other. Sense-A is thought to be extended from Sense-Proto, with THING of the instances in Sense-A being given some level of abstraction. Sense-B is separate from them since THING of the instances in this Sense, whether specified or unspecified, is abstract, even compared with the instances in Sense-A.

Now let us turn to the results of the JSs (see Figure 1). At one end of the first dimension are "gave Dan a new computer" (s3), "give me a chance" (s5), and "how much can you give" (s1), and at the other end are "the floor might give" (s2), "gave a concert" (s8), and "giving a speech" (s7). Instances of "abstract THING (object)" are at both ends. So, for the JSs, an interpretation of the first dimension does not seem to be possible. Paying attention to their forms, however, we will see that instances of "GIVER + *give* + RECIPIENT + THING" are at one end, and instances of "GIVER + give + THING (RECIPIENT unspecified)" and an instance of "GIVER + give (Both THING and RECIPIENT unspecified)" are at the other end. It might be said that the structure the verb takes plays a role in the JSs' categorization. It might seem that the Japanese equivalent of the verb "give," "ataeru," also plays a role in their categorization.

Concerning the second dimension, at one end are "gives me a headache" (s9), "give your life for your country" (s14), and "gave his whole life" (s15), and at the other end are "gave a graduation party" (s6), "the floor might give" (s2), and "gave the guard a punch" (s11). So, the interpretation of the second dimension seems to be also difficult here.

It should be added that, as compared with the configuration of the NSs, the instances seem to be sparsely clustered.

The results from the JSs form the following three clusters (senses) (see Appendix C).

Cluster 1

This cluster consists of "how much can you give" (s1), "gave $125 for her outfit" (s10), "gave the guard a punch" (s11), "gave Dan a new computer" (s3), and "give me a chance" (s5). What links

these instances? The instances "how much can you give" (s1) and "gave $125 for her outfit" (s10) are first clustered. The JSs perhaps put them together because they look at the attributes of THING of each instance. Then, "gave Dan a new computer" (s3) is clustered with "give me a chance" (s5). It seems a bit difficult to explain this clustering at this stage. One plausible explanation is that the structure in which both instances occur is classified as "Type 4 (GIVER + *give* + RECIPIENT + THING)" (see 3.1.4 above). At the next stage, the instance "gave the guard a punch" (s11) is linked with the cluster consisting of "how much can you give" (s1) and "gave $125 for her outfit" (s10), forming a larger cluster. This larger cluster is then joined by the cluster with "gave Dan a new computer" (s3) and "give me a chance" (s5). This can be explained by the structure that the four of the instances (except for "gave $125 for her outfit" (s10)) take. Therefore, it can be said that the JSs look more at the structure that the instances take than the meaning of the verb used.

The instance "gave Dan a new computer" (s3) is considered to be a prototypical instance. So, let us call the sense represented by this cluster "Sense-Proto" for the sake of convenience.

Cluster 2

This cluster consists of "gave the criminal 30 days" (s13), "gave his whole life" (s15), "gives me a headache" (s9), "give your life for your country" (s14), "gave a little smile" (s4), and "gave me to understand" (s12). What links these instances together? In this cluster, the instance "gives me a headache" (s9) is first linked to "give your life for your country" (s14). The formation of this cluster is difficult to interpret. Then, "gave a little smile" (s4) and "gave me to understand" (s12) are clustered. The explanation of this clustering is also difficult to explain. After that, the instances "gave the criminal 30 days" (s13) and "gave his whole life" (s15) are clustered, the explanation of which is also difficult to find. At the later stages, these clusters are linked together to form larger clusters. In this process of clustering, however, neither the attributes of THING of each instance nor the structures that each instance takes seem to provide possible reasons. The influence from the Japanese equivalent of "give" also fails to provide a solution. We have to conclude that these instances just strayed into this cluster (Cluster 2).

Let us call the sense represented by this cluster "Sense-A."

Cluster 3

This cluster consists of "giving a speech" (s7), "gave a concert" (s8), "the floor might give" (s2) and "gave a graduation party" (s6). The instances "giving a speech" (s7) and "gave a concert" (s8) are linked together. The explanation of this cluster is that the JSs refer to their structures "GIVER + *give* + THING (RECIPIENT unspecified)" in clustering. This cluster is then joined by the instance "the floor might give" (s2), forming a larger cluster. The explanation of this clustering is difficult to explain. At the last stage, this larger cluster is joined by the instance "gave a graduation party" (s6). This clustering is because of the similarity in the structure between the instances "giving a speech" (s7) and "gave a concert" (s8) and the instance "gave a graduation party" (s6). Like the NSs, the JSs also separate "give a graduation party" (s6) away from "giving a speech" (s7) and

"gave a concert" (s8), though they did this to a lesser degree than the NSs. However, it is not clear here that the JSs are subconsciously aware of the differences in meanings explained in Newman (1996, p.143), which is stated above. It is appropriate to say that the structures that the instances take play a larger role than the meaning of the verb used.

