

Let's Get More Visual, More Physical: A Proposal for University English Education

Tagawa Kenjiro

Introduction

The past few decades have seen the Internet emerge as a new form of information infrastructure and become accessible to the general public, and during almost the same period Cognitive Linguistics has grown into one of the major branches of linguistics. The two apparently unrelated events happening simultaneously is a very fortunate coincidence for EFL teachers. Cognitive Linguistics is primarily characterized as a perspective on language that, in Tyler's (2008: 462) words, "offers explanations that draw on learners' everyday real world experience by tapping into an intuitive reservoir of knowledge," and such 'an intuitive reservoir of knowledge' is now only a few clicks away from us thanks to an astronomically large volume of web resources.

Prior to the age of the World Wide Web and browsers, it was extremely difficult for Japanese students to get access to the 'real world experience' of native speakers of English, unless they lived in an English speaking environment. The advent of the IT era and the technology's rapid progress, however, have made it significantly easier to find not only texts in English on any topic we may choose but also images and videos related to that topic. We are now able to get with astounding ease visual materials along with relevant texts in English, or any other language, just about anything.

No matter how abstract an idea we verbally express may seem to be, there is almost always a physico-sensory foundation underpinning its conceptualization. In other words, an entity, an event, or a situation that do not seem to have anything to do with a shape or spatial configuration is intuitively conceptualized as a visual, spatial image in our mind. Consider the following observation made by Lakoff and Johnson (1980):

our experiences with physical objects (especially our bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions, ideas, etc., as entities and substances. (Lakoff and Johnson 2008: 25)

This perspective is shared by numerous researchers working along the line of the Cognitive Linguistic paradigm, including Yamanashi (2000, 2009) and Ueno et. al (2006) among many others. They rightly recognize the importance of bodily and sensory experience in language. Even grammatical items, which apparently carry little meaning, are not totally meaningless. In the words of Langacker (2001:

6), “lexicon and grammar form a continuum, all elements of which are symbolic in nature,” and “all grammatical elements are meaningful.” The meanings of grammatical items are built upon our physical and visual perception. Thus, it is crucially important for the teacher to ensure that his EFL students have access to the physical and visual experience of native English speakers that serves as the foundation for concepts verbally expressed. There is no doubt that visuo-spatial information available via the Internet will help the students internalize such experience as their own.

The physical, visual experience can be offered in low-tech methods as well. The instructor can make use of hand-drawn diagrams, for example, to visually show how *to play* differs from *playing*. He can also bring a rubber ball to the classroom and squeeze it to demonstrate what *flexible* means.

Whereas teachers in junior high and senior high schools are restrained by the detailed guidelines stipulated by the Ministry of Education, Culture, Sports, Science and Technology, university teachers are largely free from such restraints and thus are in a better position to incorporate the latest insights of Cognitive Linguistics into their teaching. In the following pages, I propose that English teachers in Japanese universities should use more physically and visually oriented methods, high tech or otherwise, to teach our students what English words, phrases, and syntactic constructions ‘look’ like and ‘feel’ like, thereby facilitating the process in which they acquire native-like intuitive knowledge.

1. Image Search and Prototype

In this section, I propose using the image search feature of Internet browsers to offer a more intuitively effective representation of the semantics of English words and phrases. Under the framework of Cognitive Linguistics, it is assumed that a native speaker’s physical perception provides the basis upon which her more abstract experience is conceptualized. As Lakoff & Johnson (1980: 25) put it:

Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind.

(Lakoff & Johnson 1980: 25)

‘Objects and substances’ are easily captured in images and pictures, and therefore are readily accessible visually on the Internet. This makes image search an extremely friendly tool for anyone wishing to learn English from a Cognitive Linguistic perspective.

Another reason why image search is suitable for Cognitively-oriented pedagogy has to do with the notion of ‘radiality,’ which is illustrated in the following quote from Lee (2001):

the prototype-based model recognises that category membership is a gradient phenomenon, such that some members of a category are more central members than others. (Lee 2001: 53)

The results we get from searching for images online visually illustrate which entity is the prototypical referent of a given vocabulary item and which ones are not so typical but still can be referred to by the item. We can literally see this gradient nature of reference because an entity shown in a larger number of images is presumably closer to the core image of the item and those shown in fewer pictures are farther away from the core.

An example to the point is the word *bug*. Lee (ibid.: 10-11) gives an anecdotal account for how the word for a tiny creature came to be used as a noun for a glitch in a computer program. According to the anecdote, the use of *bug* for a fault in computer software may be traced back to an actual dead bug found in a computer.

