



Applying Theory to Practice Teaching Down and Under to Japanese Efl Students with Modular Materials and Through Showing The Differences Between English And Japanese

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Abstract. Teaching prepositions, in this case, down and under, to Japanese English learners is difficult at least because of the following two reasons; Firstly, there has been a long dispute in the literature on the semantics of prepositions as to whether prepositions denote only static relationship of Trajectory (TR) and Landmark (LM) (eg. Tyler and Evans 2003), or can denote not only static but also dynamic relations between TR and LM (eg. Dewell 1994, 2007). Under and its counterpart over seem to correspond to the former, while down and up to the latter. However, things are not so straightforward as we have argued in Hanazaki and Hanazaki (2018). This discrepancy in meaning has made the learning of the words difficult. Secondly, there is no one-to-one correspondence of down and under to Japanese. Both of them are translated as SHITA, a noun that depicts a place underneath, with a postposition, usually NI or HE or DE as in SHITA-NI. Hence, it is difficult for the Japanese learners to fully comprehend those meanings. With these observations, this paper, picking up under and down as examples, makes the following three claims; (1) prepositions depicts spatial relationship between two objects, and sometimes the linguistic context in which the prepositions is used may make it seem as if the preposition denotes a dynamic meaning, (2) English prepositions and Japanese postpositions are different in nature, and (3) a modular material teaching the words based on cognitive linguistics highlighting the differences between the target language and the source language may be a key to a better understanding of the words for Japanese English learners.

Keywords: TESL, Preposition, Down, Under, Polysemy.

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INTRODUCTION

Teaching prepositions to Japanese English learners are difficult in at least two respects.

First of all, there has been a long disagreement in the literature on the semantics of prepositions as to whether English prepositions denote only static relations of landmark (henceforth LM) and Trajectory (henceforth TR) (eg. Tyler and Evans 2003), or it can denote not only static but also dynamic relations between TR and LM (eg. Dewell 1994, 2007), and this disagreement on the nature of prepositions has made the learning difficult. Down and under are no exceptions.

It seems that Down and under are similar in meaning but differ in that down denotes that TR (Trajectory) and LM (Landmark) are in a dynamic relation, while under represents that the two are in a static affiliation. (1) and (2) seem to show such relationships;

(1) She went down the ladder.

(2) We are under his direction.

It seems down in (1) denotes that she shows a dynamic movement of going down the ladder, whereas under in (2) shows that we are in the state of following his directions.

However, as we have argued in Hanazaki and Hanazaki (2018), things are not that easy. First of all, if down denotes a dynamic movement of going under, (3) should imply her movement of going underneath the street, not heading south; and, secondly, if under shows a static relationship between TR and LM, (4) should mean that she is in the state of underneath the street, not she "walks", that is "moves", beneath the street; 25

(3) She walks down the street.

(4) She walks under the street.

Also, when we think of the antonyms of down and under, i.e., up and over respectively, it seems that down and under does not just differ whether they are dynamic or static. Consider (5) and (6);

(5) He went down / up the stairs.

(6) They shot the lion down / up.

(Otani 2013: 98)

Down and up in (5) seem to indicate the movements towards a place opposite to each other, i.e., underneath / over, however, those in (6) do not indicate such movements.

Hence, these difficulties in arguing what the meanings of down and under are has lead to the difficulties in learning those words for Japanese English learners.

On the second hand, English prepositions and their seemingly correspondent Japanese postpositions are different in nature. (cf Hanazaki and Hanazaki (2008)) In other words, the understanding of those words is difficult to Japanese EFL learners because there is no one to one correspondence; the seemingly Japanese translation of down and under are, for both English words, *shita*, which is a noun meaning a place that is lower, and that Japanese noun is combined with postpositions *ni* or *he* or *de*.

Let us look into this with the following examples. If we translate (1) and (2) into Japanese, interestingly, we use the same word, *shita-ni*, as (7) and (8) show respectively;

(7) Kanojyo-wakaidan-wo shita -ni it - ta.(translation of (1))

She-TOP ladder-OBJ down-POST go-PAST

“She went down the ladder”

(8) Wareware-wakare-no meirei-no shita-niiru (translation of (2))

We -TOP he-GEN direction-GEN under-POST be

“We are under his directions”

In Japanese, both of the words down and under are translated into a noun, *SHITA*, with a postposition, in these cases, *NI*. In other words, there is no one-to-one correspondence between down and under with Japanese words (In other cases, *SHITA* is combined with other postpositions such as *HE*, *DE* and so on) This fact should make it difficult for the Japanese English learners to fully understand the difference between down and under.