Let us call the sense represented by this cluster "Sense-B."

Regarding the relationships among the three senses, the following can be observed. Sense-Proto and Sense-A are close to each other. Sense-A can be thought of as extending from Sense-Proto. Sense-B is separate from them since the structure "GIVER + *give* + THING (RECIPIENT unspecified)" seems to play a greater role in the categorization in the case of the JSs.

From the above, the following observations can be made:

1) The clusters for the JSs are not densely clustered, as compared with those for the NSs.
2) The NSs refer to the meaning of the verb "give" used in each instance when clustering the instances, while the JSs seem to look more at the structures the instances take when clustering the instances.
3) The NSs' overall network of the senses of the verb can be to some extent explained, while that for the JSs does not seem to carry any significance, which may indicate that the JSs are not aware of the mechanisms underlying the extension of the senses.

4. Summary

The purpose of this study was to investigate how the verb "give" is understood by Japanese learners of English as a second language. For this purpose, the Production Test and the Semantic Relatedness Test were conducted.

The Production Test was conducted to elicit prototypical instances for the verb "give" both for Japanese learners of English and native speakers of English. This serves as a necessary step toward identifying a prototypical sense and a lexical network for the verb. The results of this test revealed that instances that occur in the sentence pattern "GIVER + *give* + RECIPIENT + THING (concrete noun)" are thought to be prototypical both for the JSs and the NSs.

The Semantic Relatedness Test was conducted to examine the way senses of the verb were organized both in the minds of Japanese learners and in the minds of native English speakers. The results show that the NSs seemed to take into account the meaning of the verb used in the instances when judging the similarity of the instances. The JSs, however, look more at the structures the instances take when clustering the instances.

Furthermore, while the NSs' cognitive framework for the senses of the verb "give" can be explained for the most part, the framework for the JSs is more difficult to determine. This may indicate that the JSs do not possess an understanding of the deeper structures that support the extension of the senses of the verb "give."

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Notes

1）Western Michigan University, CELCIS

2）Newman (1996, pp. 54-55) states that when THING is unspecified, RECIPIENT should be preceded by the preposition "to."

3）One of the NSs wrote a sentence with three instances of "give."

4）Multidimensional scaling (MDS) is an exploratory technique used to visualize proximities between items in a low dimensional space. In MDS, in order to fully represent relationships between items, it is necessary to have the same number of dimensions as items. For example, when 8 items are to be judged for their similarity to each other, an 8-dimensional representation is needed. However, it is impossible to describe an 8-dimensional representation. No more than three dimensions are recommended, with two-dimensional representations being most highly recommended.

5）The cluster analysis is a data analytical tool for solving classification problems. Its object is to sort items into clusters, the degree of association being strong between members of the same cluster and weak between members of different clusters.

6）One way of deciding the number of clusters is by determining the widest distance between the values where the number of clusters changes. However, some scholars state that deciding the number of clusters based on a cluster analysis may also be left up to each researcher's subjective judgment (see, for example, Koyano, 1988).

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Appendix A

Elicitation Test

1. The Production Test

Please write one sentence using the verb "give" (or its inflected form such as "gave," "given" and "giving").
動詞 give (あるいは，gave や given や giving) を用いた英文をひとつ書いてください。

2. The Semantic Relatedness Test

Below you will see 15 sentences containing the verb "give" (or its inflected form). Please sort the sentences into groups depending on the meaning of the verb used. You can make as many groups as you wish. It is possible to have only one group. Then, please describe what criteria you used to make each group.
以下に give（あるいは，その屈折形）を用いた英文が 15 あります。使われている give（あるいは，その屈折形）の意味に基づいて，分類してください。グループの数は幾つでも構いません。ひとつでも構いません。グループ分け際に用いた基準も書いてください。

1. How much can you give?
2. The floor might give if we put that much weight on it.
3. Terry gave Dan a new computer.
4. She gave a little smile at the news.
5. Give me a chance to prove myself.
6. We gave a graduation party for the seniors.
7. The senator is giving a speech on TV.
8. The symphony gave a concert last night.
9. Loud music gives me a headache.
10. Michelle gave $125 for her outfit.
11. Freddie gave the guard a punch in the mouth.
12. You gave me to understand that you would support us.
13. The judge gave the criminal 30 days in jail.
14. It is sweet and right to give your life for your country.
15. Marvin gave his whole life to the cause of justice.

Appendix B

Results of the Production Test

The number in ( ) refers to the categorization.

Japanese learners of English

(Mistakes have not been corrected.)

1. (5) I gave a present to him.
2. (4) I'll give you something to eat, if you do so.
3. (4) My father gave me some money.