Whether the story is true or not, the new extended use of *bug* would never have been established if a majority of English speakers had found it difficult to associate the notion of *bug* with a computer malfunction. In other words, it must have been easy and natural for them to visually conceptualize a dead *bug* trapped in computer hardware. The English teacher should be able to visualize this image of a *bug* as it appears in the native speaker's mind and has to make sure that this image is shared by his students.

A simple, straightforward way to teach the meaning of *bug* to Japanese students is to translate the word into the Japanese word *mushi* (虫) and attribute the emergence of the second meaning to an analogous relationship between the small creature and a programming error. But this leaves us with an important issue to deal with: Does *mushi* (虫) really invoke an image in the mind of a Japanese student that is comparable to the prototypical image of *bug* conceptualized by native English speakers? While *bug* typically refers to an insect, a spider, and other small 'legged' hard-shelled invertebrate, the referential range of *mushi* (虫) seems to be a bit wider and include creatures that would be referred to as a *worm*, which is a small, soft-bodied creature that undulates as a means of propulsion.

This disparity between English and Japanese can be made clear if we search online for images of *bug* and *mushi* (虫) respectively and compare the results. Figures 1 and 2 below show some of the images found for the two words. The first 100 images returned as a result of searching for *bug* images do not include any pictures of a *worm*, whereas, of the first 100 images found by searching for images for *mushi* (虫), 13 are of the kind of creatures that would be more fittingly referred to as a *worm*, such as the creature shown in Fig. 2d. The difference between the two search results suggests that my suspicion mentioned above is justified: Namely, visual concepts invoked by the words *bug* and *mushi*

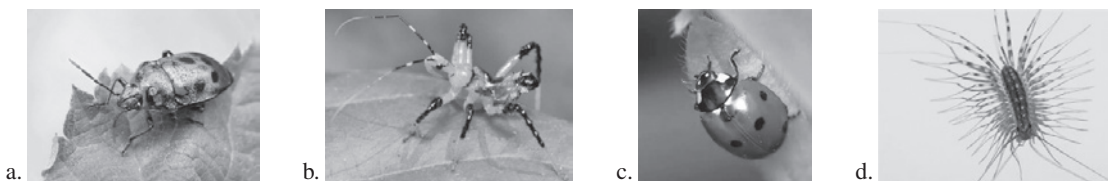


Figure 1. Images found for *bug* (Search engine: Yahoo <https://yahoo.com>)

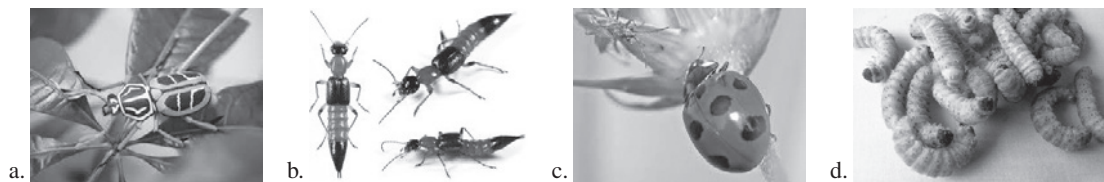


Figure 2. Images found for *mushi* (Search engine: <http://www.yahoo.co.jp>)

(虫) do not completely match. Although the ranges of their reference overlap considerably, *mushi* (虫) clearly has a larger scope of reference.

However, if you continue scrolling down for images of the English word *bug* beyond the first 100, you will eventually come across a few photographs of larvae, lice, maggots, and other ‘worms’. So it may be more appropriate to say that those creatures which are normally referred to as a *worm* could sometimes be referred to as a *bug* in English, but this usage is extremely peripheral, as is indicated by the extremely small number of pictures of *worms* returned as a result of searching for *bug* images. By contrast, although *mushi* (虫) is most likely to be conceptualized visually as a legged, hard-shelled creature, it is not so unusual for *mushi* (虫) to refer to a soft-bodied undulating creature, i.e. a ‘worm,’ as the search results above indicate.

Thus it is important for the English teacher to alert his students to the referential discrepancy between the English and Japanese words so that the learners can have a visual image of ‘a computer bug’ as close as possible to the native speaker’s image of the phrase. After all, it is part of our daily experience to find a dead fly or mosquito (i.e., a *bug*) trapped in an electrical appliance, but hardly ever do we find a dead larva, a maggot, or a louse (i.e., a *worm*) mummified in a fluorescent light cover. But if our students believe that *bug* may refer to a larva or a louse, some of them might mistakenly conceptualize a ‘computer bug’ as such and find the use of *bug* in reference to a computer glitch somewhat awkward.

