

The Effects of Cognitive Awareness on Learning Less Transparent Idioms in English

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The current study tests the author's hypothesis that EFL students may profit from learning about the cognitive process which the native speakers of English subconsciously possess. This may be particularly true of grammar, vocabulary, and idiomatic expressions. This study focuses on idioms, especially less transparent ones, the meanings of which are hard to guess from the components of the idioms. The meanings of some idioms are the results of the extension of the literal meaning through the process of metaphor or metonymy, because language ability is one of the embodiments of human cognitive abilities. Helping learners become aware of the cognitive processes of native speakers may enhance their learning efficiency. An experiment to test this hypothesis was conducted in order to investigate the effects of cognitive awareness of less transparent idiomatic expressions in English. Seventy-seven Japanese-speaking learners of English participated in the experiment as part of a class activity. The result of the experiment led the author to conclude that teaching or learning about the cognitive awareness of the idiomatic expressions will stimulate learners' acquisition of the idioms and also provide motivation for language learning.

Keyword: cognitive linguistics; idioms; TEFL (Teaching English as a Foreign Language)

Introduction

The importance of English as a global language has been increasingly emphasized in recent years. A different manner of teaching or learning English, however, should be conducted according to the context of the two different learning environments: English as a second language (ESL) and English as a foreign language (EFL). In this paper, ESL exclusively refers to the process of learning English as a second language in English-speaking countries, while EFL refers to

teaching and learning English in places where English is not used as a means of daily communication. One reason for this is that the processes of learning a new language through either ESL or EFL will differ widely. ESL follows the process which is similar to native-like language acquisition in that learners are more likely to be exposed to English outside the classroom. In an EFL context, on the other hand, learners rarely have chances to use English outside the classroom. Thus, in teaching English in Japan, original and more

effective ways of instruction or learning should be developed, bearing in mind that it is conducted in an EFL context. Importing the teaching or learning methods of an ESL context is helpful, but doing that alone is not enough.

What then is effective in an EFL context? The author strongly believes that there are two indispensable things to be taken into consideration: (a) Learning about the cognitive processes that native speakers of English subconsciously possess. (b) Absorbing basic structures and collocations of English by listening and reading aloud repeatedly. This study deals with factor (a). Japanese and Americans construe things in entirely different ways. The differences should be embodied in language. From the viewpoint of cognitive linguistics, language expressions are considered to be motivated by the process of cognition, while at the same time they are restricted by rules of language to some extent. This observation is supported by Matsumoto (2004: 163). The author believes that the above generalization is true of vocabulary, syntactic structures, and idioms.

1. A brief review on the new concept of learning English grammar

Many scholars agree that learning English is one thing, and learning about it is another. In other words, acquiring the grammar of English is indispensable, but knowing technical terms of grammar is rather a hindrance for learning the target language. The author shares this view, but as it stands it may cause misunderstanding. Learning grammar and learning about grammar are not necessarily mutually exclusive. Dichotomy is not helpful here. The most important point when teaching or learning grammar is to confirm whether the explanation will be helpful for learners or not. The author believes that learning what native speakers do not think about consciously but “know”

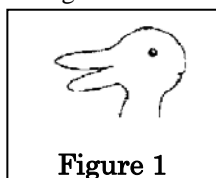
subconsciously is sometimes very useful if it can help learners understand or produce the target language. Let us consider this point more concretely.

In the traditional “school grammar” approach, language structures or expressions are simply categorized and given technical terms. Language ability is regarded as an independent system, not affected by cognitive ability. This kind of grammar learning is not considered “learning grammar,” but “learning about grammar.” In the author’s view, traditional approach is not only unnecessary, but sometimes it is even harmful, if it prevents learners from learning the target language. A new approach based on the concept of cognitive linguistics, on the other hand, considers language ability to be motivated by cognitive ability. Language structures or expressions are explained by human cognition, that is, how people construe things. The latter approach seems to shed more light on learning and teaching EFL than the former one. Let us consider the differences between the two approaches by observing an example of more transparent idioms.

(1) I’m looking forward to **skiing** in Canada.

In the traditional approach, the expression, “look forward to *doing*” in (1) is explained as this: since the “to” in (1) is not an infinitive but a preposition, then the gerund form, not the base-form is followed. Can this way of explanation be thought of as useful for learners of EFL? In this approach, the same *doing*-form is categorized into two different items: gerund and progressive. This is an example of teaching about grammar. Whether we can see the *doing*-form is a gerund or a progressive has nothing to do with understanding the meaning of the sentences. This is similar to the Japanese grammar which native-speaking Japanese are taught in middle school.