From these swift observations, the purpose of this paper is to answer the following two questions and suggest an application of the two arguments. Namely, (1) through examining COCA as well as other corpora, we will argue that down and under do not differ in whether they depict movement or static place, but rather differ in what TR and LM show in the semantics (point mostly argued in Hanazaki and Hanazaki (2018)), (2) we will argue that English prepositions and Japanese postpositions do not show a one-to-one correspondence, rather, they differ in nature, and (3) Based on the above two arguments, suggests an effective method for teaching those two words to Japanese EFL learners. In other words, the research questions of this paper are the followings;

(9) Research questions of this paper

(a) How do down and under differ in semantics? Do prepositions show static relationship and / or dynamic relationship between TR and LM? (based on Hanazaki and Hanazaki (2018)).

(b) Why is it that English prepositions and Japanese postpositions do not show a one-to-one correspondence?

(c) And based on the above observations, what is a better way to teach the difference between down and under to Japanese English learners?

LITERATURE REVIEW

The literature on semantics has treated prepositions as “functional words” not “content words”, hence they were considered “meaningless” and have been “discarded” (Jackendoff 1973) in semantics. In her book, Zelinsky-Wibbelt also argues that preposition “had long been neglected in linguistic inquiry” (Zelinsky-Wibbelt 1993:1) It was Lakoff (1987) and Brugman (1981, 1985) that put prepositions into the limelight, and following their work on preposition over, some studies have dealt with the “semantics” of prepositions.

We can divide these few studies on prepositions into three categories; (1) lexicological studies on prepositions (they list all the usages of the word in question); (2) those that explore the semantic-network of the preposition (they try to find how all the meanings of the word are related as “family resemblance” (Wittgenstein 1953); and (3) discourse line of thought: acknowledge the core meaning of the word and try to explain other meanings as the result of online interpretation of the word in question) (cf. Miller and Leacock 2000)

Let us explore the three kinds of the studies in detail respectively.

Literature on the Meanings of Prepositions

Lexicological Line of Thought: Treat Them as Having Many Meanings

We can include dictionaries, and most textbooks as well as the guidebooks for teachers used in English classes in Japan into this category. Cobuild lists 21 usages of preposition down, 3 usages of adjective, and 3 usages of noun and verb, and 12 prepositional usages for under. Also, we can say that Ando (2015), which many English teachers in Japan rely on for teaching, is included in this category.

However, making a catalogue of all the meanings will force the EFL students to “memorize” the listed meanings, and we cannot say this will lead to an effective teaching / learning.

Semantic Network Line of Thought: Treating All the Meanings as Related in a Semantic Network

It was Lakoff (1987) and Brugman (1981, 1985), who first argued that prepositions have a core meaning and other meanings center around the core meaning using family resemblance. (Wittgenstein 1953)

In concrete terms, they argue that the semantics of over can be depicted as Figure 1.

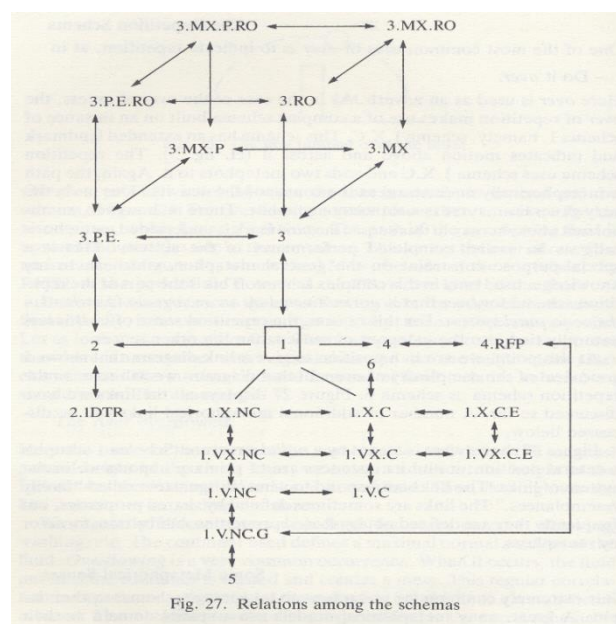


Figure 1: Semantic Network of Over (Lakoff (1987))

Their explanation claims that the core meaning of over is 1 in Figure 1, and gives (10) as a typical example;

(10) The plane flew over (the city). (Lakoff 1987)

After Lakoff (1987) and Brugman (1981, 1985), some studies tried to show the semantic network of many prepositions. (cf. Dirven (1993, 1995), Langacker (1991), Kato and Hanazaki (2006))

However, this line of thought is questionable when we look at (11) and (12).

(11) The plane flew over (the city).