Therefore, instead of resorting to a traditional mode of verbal explanation and translation, we should give a few taps to our smartphone, and it would instantly produce a visual presentation of the referential domain of any given noun. Image search thus offers a very useful data showing that “some members of a category are more central members than others” (Lee 2001: 53) and helps us literally see how central or marginal a given member of a category is.

Of course, given the fact that non-native speakers of English may contribute to the linguistic information available online, we need to be careful not to regard those search results as a totally fair representation of the semantics of English. However, there is some encouraging evidence with respect to this concern. In their discussion of subject-verb agreement about the phrases *none of these books* and *none of us*, Kuno & Takami (2009: 151) report that their native speaking informants find only a negligible amount of their data acquired on the Internet to be attributable to non-native speakers. Thus, while caution is due of course, the data available online should be considered seriously as a potential

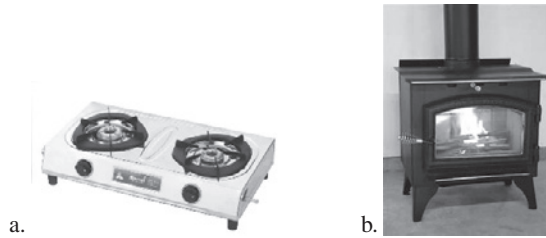


Figure 3. Images found for *stove* (Search engine: Yahoo <https://yahoo.com>)

tool for teaching native speakers' intuition.

Let us now consider another set of examples. English nouns that have been loaned and become well established members of the Japanese vocabulary may have rather different referents from their original use in English. This may turn out to be very problematic for Japanese students because it is difficult for them to anticipate that such simple, mundane words as *stove* could refer to something with which its Japanese usage is never associated. In English *stove* usually refers to a cooking device in the kitchen as well as a heating appliance used in winter. Japanese students are familiar only with the latter use of *stove*, and therefore their attention should somehow be directed to the former usage, which is novel to them.

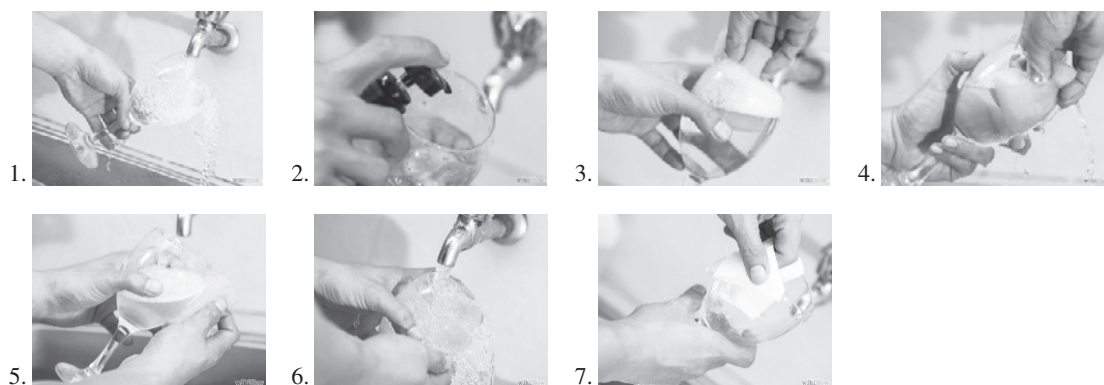
Although the most straightforward way to do this is to explain that *stove* is likely to mean a kitchen appliance referred to as a *konro* (コンロ) in Japanese, a more revealing and intuitively persuasive way would be to have our students search for images of *stove* online. With a few clicks, their smartphones or PCs will return numerous pictures. An overwhelming number of the pictures that pop up for *stove* are those of a cooking device such as shown in Fig 3a. with space heaters such as the one shown in Fig. 3b accounting for a much smaller, though not marginal, percentage. Indeed, of the first 100 images my search on Yahoo returned, 77 are cooking stoves and only 16 are space heaters. Note that the numbers do not add up because there are some ambiguous or unidentifiable images.

As has been made clear by now, searching for images on the Internet is an extremely effective method for the learner to get a straightforward intuitive representation of the 'radiality' of different meanings of a given vocabulary item.

2. Websites for Pragmatic Purposes

In this section I claim that university English instructors should turn to Websites that are aimed at native English speakers and created with the purpose of offering pragmatic tips for washing, cooking, cleaning, driving, and other mundane daily chores.