Let us reconsider the matter from the perspective of cognitive linguistics. The core image of the *doing*-form is that “something is on the way.” Progressive and gerund do not have to be dealt with as two different items. The underlying idea here is that if the form changes, the meaning also changes. (Cf. Bolinger, 1977) In this case, since the form is the same, both forms should share the same core meaning. The author explains the sentence (1) based on a cognitive way of thinking: The meaning of “looking” is “turning your eyes.” The basic image of “forward” is “moving, looking, or pointing in a particular direction.” The core image of “to” is a goal. In this example, the speaker is thinking about the future, so “looking forward to” is used metaphorically.



Here, two manners of construal can be possible, as in figure-ground segregation. In Figure 1, this picture can be construed as a rabbit or a duck. This is one of the basic cognitive abilities: figure / ground segregation. If this ability is applied to language, two ways of construal will be possible. If we are “looking,” something which is happening in the future has to be seen or pictured in the speaker’s mind. The “doing” form indicates that something is happening. In this example, skiing in Canada is pictured in the speaker’s mind.

By contrast, the base form is used to indicate something which has *not* happened yet. Consider the fact that it is used in the imperative mood or after verbs of suggestion, order, request, and so on. If we construed sentence (1) as “skiing in Canada” will happen in the future, the base form would follow “to.” When we are anticipating something, which aspect do people usually focus on: (a) something that is happening or (b) something that has not happened yet? Most people, the author thinks, will probably choose the former. That is why most people picture (a) in their mind. Some people,

of course, picture (b) in their mind, but they also use the doing-form because people around them use it. This is the point where language is motivated by cognition, and at the same time, restricted by the language itself. That is why “to” is followed by doing-form. This approach explains why the doing-form is used in example (1), while the traditional approach does not provide an adequate explanation. In the new approach, learners can understand the relationship between form and meaning, while in the traditional approach they do nothing more than rote memorization.

Particular note should be given to Kawakami (1996: 50), who contends that cognitive motivation is not what can be predicted—that is, the relationship between the prototype and the extensions cannot be foreseen. Rather, we should try to understand the reasons why such extensions are made by some native speakers and why the expressions have come to be used habitually.

Native speakers of English acquire grammar and vocabulary by hearing the same expressions repeatedly, and they do not seem to possess this kind of knowledge consciously, but they do have it subconsciously. If the reason is explained, the author believes it will help Japanese-speaking learners of English to learn grammar or vocabulary.

2. The nature of idioms

In Japan, there are many expressions that are taught as “idioms” in senior high level English language classes. What is called “idioms” in high school, however, seems to include two categories: collocations and idioms. Collocations are literal, while idioms are figurative. Some examples of the collocations are “buy insurance,” “wear beard,” “build a road,” and so on. Instances of idioms, on the other hand, are such as the following: “listen to,” “look forward to,” “kick the bucket,” “hit the sack,” “pig out,” and so on. The author thinks,

however, dichotomy does not always work well in distinguishing between the two categories. These two categories may be seen as occupying opposite ends of a continuum. Language expressions which are called “idioms” in Japanese high schools should be somewhere between the two extremes, according to a standard of transparency. That is, when a statement is literal, such as “depend on,” “put on,” the meaning of the expression can be guessed from the meaning of each component; while when it is figurative, such as “kick the bucket,” “spill the beans,” the meaning of the idioms cannot be guessed, even if we know the meaning of all the components. It is a problem of transparency or analyzability of idioms; the meanings of some idioms are easy to guess, while others are difficult to predict the meaning. Gestalt psychology says that the whole is not merely the sum of the parts, but in cognitive linguistics almost all “idioms” are just that of their parts. Consider “turn toward.” This is an example of more transparent idioms. If learners know the meaning of “turn” and “toward,” they can easily guess the meaning of “He *turned toward* me.” Then they can also tell the difference between “He turned towards me,” and “He turned on me.” The core image of “toward” is “in the direction of something,” while that of “on” is one thing contacting another. If two things contact, there should be pressure. This is a peripheral meaning of “on,” in other words, an extended meaning. Then the meaning of “turn on” can be seen as “to attack or criticize someone suddenly and unexpectedly.”