(12) Hang the painting over the fireplace. (Lakoff 1987)

They argue that over in (11) shows a dynamic sense, while (12) a static, and hence, they treat them as separate meanings; they are 1 and 3 in Figure 1 respectively. However, we argue that it is more reasonable to attribute the difference in the meanings of over in (11) and (12) to the differences in the verbs used in each sentence, i.e., fly and hang. If we change the verbs of (11) and (12) into a static / dynamic one respectively and make (13) and (14), the meaning changes into static / dynamic meaning correspondingly;

(13) The plane is over the city.

(14) Throw the painting over the fireplace.

With this observation, we argue that the discourse, i.e., the lexical context within the discourse in which the word is used, plays a great role in considering the semantics of the word in question.

Discourse Approach to the Semantics of Preposition

With the observation we carried out with (13) and (14), we should argue that over does not have separate meanings of 1 and 2, namely, a dynamic meaning and a static meaning. Rather, we must argue that contextual information plays a role in deciding whether the word depicts a dynamic sense or a static sense.

Still, there is room left for arguing which should be admitted as the core meaning, whether the dynamic or the static. To which question we turn in the following chapter using down and under as a case study.

The Semantics of Down and Under: The Arguments of Hanazaki and Hanazaki (2018)

This chapter summarizes the arguments we have made in Hanazaki and Hanazaki (2018), in which we have argued the semantics of down and under. We have conducted this in three steps. Firstly, we tried to capture the differences between down and under through data analysis. Secondly, we have tried to see the differences between the two words in question through comparing these with their seemingly counterparts, up and over. And thirdly, we checked whether our hypothesis is adequate through examining the usages listed in dictionaries. Let us summarize the first two steps from the following.

The differences between down and under through data analysis

Table 1 shows the verbs that are used most frequently with the words in question according to Corpus of Contemporary American English (henceforth COCA) and News on the Web Corpus (henceforth NOW). These corpuses contain over 600 million words and 8.7 billion words respectively and are one of the largest corpuses now available.

Table 1: *The Verbs that are Used with Down and Under(COCA, NOW)*

down (30166)	both	under (11754)
walk (4293)	go (2653,427)	be (2942)
run (1968)	come (1941,976)	fall (862)
shut (1947)		operate (495)
break (1264)		live (425)
bring (1199)		hide (371)
put (1150)		work (311)
turn (1052)		drive (285)
look (969)		stand (268)
roll (788)		get (222)
take (680)		sit (222)
slow (669)		do (191)
start (456)		bury (178)
cut (436)		place (167)

Looking at Table 1, we could see that not only down but also under is used with verbs denoting dynamic movements, and if we look at data more closely, not only under but also down is used with verbs denoting static place, albeit a small amount. Hence a need for explanation besides the common theory that believes down is used for movements, while under is used to show static places.

Table 2 summarizes the grammatical differences between the two words as can be analysed from the corpus data we find in COCA, NOW and some previous studies.

Table 2: *The Differences between Down and Under (Hanazaki and Hanazaki 2018)*

DOWN		UNDER
Adverb → Preposition	Adverb	Rare
•Verb down the opponent •Adj. down escalator •Noun ups and downs	Other grammatical categories	•Adjunder jaw
NA	Special	Protasis under such condition

	Preposition	Prefix meaning shortage: understate meaning below: underline
From OE meaning: descend from hill	Etymology	From OE meaning close to present day English
come from down the hall	Prep + prep	from under the bed
NA	Prepositional subject	OK under the bed is a favourite place for cats (Iwasaki 2007: 114) Under the bed is where we used to hide the keys. (Huddleston + Pullum 2002:64)
OK Down the falls flows the little brook (Hayano 2014: 15)	Locative inversion	OK Under the armour they wear padding.
up (but not completely) (Otani 2013)	antonym	over (Benesse 2003)

These differences obviously cannot be explained with a simple theory that argues down shows a dynamic relation, while under static.

What is noticeable in Table 2 is that down and under contrast mostly in three points; 1) down has the usage of not only a preposition but also of verbs, adjectives and noun; 2) there are more fixed phrases with under than with down; and 3) under is used more, compared to down, in a prepositional subject. In other words, down is more flexible in usage, while under tends to be used in idiomatic expressions.

Semantics of Down and Under in Contrast between Up and Over

(15) - (17) show down and up in a minimal pair.

- (15) a. look down
b. look up

A sheer glance at (15), the minimal pair, compels us to argue that down shows a downward movement, and up an upward movement. Nevertheless, looking at (16) and (17), we cannot embrace that argument;

- (16) a. They shot the lion down
b. They shot the lion up. (Otani 2013: 98)

- (17) a. He came down to me.
b. He came up to me.

(16b) does not necessarily indicate that the lion went through an upward movement, and he in (17b) did not necessarily went through an upward movement. In fact, he in (17b) could have been on the third floor and came “up” to me in the basement!