The rationale for my claim is twofold. First, those pragmatically-oriented sites tend to concern physical activities and are replete with visual illustrations such as diagrams, photographs, and even videos. As Imai (2015: 235) suggests, an image schema may originate in physical space before it is



1. Rinse the glasses in very hot water.
2. Use a drop of mild dish detergent for each glass and partially fill each one with hot water.
3. Hold the glass carefully by the bowl and insert a sponge.
4. Turn the glass around while holding the sponge in place. The best is if you have a sponge that is attached to a long handle so that your hand is not actually inside the glass.
5. Wash the outside of the glass by holding the bowl with one hand and washing the outside of the bowl, the stem and the base with the sponge.
6. Rinse each glass thoroughly, inside and out, with hot water.
7. Allow your glasses to air-dry, right side up, or hand-dry them using a lint-free towel, or unscented paper towel.

Figure 4. *How to Clean Wine Glasses*: (wikiHow, modified and emphasis added by the author)

extended and projected onto temporal, social, and psychological spaces. We should thus pick Websites focused on the physical aspect of our daily life and present them to our students as teaching materials so that they can acquire a prototypical, i.e., physico-visual, concept of basic vocabulary items.

One example of such Websites is *wikiHow*, which is an advertisement-funded Website made up of a huge number of articles and visual illustrations. Launched in January 2005, the ten year old Website contains more than 180,000 articles as of February 2015,¹ and the number is constantly growing as people contribute articles on a daily basis. The topics dealt with range from daily chores (e.g., *How to Clean a Toilet*) to psychological (e.g., *How to Fight Depression and Loneliness without Outside Help*). Fig. 4 is a section from a *wikiHow* article titled *How to Clean Wine Glasses*. Note that on the real *wikiHow* page the photographs are much larger and in color, and each caption is inserted under the corresponding photograph.

Let us consider some of the vocabulary items in the captions in Figure 4. In caption 1, the verb *rinse* is employed to refer to the act of washing. Although Japanese students are no doubt quite familiar with the word *rinsu* (リンス) as an established part of the lexicon of their native language, the word is used with drastically different categorical and referential statuses in English. While *rinsu* (リンス) is a

1) <https://en.wikipedia.org/wiki/WikiHow>

noun in Japanese and refers to a hair conditioning product, *rinse* is a verb in English and refers to the action of cleaning with water. Whereas this disparity is too complicated for a verbal account, a mere look at the photograph would give the students a clear visual illustration as to what kind of meaning they are expected to conceptualize.

In caption 3, the elongated part of the glass that holds wine inside is referred to as a *bowl*. This usage of the word would come as a surprise to the students because, most of the time, *bouru* (ボウル) in Japanese invokes an image of a semi-circular container such as a salad bowl without any parts protruding from it. Calling something with a leg and base coming out of it a “bowl” is not likely to be within the normal referential scope of *bouru* (ボウル). Again, this rather subtle difference can be grasped instantly by looking at the picture.

Caption 7 illustrates an even more interesting advantage of visual information. Here, the verb *dry* occurs in two phrasal combinations. *Air-dry* means exposing an object to air, thereby facilitating evaporation, and *hand-dry* refers to the action of wiping off moisture with a piece of absorbent material. The former use would sound natural to the students because they are familiar with a *headraiya* (hair drier / ヘア・ドライヤー), whose primary function is to remove moisture by exposing wet hair to moving air. Indeed, the verb *dry* is often translated into the Japanese verb *kawakasu* (乾かす), which implies exposition to air and does not connote using a towel or paper. On the other hand, the Japanese students would have a hard time understanding what *hand-dry* means because in Japanese the act of removing moisture with absorbent material is not described as *kawakasu* (乾かす), and the action is usually referred to by employing a different verb such as *hukkitoru* (拭き取る).

The difference of connotations could well be explained in terms of the notion of profiling (Langacker 1991, 2008). In English, the process of removing moisture is profiled, and therefore the phrases *air-dry* and *hand-dry* share the same verb *dry*. Here, how to remove moisture is not important. By contrast, the physical movement of running a piece of cloth or paper along a surface is profiled in the Japanese expression *hukkitoru* (拭き取る) and it is interpreted as a different action from *kawakasu* (乾かす), which lacks such movement.

The examples presented above demonstrate Websites designed to give pragmatic tips could prove to be effective teaching material for our university ESL students. Since the creators of such sites assume native speakers as their audience, they often use words and expressions that are too difficult for pre-university Japanese students. While the level of vocabulary could be a problem for junior high and senior high school students, it should not be problematic for our university level students, most of whom intend to acquire the level and range of vocabulary that is commonly shared by ordinary native English speakers anyway. The real-life language and images available on those Websites, therefore, would provide a tremendous amount of intuitive knowledge that would collectively serve as the basis for an understanding of the native speaker's perspective on the physical world and how they carve up reality. Knowledge acquired in this way would in turn become an effective template that would guide EFL students as they are forced to make constant intuitive decisions as to what aspects of the process

or situation they should profile when speaking English.