Even with less transparent idioms, however, it is possible to guess the whole meaning from each component. In other words, we can guess the meaning of an “idiomatic expression” from the words which the expression consists of, if we know the meaning of each component of the idioms. That is possible because language expressions are motivated by the cognitive process of human being.

Take “kick the bucket” and “spill the beans” for examples. The expression, “kick the bucket,” came from the practice of hanging a criminal by having him stand on a bucket, putting a noose around his neck, and then kicking the bucket out from under him. “Kick the bucket” used to refer to this act, but the meaning of this expression was expanded metonymically. In this construe, if someone kicks a bucket, then the person above it will die by hanging. The act of kicking the bucket is construed as the *reference point*¹ of dying. In other words, referring to the act of kicking a bucket can mean that “someone dies.” Today this expression can be applied to any manner of death. This is a typical example of *metonymy*². “Spill the beans,” on the other hand, is an example of extension of the meaning by *metaphor*². If information in the brain is compared to beans in a bag, the meaning of this idiomatic expression can be guessed easily. Information leaks out of the brain, like beans spill out of the bag accidentally.

Most native speakers of English, in fact, do not consciously perceive the motivation of the idiomatic expressions, but the knowledge seems to lie subconsciously somewhere in their brain. If EFL learners are instructed with this kind of knowledge, it may facilitate the learning process of idioms, as the experiment described below was designed to demonstrate.

3. Method

3.1 Participants

Seventy-seven Japanese-speaking learners of English participated in the experiment. All of them were Spanish majors at a public university. Forty-one were freshmen, and thirty-six were sophomores. The experiment was conducted as part of class activities in July, 2005.

3.2 Materials and Procedures

The experiment was conducted over a two-week period in classes that met once a week. In the first week, 20 idioms³, all of which were categorized into less transparent idioms, were dealt with during the class. The 20 idioms were divided into two groups: group A (GA) and group B (GB). In the freshmen class, students received an explanation⁴ about the motivation for each of the 10 GA idioms, along with the Japanese equivalent and an example sentence; for the GB idioms, however, students received only the Japanese equivalent and an example sentence. The author designated the former style as *D-Level Learning*⁵ and the latter as *S-Level learning*⁵. For the sophomore class, GA and GB idioms were reversed, that is, those in GA were dealt with by *S-Level Learning*, while those in GB by *D-Level learning*.

In the second week, a questionnaire and a pop quiz were conducted for 30 minutes. The questionnaire asked the subjects two questions: One was to let the subjects answer whether they felt the explanation given a week before was beneficial or not. The other was to let them answer what percentage of the idioms they had known before they were presented in the class. The subjects were asked to give their answers to each question on a scale of 5. The pop quiz consisted of two tasks: Section A was to let the subjects choose the definition of each of the 20 idioms. The definition was written in English. Section B was to let the subjects make their own sentence by choosing among the 20 idioms presented on the quiz.

3.3 Experimental Design

The independent variable of this study was *D-Level Learning* and *S-Level Learning*, and the dependent variable was the pop quiz score. “One-way within” Analysis of Variance (ANOVA) was employed where D/S-Level Learning was the “within-subject” factor.

3.4 Hypothesis

Based on the preceding discussion, it is hypothesized that giving learners the motivation for each less-transparent idiom will help them remember these expressions.

3.5 Results

The results of the questionnaire are presented in Table 1. Question (a) asked the subjects how useful the *D-Level Learning* was for them. More than 80% of the subjects answered that the *D-Level Learning* was useful or very useful. Question (b) asked the subjects what percentage of the idioms presented in the study they had already known before the lecture was given. Most said they had known very few of the idioms before this study was conducted. This leads to the conclusion that the *D-Level Learning* was helpful for idiom-learning.

Table 1. The results of the questionnaire

(a) How useful was the instruction on idioms for you?

| Q.1 | Very useful | Useful | OK | Less useful | Not useful |
|------|-------------|--------|-------|-------------|------------|
| N=72 | 25 | 35 | 10 | 1 | 1 |
| % | 34.72 | 48.61 | 13.88 | 1.38 | 1.38 |

(b) What percentage of the idioms had you known before the lecture was given?

| Q.2 | 0~30% | 30~49% | 50~69% | 70~89% | 90% or more |
|------|-------|--------|--------|--------|-------------|
| N=69 | 64 | 4 | 0 | 1 | 0 |
| % | 92.75 | 5.79 | 0 | 1.44 | 0 |

Table 2 presents the descriptive statistics for section A of the pop quiz. Note that one point is given for each correct answer and no point was given for a wrong answer. There being twenty questions in section A, the maximum score for the

quiz amounted to 20.