With these observations, we argued in Hanazaki and Hanazaki (2018) that, instead of saying that down indicates a movement downwards, context makes the interpretation that the TR went through the downward action; the context illustrates that there was some action, and what down shows is the position that the TR is lower in space after the action.

This argument is enforced when we think that down can be used with stative verbs such as be, not only with action verbs. Take (18) as an example:

- (18) The Gents is down the stairs on the left. (COCA)

We are on the upper level, and our eyes does a mental scanning (Langacker 1991) and go through a movement, and after the movement, we realize that the The Gents is lower in space.

If we look closely at the adverbial usages of down, which are shown in (19), the point becomes clearer. (19) lists some of the adverbial usages of down in Oxford Advanced Learner’s Dictionary (henceforth OALD.)

- (19) Adverbial usages of down in OALD
a.<towards / in lower place> the sun started to go down
b. <to a low level> keep the noise down
c. <in a weaker position> he was down with the flu

However, we cannot be sure where the word under indicates with Figures 2 and 3; can 50cm lower than a table be indicated by under? Or is it below?

Rather, this paper claims that under is used to show a place that is confined by a top and sides as shown in Figure 4;

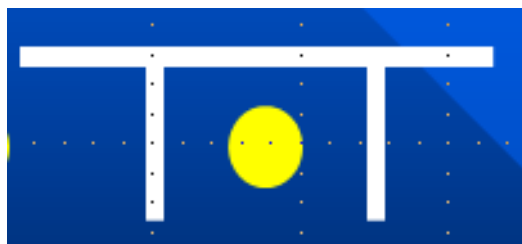


Figure 4: Image Schema for Under (Hanazaki and Hanazaki 2018)

Figure 5 can strengthen our argument.

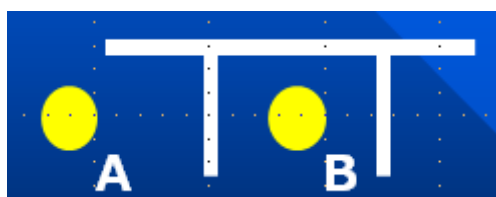


Figure 5: Under requires a Controller (Hanazaki and Hanazaki 2018)

We would describe ball A in Figure 5 as the ball is below the table without using under. On the other hand, to explain the position of B, we would use under not below. This sheer observation tells us that in order to use under, we need a confined space with a top and sides. In other words, under calls for a controller, controlee, and power relation between the two.

Our argument for under, i.e., under involves a controller, controlee, and power relation between the two can give explanation to the peculiar usages of under listed in (24).

- (24) Preposition Under in OALD
- a. <directly below> under the North Sea
 - b. <lower level than> the room under his study
 - c. <lower than> under 18
 - d. <controlled> under his spell
 - e. <undergoing, in the state of> children under difficult circumstances

TR's in (24d) and (24e) are in a power relation with his spell in (24d) and difficult circumstances in (24e). It may be difficult at first sight to see a controller in (24a,b,c) but when we compare them with (24a', b', c') respectively, we can notice the existence of controllers.

- (24a)' below the North Sea
- (24b)' the room below his study
- (24c)' below 18

(24a) hints something mysterious hidden in the sea, while (24a') simply indicates where the sea is; also (24b) suggests some influence from his study and indicates something furtive about the room, while (24b') simply indicates the position of the room.

Adverbial under's can also be explained by our argument of recognizing a controller, controlee, and a power relationship between the two.

- (25) Adverbial Under in OALD
- a. <directly below> weaving the body through crossbars, over and under
 - b. <under water> he was floating for some time but suddenly went under

We can infer some obstacles in (25a), and we can guess that he was caught in the control of water in (25b).

Our argument can also describe the reason why fixed phrases including a prepositional subject involves under not down: such idiomatic expressions need a location that is explicit, which under not below involves.

Above discussion has shown that under involves a confined space with a controller, controlee, and a power relationship between the two.

Summary of the Semantics of Down and Under

Section 3 has summarized what we have argued about the semantics of down and under in Hanazaki and Hanazaki (2018). We have argued that, instead of the common belief that down implies a movement downwards, while under shows a static place of underneath, we have argued that the former, i.e., down, depicts the final lower position of a thing in question after an action is carried out, while under depicts a confined space underneath with a controller and controlee with some power between the two.

With these observations, we move on to the difference between the English preposition and Japanese postpositions.

Another Factor Making it Difficult for the Japanese EFL Learners to Learn Prepositions: The Difference in Nature between Prepositions and Postpositions

As we have seen in section1, there has been a long disagreement on whether prepositions depict a movement or static places. And section 3 has argued that down and under depicts a static place although at first sight, they seem to differ in whether they denote a motion or a static place. Rather, we have argued that under and down both depict a static place, however differ in that the former is a location after a change has occurred, while under shows that something is located in a place underneath with a controlled power. In other words, both of them denotes a static locational relation between two things.