To help illustrate the problem with the way English vocabulary has been taught in pre-college schools, one should take a glimpse at an English textbook used in Japanese junior high schools. Currently six English textbooks are officially recognized by the Ministry of Education. *One World*, (Kyoiku Shuppan 2012), is one of them. It is a series of English textbooks consisting of three volumes for the three grades of junior high school. The volume for the first year students is divided into ten lessons. The following sentences in (1) contain the first four occurrences of the preposition *in* in the textbook.

- (1) a. What do you have in your hand? (Lesson 3)
b. This is Mr. Abe's compass. We need it in math class. (Lesson 3)
b. Do characters speak in English? (Lesson 7)
c. I'm home in New York. (Lesson 8)

(*One World English Course 1*: Kyoiku Shuppan 2012)
(emphasis by the author)

None of the above uses represents a prototypical meaning of the preposition. As Lee (2001, 19) puts it, the prototypical use of *in* refers “to a situation in which the trajector (TR) is wholly contained within the landmark (LM).” In (1a), *your hand* is not a typical ‘container.’ *Math class* in (1b) is an activity analogically construed as a container, and a higher degree of abstraction is required for *English* in (1b) to be conceptualized as a container. The use of *in* in (1d) is probably the closest to the prototypical use because New York is a closed area delineated on its perimeter, but the lack of three dimensional containment makes it a less prototypical container than such entities as a box, a room, and a house.

Japanese students who are exposed to these types of uses of *in* would have trouble building a schematic image of what the preposition typically expresses. In the classroom, they are offered a different, distinct translation each and every time they encounter a new use. The notion of radial distribution of meanings would never be understood.

An infant being raised in an English speaking community would most likely have her first encounter with the preposition *in* as it is used in its prototypical sense. *The cat in the house* (Lee 2001: 19) would be one such example. Other relevant examples may include *the piano in the room*, *the cakes in the box*, etc. Our Japanese college students should be given the opportunity to ‘re-learn’ the meanings of the preposition in a natural order, starting with these prototypes followed by increasingly more abstract ones, in order to ‘retrofit’ themselves with a more intuitive sense of semantic radiality. Websites like *wikiHow* would offer ideal resources in this respect because their pragmatic orientation means they have numerous physico-visual information about mundane objects and daily routines to which native speakers are likely to be exposed in their infancy. The following image is quoted from a *wikiHow* article entitled *How to Store Strawberries*:



Caption: Store strawberries in an open Tupperware container.
Figure 5. *How to Store Strawberries* (wikiHow, emphasis by the author)

Here you can see how the preposition is used in its spatial sense: objects placed inside a container. This seems to be pretty close to the prototypical image of *in* that most native speakers encounter as an infant, and it would give our students a better foundation upon which to build their image schema of the preposition than the examples found in the junior high school textbook in (1). Exposing the students to this type of visual and physical meanings of a vocabulary item should help them avoid relying upon translations and having to memorize a long list of different ‘uses’ of that item.

The other half of my motivation for advocating using pragmatic Websites has to do with the benefit of learning the universality of human behavior. When we talk about international cultural exchange, our discussion tends to be focused on differences among cultures. While this may offer an eye-opening perspective to students, some learners may end up knowing little about what foreign cultures around the world have in common with that of Japan. Such a disparity in attention could in turn lead our students to assume that every society has a different, distinct way of life that has little to share with other societies.

As we have observed so far, websites dealing with daily chores contain numerous expressions that describe mundane physical activities, and such activities tend to be shared globally by every human community because there cannot be so many different ways to wash the bathroom, to repair a broken roof, or to remove a food stain from clothes, for example. Websites offering tips for daily activities would help our students to see the elements that are shared universally by all human societies and develop a healthy, bias-free view towards foreign cultures.

3. Diagrams

In this third section, the possibility will be explored of visual illustration of temporal expressions. Insights gained by Cognitive grammarians have already been utilized for educational purposes. It has become a common practice for English dictionaries and grammar books to include the prototypical meanings of prepositions presented by diagrams of various sorts. However, while prepositions are relatively easy to schematize visually, more abstract components of grammar such as tense and aspect cannot be illustrated visually in a straightforward manner. Yet, Langacker (2008) claims that abstraction is only “a matter of degree”:

Grammatical meanings are generally more abstract than lexical meanings. This is, however, a matter of degree, so there is no clear line between lexicon and grammar. (Langacker 2008: 67)

As opposed to the Generative view of grammar, where functional items are strictly distinguished from lexical items, Cognitive Linguistics sees no absolute distinction between lexicon and grammar. Therefore, in the Cognitive framework, if lexical items can be given visual representations, it is assumed that grammatical items and constructions can also be represented visually. The teacher should go beyond prepositions and explore the possibility of visualizing grammar in general.