4. (4) I gave him two dollars.
5. (5) I gave a present to her.
6. (4) I'll give you an example.
7. (4) Give me chocolate.
8. (4) I give you a chocolate.
9. (4) You give me a present.
10. (6) Do not give in too much to your feelings!
11. (4) I'll give you some examples.
12. (4) Please give me a chocolate.
13. (4) Please give me more information.
14. (O*) Give me a chance one more play.
15. (4) I'll give you a birthday present.
16. (5) I gave a cell phone to my son for calling me when he came back from school.
17. (4) He gives me a present.
18. (4*) My mother give me advice about this problem.
19. (4) Give me a chocolate.
20. (4) I give you a birthday present.
21. (2) I gave a cry of pain.
22. (O*) He gave a present for her.
23. (4) He gave me a book.
24. (5) I gave beautiful flowers to her.
25. (4) My friend gave me a pen.
26. (5*) I give book to Mike.
27. (4) Give me a chocolate.
28. (O*) I give you happy.
29. (4) I gave Mike a flower.
30. (4) My uncle gave me his watch.
31. (4) He gave me an apple.
32. (5) I gave clothes to my cousin.
33. (O*) Please give me.
34. (4) I'll give you the car.
35. (4) Please give me chocolate.
36. (4) My father gave me a gift.
37. (4*) I give you an advice.
38. (4) I gave him a pen.
39. (O*) I give the pencil for you.
40. (4) I gave her my pencil.
41. (4) He gave me a book.
42. (5) I gave a present to my mother.
43. (4) Give me one more chance.
44. (4) I give her a watch.
45. (4) I'll give you this watch.
46. (4) I give you a present.
47. (4) He gave me a lot of flowers.

48. (4) I gave my sister a bag.
49. (5) I gave a video game to my friend.
50. (6) I will not give up.
51. (4) Give it a try.
52. (4) I'll give you a beautiful rose.
53. (O*) If you want this book, I'll give you it.
54. (4) I gave you some money.
55. (4) Her mother gave her a lot of presents on her birthday.
56. (4) She gave me a watch.
57. (4) I gave you my book.
58. (4) I'll give you this book.
59. (4) He gave me presents for my birthday.
60. (4) You gave me chocolate.
61. (4) I'm going to give you a present.
62. (4) I give you my guitar.
63. (4) I give you an apple.
64. (O*) I gave a birthday present by my boyfriend.
65. (2) I give a present.
66. (4) She gave me a dog.
67. (2) I gave 5000 dollars for that car.
68. (4) I gave her a present for her birthday.
69. (4) I give you a chocolate.
70. (4) I'll give you a present.
71. (4) I gave you a notebook.
72. (O) It was given by my sister to me.
73. (4) I gave her presents.
74. (5) I give my big smile to lots of people.

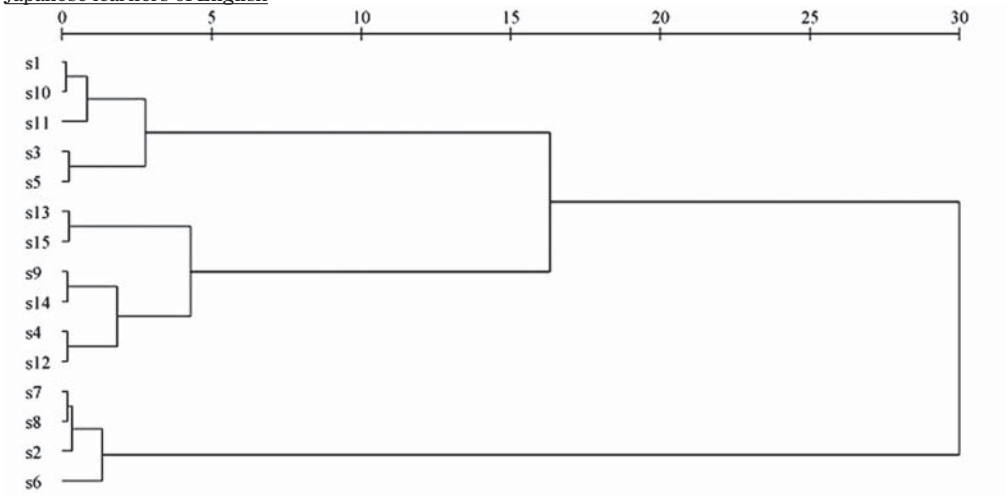
Native speakers of English

1. (5) I gave my book to Tom.
2. (1) It is more blessed to give than to receive.
3. (4) Give me some money!
4. (4) I gave my daughter a cookie.
5. (4) Would you please give me a minute to get back to you?
6. (4) The boy gave his friend a high-five signs.
7. (4) I'll give you the job.
8. (1) To give means to transfer from source to recipient.
9. (O) Women were given the right to vote
10. (5) I gave the pen to my brother.
11. (4) Please give me a raise or I will quit.
12. (2) (3) (4) While giving a speech, having been given the top award, he gave the audience a note of appreciation.
13. (4) I would like to give him some advice on how to improve his Japanese reading comprehension.
14. (4) Give me an example of a stative verb.

Appendix C

Cluster Solution by the Two Groups

Japanese learners of English



Native speakers of English