When we look at Japanese postpositions, a completely different picture emerges.

Let us look into this with examples. As we have seen in (7) and (8), now repeated as (26) and (27), both down and under are translated as SHITA-NI, a noun that indicates a lower place, SHITA, with a postposition of NI.

(26) Kare-wakaidan-wo shita -ni it - ta. (=7) (translation of (1))
 He-TOP stairs-Obj down-POST go-PAST
 "He went down the stairs"

(27) Kare-wapuresya-no shita-niiru (=8) (translation of (2))
 He -TOP pressure-GEN under-POST be
 "He is under stress"

If we are right in arguing that down and under denotes a relationship between two things and one is lower in space, down and under are close to SHITA in Japanese. Then what is NI?

The following (28) is the list of usages of NI according to a Sugai (2007)

- (28) The usages of NI according to Sugai (2007)
- a. <Direction> Uchigawa-nimageru
 Inside-NI bend
 "bend inwards"
 - b. <Goal> Kabe-ninageru
 Wall-NI throw
 "throw at the wall"
 - c. <Point in contact> Te-niTsuku
 Hand-NI stick
 "stick to hand"
 - d. <Point in Convergence> Supu-niIreru
 Soup-NI mix
 "put it into the soup"
 - e. <Objective> Shokuji-niiku
 Dinner-NI go
 "go to dinner"
 - f. <Point of transfer> Kodomo-niOshieru
 Child-NI teach
 "teach children"
 - g. <Element> Saino-niMichiru
 Talent-NI filled up
 "is full of talent"
 - h. <Result> Sanagi-ninaru
 Chrysalis-NI become
 "has become a chrysalis"
 - i. <Experiencer> Taro-niWakaru

- j. <Starting point> Taro-NI understand
"Taro can understand"
Tomodachi-niKariru
Friend-NI borrow
"borrow from a friend"
- k. <Agent> Ryoshin-nihantai-sareru
Parents -NI oppose-PASSIVE
"opposed by the parents"
- l. <Cause> Atsusa-ni Ki-wo Ushinau
Heat-NI mind-OBJ lose
"lose conscious because of the heat"
- m. <Time> Goji-niShugosuru
5'o'clock- NI get together
"get together at 5 o'clock"

As can be seen in (29), the meanings of NI vary so much, even including those that seem to be the opposite in meanings, i.e., <Cause> (l) and <Result> (h), and <Starting point> (j) and <Goal> (b), and it also includes some usages that seem to have no relation to other meanings at all such as <Time> (m). But we can explain all those usages if we argue that NI shows the goal from the speaker's point of view, i.e., if we include the speaker's ego-centric point of view in the picture.

This idea is close to what Langacker calls the objective point of view and subjective point of view. Using the following two sentences, Langacker explains that the speaker's viewpoint sometimes is off-stage (29a), and sometimes on-stage (29b). (The speaker's point of view is indicated by G in Figure 6)

- (29) a. Vanessa is sitting across the table from Veronica.
b. Vanessa is sitting across the table. (Langacker 1990:17-20)

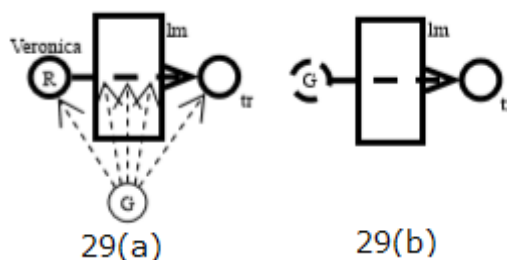


Figure 6: Two Ways of Conceptualization (Langacker 1990:18)

This Langacker's argument for acknowledging two ways of conceptualization and admitting the on-stage interpretation of the speaker in one way of conceptualization can give explanation to our situation of NI, i.e., the goal from the speaker's point of view.

We can interpret the noun with NI as the <Agent> (k) in the sentence with hantai-sareru (beingopposed) (30a), but we cannot interpret the noun with NI as the agent with hantai-suru (oppose) (30b). If Sugai (2007) is right and NI has <Agent> sense, we must be able to interpret (30b) in the sense that the noun with NI, i.e., parents, is the agent. However, (30b) is only interpretable in the <Direction> (a) or <Goal> (b) meaning, not <Agent> meaning. (* indicates that the sentence cannot be interpreted in that way)

- (30) a. Ryoshin-nihantai-sareru
parents -NI oppose -PASSIVE
"I am opposed by my parents" <Agent>
- b. Ryoshin-nihantai-suru
parents-NI oppose-do
"*Parents oppose against me" * <Agent>
I oppose against my parents <Direction><GOAL>

This is explainable if we introduce the speaker's ego-centric point of view into the picture and argue that NI shows the goal from the speaker's point of view. (30b) is easily interpretable as the goal. I, the subject, oppose the noun with NI, i.e., parents. On the other hand, in (30a), the speaker, who is presently in the state of being opposed and looking for the cause of this present situation, is on-stage and if we construe the scene from the point of view of the speaker, then the noun with NI, i.e., parents, is the goal of the mental scanning, hence (30a) seems to have the <Agent> sense, while it is actually the goal of the speaker's mental scanning.