The perspective discussed here is closely related to the tradition called localism, which claims that conceptualizing time in terms of space is universal because “temporal expressions, in many unrelated languages, are patently derived from locative expressions” (Lyons 1977: 718).² Indeed, the progressive construction *be -ing*, for example, is generally assumed as deriving historically from a locative construction of a preposition followed by a gerund. (See Lyons 1977: 719, Brinton 1988: 113)

Following the locative tradition, Imai (2010) represents the English present progressive form as a section on the temporal axis with the speech time profiled and the initiation and termination of action backgrounded:



Fig. 6 “Shelly is singing a song.” (Imai 2010: 149–150)

A similar visual representation of the progressive is offered by Kuno and Takami (2013: 68). An obvious pedagogical advantage of the visualization method for the progressive over a verbal explanation is that the student can acquire an understanding of the temporal characteristics of the progressive without being negatively influenced by the Japanese translation *-te iru*. While the convention of translating the *be -ing* form into *-te iru* still remains prevalent, the translation is likely to misguide the student into believing that every use of *-te iru* corresponds to *be -ing*. However, the Japanese *-te iru* form is aspectually polysemous and covers a wider spectrum of aspects than the *be -ing* construction, as shown in (2) below:

(2) a. Progressive

Kodomo-ga waratte-iru.

(A child is laughing.)

b. Resultative

2) The notion of localism is also discussed in Lyons (1995).

- (Doa-ga aite-iru.)
 “The door has opened.”
- c. Habitual
 Watashi-wa maiasa go-kiro hashitte-iru.
 (I run 5 kilometers every morning.)
- d. Stative
 Shota-wa Mina-wo aishite-iru.
 (Shota loves Mina.)

(a, c, Tsujimura 2014: 341)

Of the four aspectual uses of *-te iru*, only the progressive use can be designated by *be -ing*. The visual representation such as the one by Imai in Figure 6 clearly illustrates the temporariness of the English progressive and would help students to avoid using the construction for the resultative, habitual, and stative meanings.

It may also be possible to draw diagrams for finite tense forms. For instance, Tyler (2008: 472-473) proposes two similar pictograms for the modal auxiliaries *will* and *would*. Each pictogram is shaped like a person with his arrow-shaped arms extending outward. The images differ in that the one for *will* is drawn in solid lines and the one for *would* in dotted lines. The idea for using the two different types of lines is to differentiate the strength of volitional force, and as is easily surmised, the solid lines indicate “the present tense form and thus the stronger form of the modal.” (Tyler *ibid.*)

I suppose that a more useful way to visually differentiate the strength of volition of the modals might be to represent the differences in spatial distances. The possibility of spatializing modal force is hinted at by Lyons (1977: 719) as he discusses “modal remoteness.” Imai (2010: 138) classifies the nature of the cognitive distance expressed by the past tense forms of English modal auxiliaries into three dimensions: the distance from the present, from reality, and the addressee. In this section, however, let us explore the feasibility of adopting a two-dimensional system. See the diagram below:

The top solid line represents reality and the two dotted lines stand for irrealis modality. The

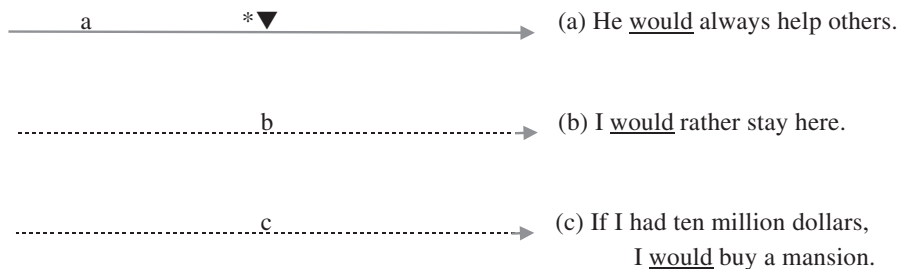


Figure 7. Volition of *Would* Represented in Two-Dimensional Space
 (*▼ indicates the speech time.)

modal *would* in (a) is located on the top solid line because the modal verb represents the volition of the subject in actuality, while the modal *would* in (c) is located on the second dotted line away from the realis line because it expresses hypothetical volition with no possibility of being realized. The *would* in (b) is slightly removed from the solid line but not quite as far from it as (c). Its ambivalent position is meant to indicate that the possibility exists of the event becoming reality. The speaker is being modest by expressing his intention without absolute surety. Thus the ‘modest’ use of *would* such as the one in (b) can be accommodated within the two dimensional plain with the horizontal axis representing the physical flow of time and the vertical axis corresponding to the distance from reality as perceived by the speaker.