Table 2. Mean scores for section A of the pop quiz regarding *D-Level Learning* and *S-Level learning*:

| Section | D-Level Learning (N=77) | | S-Level Learning (N=77) | |
|---------|----------------------------|-----|----------------------------|-----|
| | Mean | SD | Mean | SD |
| | A | 2.6 | 1.9635 | 1.6 |

Table 3 shows the results of ANOVA. The main effect of *D-Level Learning* was significant ($F=22.89$, $df=1/76$, $p<.01$). The average test score for the idioms learned by *D-Level Learning* proved to be higher than that for idioms learned by *S-Level Learning*.

Table 3. ANOVA results for section A of the pop quiz regarding *D-Level Learning* and *S-Level Learning*:

| SV | SS | Df | MS | F |
|-------|----------|-----|---------|-------|
| Sub | 340.0390 | 76 | 4.4742 | |
| | 34.6039 | 1 | | 22.89 |
| A | | | 34.6039 | ** |
| SxA | 114.8961 | 76 | 1.5118 | |
| Total | 489.5390 | 153 | | |

** $p<.01$

Table 4 presents the descriptive statistics for section B of the pop quiz. The subjects were asked to make their own sentences by choosing some of the 20 idioms given in the pop quiz. Of the 77 subjects, 40 made one sentence or more, and analysis was conducted on the responses of those subjects. The number of the sentences each subject made with the idioms learned by *D-Level Learning* and *S-Level Learning* was counted respectively.

Table 4. Mean scores for section B of the pop quiz:

| Section B | D-Level Learning (N=40) | | S-Level Learning (N=40) | |
|-----------|----------------------------|------|----------------------------|------|
| | Mean | SD | Mean | SD |
| | | 1.38 | 1 | 0.58 |

Table 5 presents the results of ANOVA. The main effect of *D-Level Learning* was significant ($F=13.79$, $df=1/39$, $p<.01$). Findings revealed that the idioms most likely to be used by the learners to make their own sentences were those they had learned through *D-Level Learning*.

Table 5. ANOVA results for section B of the pop quiz:

| SV | SS | Df | MS | F |
|-------|---------|----|---------|-------|
| Sub | 20.9500 | 39 | 0.5371 | |
| | 12.8000 | 1 | | 13.79 |
| A | | | 12.8000 | ** |
| SxA | 36.2000 | 39 | 0.9282 | |
| Total | 69.9500 | 79 | | |

** $p<.01$

4. Discussion

The reported results generally confirmed the prediction of this study: Learning and teaching about the motivation of idioms can facilitate the language-learning process. First, Table 1 shows that most learners feel the explanation given here to be very useful or useful. Second, Table 2-5 indicates that *D-Level Learning* helped learners remember the idiomatic expressions. Although some participants did not make their own sentences because of time constraints, most who did make sentences were more likely to use the idioms given by *D-Level Learning*.

The author has been studying the effectiveness of instructing learners in the cognitive process of native speakers. This paper has focused on less transparent idioms, such as “hit the sack,”

“spill the beans,” “have a bone to pick with somebody,” etc., because the main purpose of this study is to investigate whether the approach the author applies to English language teaching and learning will be effective with motivated learners. Some expert scholars and English teachers, however, contend that it may not be necessary to know less-transparent idioms from the viewpoint of English for global communication, because such idioms are useful only when communicating with native speakers of English. In other words, these expressions cannot always be understood when communicating with EFL or ESL learners from all over the world. What the experts say makes sense from the standpoint of teaching and learning. The author, however, did not choose grammar, vocabulary, or more transparent idioms, but less transparent idioms for this study.