In the same sense, we can interpret the noun with NI as the <Starting point> (j) in the sentence with kariru (borrow) (31a), but we cannot do so within the sentence that has kasu (lend) (31b). And we can explain the situation if we introduce the speaker's ego-centric point of view.

- (31) a. Kare-ni hon-wo kariru
 he- NI book-OBJ borrow
 "borrow a book from him" <Starting point>
- b. Kare-ni hon-wo kasu
 he-NI book-OBJ lend
 "*he lend a book to me" *<Starting point>
 "I lend him a book" <Goal>

In (31b), NI shows the goal from the speaker's point of view, hence the noun with NI, i.e., Kare (he), is interpreted as the goal. In the case of (31a) with borrow, the book "comes from" the person who is lending the book, hence it may be classified as <Starting point> from an objective point of view, but from the speaker's ego-centric point of view, the lender is the goal of the speaker's mental scanning. In other words, in an objective point of view, the lender may be the starting point, but for the borrower, i.e., the speaker, the noun with NI is the goal of mental scanning.

The <Time> (m) meaning is also explainable if we add the speaker's subjective point of view into picture. We can say he "came to me" (kuru) at 5 o'clock using NI as in (32a), i.e., goal time, but we cannot say he "leaves from where the speaker is" (iku) at 5 o'clock, the starting time, as in (32b). Once again, it shows that the usage of <Time> (m) can only be used when we introduce the ego-centric viewpoint and interpret the noun with NI as the goal location.

- (32) a. Kare-wa go-ji-ni kuru
 he-TOP 5o'clock-NI come
 "He comes at 5 o'clock" <time> as goal
- b. *Kare-wa go-ji niiku
 he-TOP 5o'clock-NI go
 "*He leaves at 5 o'clock" *<time> as starting point

With these observations, we can safely say that NI shows the goal from the speaker's point of view. Some usages seem to be the starting point, but when we add the speaker's subjective point of view in the picture, all the usages seem to be the goal point in the sense that the speaker is moving towards the goal or, from the ego-centric point of view, the point is the end point of the mental scanning the speaker carries out.

This shows a very different picture from the prepositions. In the case of prepositions, the word in question only shows the location of two things in question from an objective point of view, the speaker is not involved in deciding the location. In the case of down and under, one thing is underneath another thing in question, in which the speaker's point of view plays no role. On the other hand, in the Japanese postpositions, the speaker's point of view is always involved. In the case of NI, the noun with NI is located as the goal from the speaker's point of view. Hence, we can see that the English prepositions and the Japanese postpositions are completely different in nature whether the speaker's ego-centric point of view is involved or not.

A Proposed Modular-Style Material for EFL Japanese Learners to Fully Understand Down and Under

Although Japanese education has begun to place a special emphasis on the importance of English education, in reality, English proficiency of the Japanese college students has not met its expectation. One solution may be to increase the number of English classes, which is difficult because of the time constraint. In such situation, we need something that is helpful to students who try to improve their English outside of class. We propose a modular-style material which has the following three characteristics: materials (a) that can be studied with ease outside classroom; (b) that have some mechanism that the students think it is worth studying; and (c) that the students find interesting.(cf. Hanazaki and Hanazaki 2015)

In the following, we will propose a modular-style teaching material for Japanese EFL learners to fully understand down and under

Materials that Can be Studied with Ease Outside Classroom: Modular Style Material

With the time constraints and with the students' unevenness of the English abilities, we find modular-style materials very effective. One of the reasons that they are useful is that each modular material focuses on one word or grammar which can be easily learned by the students who are not very good at English. Another reason that they are effective is that they can choose the modular materials necessary

for each student from the list of materials that are uploaded on the moodle system. This makes it possible to overcome the problem of restricted learning hours in English classroom as well as the unevenness in the students' ability.

Figure 7 is the webpage where the students can find the catalogue of the uploaded grammatical items. We are still in the process of making more modular-style teaching materials, and more are to come, so that the students can study any item that they feel the need for.