Our discussion on visual schematization of temporal expressions so far suggests that visually oriented methods would work out well for not only lexical items and prepositions with spatial meanings. Grammatical constructions with a higher degree of abstraction could also be accounted for in diagrams. Such diagrams would no doubt help our university students develop an intuitive command of English grammar.

4. Gestures and Props

Finally, I propose that gestures and props be employed in the classroom to teach the basic lexical and grammatical concepts of English. This proposal is motivated by the view of our physical experience as the basis for our linguistic competence, which has been repeatedly pointed out in this article so far and is concisely worded in the observation below:

Our experiences with physical objects (especially our own bodies) provide the basis for an extraordinarily wide variety of ontological metaphors, that is, ways of viewing events, activities, emotions, ideas, etc., as entities and substances. (Lakoff & Johnson 1980: 25)

One of the pedagogical implications following from this view is that using physical objects as ‘props’ to demonstrate how the English native speaker conceptualizes a variety of English expressions would prove extremely effective in the classroom. Take the adjective *flexible*, for example. To replicate a situation where the native speaker encounters the word for the first time as an infant, the teacher can hold a plastic color ball and squeeze it in his hand saying “flexible.” For the similar but different adjective *elastic*, he could take out a rubber band and pull the two ends to make it longer, showing what being *elastic* looks like.

The future-orientation of the *to*-infinitive might be demonstrated efficiently if the teacher assumes the posture of someone who is about to start running and say “I’m going to start!” He could manipulate a Barbie doll or a G.I. Joe figure to show a similar position.

All these techniques may sound ridiculous and childish. However, the sensorial experiences that

constitute the foundation underpinning the native speaker's intuitive linguistic competence take place in his infancy, and therefore, are childish in nature. Using those 'kindergarten' techniques would prove to be an effective method to expose our students to the physical experience they should have had earlier in their English education. Indeed, O'Neill, Topolovec & Stern-Cavalcante (2002) report a significant positive effect of showing a descriptive gesture to teach a novel adjective in first language acquisition (e.g., squeezing for *spongy*) to infants.³

Conclusion

Scientists tell us that about one third of the human brain cortex is engaged in processing visual information,⁴ reflecting the importance of the role vision plays in cognition. Given the similar significance language seems to have in our perception of the world, it follows naturally that the nature of the relationship between visual schematization and language should be a focus of intensive linguistic research.

Since visual information is often accompanied by physical interaction with the outside world, studying how visual and physical cognition and language are connected would provide a lot of revealing insights into language, and those insights will help make learning a foreign language an intellectually interesting endeavor. As Ueno (2007: 73) observes, physical experience obtained through motor and sensory organs is essential for constructing a Gestalt. From a Cognitive Linguistic perspective, the most important job of the language teacher is to help his students go through the physical and visual experience and associate it with the target language, simulating the way the native speakers acquire the language as an infant.

Giving cognitively motivated accounts would make learning English much less boring than it is when the language is presented as a massive collection of arbitrary rules. Imai (2015: 254) points out that language learners, regardless of their levels, tend to find learning English "more enjoyable and valuable" if they are given cognitively motivated explanation of an item. It is important to note that the Cognitive perspective would prove effective for EFL not because it offers expedient means but rather because it reflects the truth. This is clearly stated by Hudson (2008: 89) as he observes that "a cognitive model was right for language because it was true rather than because it was useful" in his discussion of the role of Cognitive Linguistics. Murata (2011: 79) shares this view and expects that Cognitive Linguistics would free the learner from rote memorization of arbitrary rules.

Timing seems to favor Cognition-based pedagogy. As I mentioned at the outset of this article, the past few decades have seen the rapid growth of Cognitive Linguistics and the Internet technology

3) For a detailed discussion of the relationship between the Japanese speaker's sense of direction and his gestures, see Hosoma (2008).

4) Hoffman D. "Do We See Reality As It Is?" TED talk. Filmed in March 2015.
http://www.ted.com/talks/donald_hoffman_do_we_see_reality_as_it_is

simultaneously. While there does not seem to be any causal relationship between the two events, they could potentially have an extremely positive impact in combination on foreign language education, given the extraordinary ability of the Internet to instantly assemble imagery related to a particular linguistic expression. Although I did not discuss it in the preceding sections, the IT infrastructure is also a potentially useful source of animations that describe the prototypical meaning of verbs. This is another path for Cognitive linguists to explore as the technology becomes more and more sophisticated on a literally daily basis.