In an earlier study, the author tried to prove the effect of cognitive awareness on poly-semantic vocabulary and grammar, but the main effect of learning about cognitive motivation was not significant (Annen & Imai 2005, Imai 2004). The learners stated, however, it was very helpful to know the core meaning of a word and the motivation of grammar rules as discussed in chapter 1 above. One reason for this result is that almost all motivated learners at university level already have enough knowledge of vocabulary, syntactic rules, and more transparent idioms. Another reason is that current test methods are not necessarily suitable for measuring *D-Level Learning* ability. Regardless of whether they understand the idioms in *D-Level* or in *S-Level*, learners can answer the questions on such tests. That is why the effect of *D-Level Learning* cannot be reflected in raw scores. That is also why grammar, vocabulary, and more-transparent idioms do not necessarily help for the purpose of proving the effectiveness of the author’s approach. Less transparent idioms, however, are unfamiliar even to

motivated learners, as is shown in table 1 (b). Regarding the items learners have not learned before, even the current test method can be useful in proving the effect of *D-Level Learning*. Some critiques will recommend that this experiment be conducted for lower-level learners, because those learners do not even know more-transparent idioms. Lower-level learners are those who have been below average in English since they were in middle school. No teaching or learning method is likely to be effective for learners who do not want to learn. That is the reason why less-transparent idioms are chosen in this study.

5. Conclusion and Final Comments

The present study has shown that teaching and learning about the cognitive motivations of less transparent idioms can help learners acquire idiomatic expressions and that most learners made gains through the teaching methods proposed by the author. Some scholars point out that the less-transparent idioms dealt with here do not have to be learned or taught in an EFL context. What they say, in a sense, is true. All learners do not have to learn these idioms. It is also the case that such idioms are indispensable for upper-intermediate or advanced level motivated learners who would like to understand and engage in conversations among native speakers of English or who would like to understand dramas and movies without Japanese subtitles. In addition, the study found that learners are interested in knowing about the motivation of idioms, which is very important from the viewpoint of English education. Consequently, *D-Level Learning* about idioms can be a powerful incentive for many already motivated learners.

In a future study, the author intends to investigate the effect of learning the core image of a word and learning grammar in a cognitive way as introduced in chapter 1. In order to realize these

ambitions, however, a major problem remains to be solved before undertaking the study. A new test method which makes it possible to measure the effect of *D-Level Learning* should be developed first.

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Notes

1. This is the term used by Langacker, R.W. (1993). It is the ability to involve the conception of one entity for purposes of establishing mental contact with another. Metonymy is based on this conceptual ability. We can also see a similar example in Japanese. “Ote-arai”(lavatory) is used for “ben-jo”(toilet). In this case, ote-arai serves as a reference point of ben-jo.
2. Metaphor, metonymy, and synecdoche are three typical examples of figurative uses of language. In cognitive linguistics, they are regarded as a component of human cognitive ability. (a) *Metaphor*: Understanding one entity or thing in terms of another, based on some similarities between two entities or things. The cognitive ability of comparing one thing with another underlies metaphor. [Ex] 1) I’m at a *crossroads* in my life. 2) The matter has been discussed *over* the years. (b) *Synecdoche*: Using the specific for the general, or the general for the specific. This is based on the cognitive ability of construing an entity or a thing at a different level: precisely or roughly. [Ex] 1) I didn’t

drink last night. (“drink” refers specifically to drinking alcohol) 2) How do you like your *eggs* – fried or boiled? (“eggs” refers to chicken eggs) 3) *Walkman, Kleenex, xerox, hoover*, are some examples of synecdoche. These words originally meant a particular product, but they are now used to refer to things or acts which have similar functions. (c) *Metonymy*: one entity or thing is used to indicate, or provide mental access to, another entity. This is based on reference-point ability (Langacker 1993). [Ex] 1) I’m reading *Shakespeare*. (“Shakespeare” refers to any of Shakespeare’s works.) 2) America doesn’t want another *Pearl Harbor*. (“Pearl Harbor” refers to the attack that happened there.)

3. The less transparent idioms used in this experiment were as follows: [GA] keep your shirt on / let sleeping dogs lie / place [put / lay] one’s cards on the table / fish out of water / let off steam / go fly a kite / kick the bucket / hit the spot / ring a bell / spill the beans; [GB] hit the ceiling / give you [take] a rain check / born with a silver spoon in your mouth / go to the dogs / pie in the sky / hit the hay / have a bone to pick with you / let the cat out of the bag / shake a leg / carry the ball.
4. The cognitive motivation discussed in Chapter 3, taking “kick the bucket” and “spill the beans” for examples, was given for each idiom. Some of the explanations given in this study were based on Marvin, T. (1996) and were arranged by the author.
5. *D-Level Learning* and *S-Level Learning* are terms invented by the author. D and S here means “deep” and “surface” respectively. In *D-Level Learning*, learners are more likely to

understand the meaning of the idioms in relation to the cognitive process. In *S-Level Learning*, by contrast, learners simply remember the Japanese equivalents for the idioms.

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