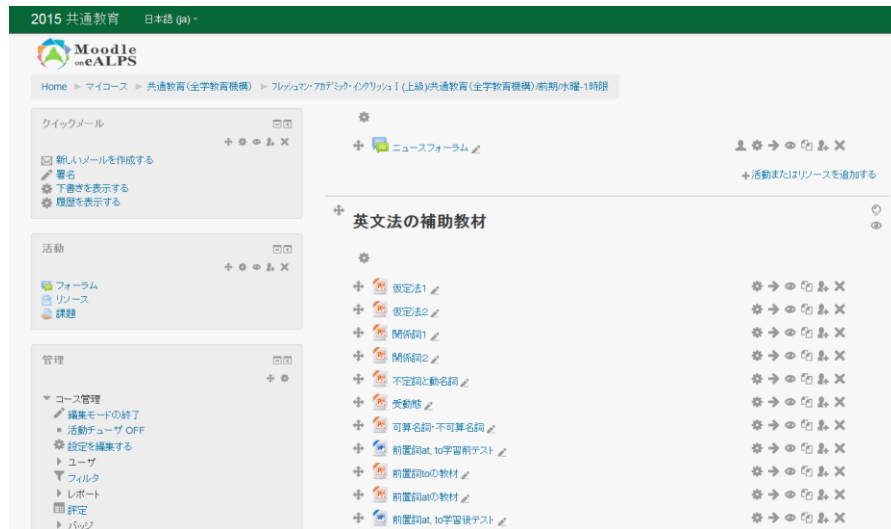


Figure 7. The Table of Contents Page of the Material

Mechanism for Motivating Students: Tests Before and After Learning the Material

We have carefully designed that each modular material has a pre-test as well as a post-test. The pre-test allows the learners to realize fully which usages they have not yet mastered, and makes the students pay attention to those usages. Also, the post-test enables the learners to focus on learning the material to prepare for the post-test.

Below are the pre- as well as the post-tests. (Instructions are given in Japanese.)



Figure 8. Pre-Test



Figure 9. Post-Test

Interesting Material: Materials based on Cognitive Linguistics as well as Providing Comparison with Japanese

We designed the material to be interesting by not only making the students do some practice but through the following two mechanisms: (1) try to give an explanation on WHY that linguistic phenomenon in question exists, a basic concept that Cognitive Linguistics strives; and (2) compare the usages of down and under with the Japanese counterparts, i.e., SHITA-NI, -DE and -HE. We have made the material with the belief that if the material makes the learners "remember" various usages through tests such as fill-in-the-blanks, less motivated students may not find it interesting to go through the material. We have

adopted the explanation style of WHY it is that the grammatical item in question is used in such and such way; in the case of down and under, the material explains all the usages of the two words based on the arguments in Section 3 and 4 of this paper. Specifically, the material tries to drive out the notion that down depicts movement, while under denotes a static place, and shows that down only depicts a position in space after an action or a change has been carried out beforehand, and under needs a confined space. Also, it encourages the learners to look from an objective point of view, not from an ego-centric point of view, showing the differences between English prepositions and Japanese postpositions. Below is a page of the material for down.

まとめ

話者が空間の低い位置と認識する最終的な場所を表すのがdown！

down the Thames テムズ河の**下流**に
 She lives just down the street.
 通りの**ちょっと先**に住んでいる
 down the ages 太古以来(昔からの時の流れを考え、
時が進んだ先がdown)
 Sail down the Sea of Japan 日本海を南下する

辞書に書いてある様々な意味は、
downそのものが持つ意味ではなく、
文脈から派生して出てきた**用法**と考えられますね！

Figure 10. One Page of the Material for Down

CONCLUSION

This paper has tried to answer the following three research questions now repeated as (33);

(33) Research questions of this paper

- (a) How do down and under differ in semantics? Do prepositions show static relationship and / or dynamic relationship between TR and LM? (based on Hanazaki and Hanazaki (2018)).
- (b) Why is it that English prepositions and Japanese postpositions do not show a one-to-one correspondence?
- (c) And based on the above observations, what is a better way to teach the difference between down and under to Japanese English learners.

And we have come to the following answers;

(34) Answers to the Research questions of this paper

- (a) Down and Under both denote a static location. They both show the spatial relationship of two things involved, and differ in that the former depicts a location after a movement or a change has made, and the latter shows the location of a thing in question that is confined in a power relation.
- (b) Down and Under depict the spatial location objectively, but Japanese corresponding words denote a location from the speaker's point of view. Japanese postpositions in question always involve an ego-centric point of view. In other words, the situation is captured from a subjective point of view. Hence there is no one-to-one relation between down and under with Japanese counterparts, hence the Japanese students may find it difficult to fully comprehend down and under.
- (c) We have suggested a modular-style material showing WHY down and under are used in each usage, with comparison with the Japanese postpositions.