One of the obvious factors that have made such gadgets as the iPhone and the iPod so successful is that those devices can be controlled intuitively. The user only needs to swipe his finger to the right to move the texts or image on the screen to the right. There is no arbitrariness involved here. The user does not make an arbitrary connection between a number and a direction, for example. Cognitive Linguistics has the potential to provide the English learner with intuitive controllability similar to that of the Apple devices. After all, the native speaker has an intuitive command of a given language, and Cognitively motivated teaching offers a realistic possibility to enable non-native EFL learners to control English grammar in an intuitive manner. The university English teacher, in designing his teaching plans, should explore how the insights of Cognitive Linguistics could be used to help students become intuitive users of the English language.

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One World English Course 1. Tokyo: Kyoiku Shuppan.

Websites and Image URLs

Figure 1.

- <http://www.wikihow.com/Clean-Wine-Glasses>
- a. https://commons.wikimedia.org/wiki/File:Metallic_shield_bug444.jpg
https://upload.wikimedia.org/wikipedia/commons/6/6d/Metallic_shield_bug444.jpg
- b. http://www.marcofolio.net/inspiration/50_pictures_of_amazingly_colourful_insects.html
<https://www.flickr.com/photos/orionmystery/2303337035/>
- c. <http://shadesofgreensa.com/ladybugs.html>
<http://www.shadesofgreensa.com/Images/Beneficials/ladybug.jpg>
- d. <http://www.putfamiliesfirst.com/wp-content/uploads/2013/07/silverfish.jpg>
<http://www.putfamiliesfirst.com/bug-profile-silverfish/>

Figure 2.

- a. <http://www.3331.jp/schedule/001590.html>
http://www.3331.jp/schedule/file/001590_03.jpg
- b. <http://www.kotubankyosei-iyashiya.com/health/yaked...>
<http://www.kotubankyosei-iyashiya.com/wp-content/uploads/yakedo.jpg>
- c. <http://fuchu.waiwai7.lolipop.jp/?eid=291>
http://img-cdn.jg.jugem.jp/3bc/2764884/20130921_1573298.jpg
- d. <http://blog.livedoor.jp/mushigashigoya/archives/12...>
<http://livedoor.blogimg.jp/mushigashigoya/imgs/6/7/67c6da15.jpg?d0a2c9b7>

Figure 3.

- a. http://www.craftindia.in/two_burner_stove.htm
[Two_Burner_%20Gas_%20Stove_%20MAGIC.jpg](#)
- b. <http://www.artec.net/Solar/11-18-05/November18-05.html>
[http://www.artec.net/Solar/11-18-05/Stove_w-fire.JPG](#)

Figure 4.

Website URL

<http://www.wikihow.com/Clean-Wine-Glasses>

Image URLs

- a. <http://pad3.whstatic.com/images/thumb/8/87/Clean-Wine-Glasses-Step-1-Version-2.jpg/900px-Clean-Wine-Glasses-Step-1-Version-2.jpg>
- b. <http://pad3.whstatic.com/images/thumb/d/d5/Clean-Wine-Glasses-Step-2-Version-2.jpg/900px-Clean-Wine-Glasses-Step-2-Version-2.jpg>
- c. <http://pad2.whstatic.com/images/thumb/a/ad/Clean-Wine-Glasses-Step-3-Version-2.jpg/900px-Clean-Wine-Glasses-Step-3-Version-2.jpg>
- d. <http://pad2.whstatic.com/images/thumb/1/19/Clean-Wine-Glasses-Step-4-Version-2.jpg/900px-Clean-Wine-Glasses-Step-4-Version-2.jpg>
- e. <http://pad2.whstatic.com/images/thumb/4/4b/Clean-Wine-Glasses-Step-5-Version-2.jpg/900px-Clean-Wine-Glasses-Step-5-Version-2.jpg>
- f. <http://pad2.whstatic.com/images/thumb/d/dc/Clean-Wine-Glasses-Step-6-Version-2.jpg/900px-Clean-Wine-Glasses-Step-6-Version-2.jpg>
- g. <http://pad1.whstatic.com/images/thumb/4/4e/Clean-Wine-Glasses-Step-7-Version-2.jpg/900px-Clean-Wine-Glasses-Step-7-Version-2.jpg>

Figure 5.

Website URL

<http://www.wikihow.com/Store-Strawberries>

Image URL

<http://pad3.whstatic.com/images/thumb/0/00/Store-Strawberries-Step-1-Version-3.jpg/900px-Store-Strawberries-Step-1-Version-3.jpg>



Tagawa Kenjiro

Email: tamboriver@nifty.com