The materials are still in their infancy, just started to be used among students, so future research on how effective these materials are will be our next work.,

REFERENCES

- Ando, S. (2005) *GendaiEibunpo Kogi [Lectures on Modern English]* Tokyo: Kaitakusha.
- BenesseCooperation (2003) *E-gate to English*. Tokyo: Benesse.
- Brugman, C. (1981) *Story of Over*. master thesis, UC-Berkeley. Berkeley, California.
- (1985) *The Story of Over: Polysemy, Semantics, and the Structure of the Lexicon (Outstanding Dissertations in Linguistics)*. London: Taylor & Francis.
- Dewell, Robert B. (1994) "Over again: image-schema transformation in semantic analysis" *Cognitive Linguistics* 5, pp. 351-381.
- (2007) "Moving Around: The Role of the Conceptualizer 111 Semantic Interpretation," *Cognitive Linguistics* 18, 383-415.
- Dirven, R. (1993) "Dividing up physical and mental space into conceptual categories by means of English prepositions" in C.Zelinsky-Wibbelt ed. *The Semantics of Prepositions: From Mental Processing to Natural Language*. Berlin: Mouton de Gruyter. pp. 73-97.
- (1995) "The construal of cause: The case of cause prepositions" in J. R. Taylor and R.W. KacLaury eds. *Language and the Cognitive Construal of the World*. Berlin: Mouton de Gruyter.
- Hanazaki, M. and K.Hanazaki (2008) "Semantics of Prepositions" presentation made at ELSJ International Spring Forum
- (2015) "Teaching Prepositions to Japanese EFL College Students; Bridging Theory and Practice", *IJLEAL (International Journal of Language Education and Applied Linguistics)* 2015, Vol3, pp.1-10.
- (2018) "The Semantics of Words that Denote Lower Places or Movements toward such Lower Places" *Proceedings of the 11th ICLEI Singapore 2018*. pp. 25-35.
- Hayano, Y. 2014 "An Analysis of English Prepositions and its Application to English Pedagogy" Master thesis presented to Shinshu University.
- Huddleston, R. and G. Pullum (2002) *The Cambridge Grammar of the English Language*. Cambridge: Cambridge U.P.
- Iwasaki, H. 2007. "On the Prepositional Subject Construction", *Tsukuba English Studies* 26. pp.109-126.
- Jackendoff, Ray (1973) "The Base Rules for Prepositional Phrases" In S. Anderson and P. Kiparsky (eds.) *A Festschrift for Morris Halle*. Holt, Rinehart and Winston, New York. pp 345-356.
- Kato, K. and M. Hanazaki (2006) "With-no Imi-ron" [Semantics of With] Oral presentation made at Modern English Association.
- Lakoff, G. (1987) *Women, Fire and Dangerous Things: What Categories Reveal about the Mind*. Chicago: University of Chicago Press.
- Langacker, R. (1987) *Foundations of Cognitive Grammar 1: Theoretical Prerequisites*. Palo Alto, CA: Stanford U.P.
- (1990) *Concept, Image and Symbol*, Mouton de Gruyter, Berlin
- (1991) *Foundations of Cognitive Grammar, Vol. 2: Descriptive Application*. Stanford: Stanford University Press
- Miller, G. A. and C. Leacock (2000) "Lexical representations for sentence processing", in Yael Ravin and Claudia Leacock (eds) *Polysemy: Theoretical and Computational Approaches*. Oxford: Oxford U.P. pp.152-160.
- Otani, N. (2013) *A Cognitive Analysis of the Grammaticalized Functions of English Prepositions: From Spatial Senses to Grammatical and Discourse Functions* Tokyo: Kaitakusha.
- Sugai K. (2007) "Kakujoshi Ni-no ToitsutekiBunseki-niMuketaNinchigengogakuteki-apurochi" [A Cognitive Approach Aiming to Analyze Postposition NI] *SEKAI-no NIHONGOKYOIKU* 17. pp.113-135.
- Tyler, A. and V. Evans (2003) *The Semantics of English Prepositions: Spatial Scenes, Embodied Meaning and Cognition*. Cambridge: Cambridge U. P.
- Wittgenstein, L. (1953) *Philosophical Investigations*, Blackwell, Cambridge, MA.
- Zelinsky-Wibbelt, C. (1993) *The Semantics of Prepositions: From Mental Processing to Natural Language Processing*. Mouton de Gruyter, Berlin
- Datasource
COCA: Corpus of Contemporary American English available at <https://corpus.byu.edu/COCA/>
NOW: Corpus of News on the Web available at <https://corpus.byu.edu/now/>
OALD: Oxford Advanced Learners' Dictionary
Cobuild