

**Development of
Japanese Learners' EFL Communication Ability and
Cognitive Differences of Tense-and-Aspect Systems between
Japanese and English**

Yutaro TAKAHASHI and Keiko UEHARA

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Yutaro TAKAHASHI¹⁾ and Keiko UEHARA²⁾

1) Takasaki Municipal Kita Elementary School Takasaki, Gunma 371-0067, Japan

2) Department of English, Faculty of Education, Gunma University, Maebashi, Gunma 371-8510, Japan

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1. Introduction

The major goals of this study are to investigate possible difficulties associated with the cognitive differences between the tense-and-aspect systems of English and Japanese and to consider how to apply information obtained in that investigation to the development of Japanese learners' communication abilities using English as a Foreign Language (hereafter, EFL). To attain these goals, a questionnaire survey and an eye-tracking experiment were carried out so as to obtain information about (a) the types of cognitive differences between the tense-and-aspect systems of English and Japanese, and (b) the types of errors frequently observed in Japanese EFL learners' use of English tense and aspect.

It is a well-known fact that the English and Japanese languages are linguistically very different from each other. Differences between these languages are observed in every linguistic aspect and are considered to cause many difficulties for Japanese EFL learners in the course of developing practical communication abilities. One such difference is how tense and aspect are cognitively acknowledged and used in each of these languages. Traditional Japanese ways of teaching/learning English focused only on form and meaning, as represented by the Grammar-Translation Method. In contrast, our contemporary ways of teaching/learning English include not only form and meaning but also usage to develop the ability to exploit English as a communication tool. Since tense and aspect play very important roles in communicating with others in any language, it is vital for the second/foreign language learner to adequately acquire how to use them. For this reason, it is of particular interest for us to obtain information pertaining to (a) Japanese EFL learners' cognition of the English tense-and-aspect systems and (b) the types of difficulties they may experience, so as for us to apply such information to make our EFL teaching/learning more effective.

In what follows, we first introduce the theoretical background of this study, reviewing earlier studies on the tense-and-aspect systems of English and Japanese (Section 2), then report the results of a questionnaire survey and an eye-tracking experiment (Sections 3 and 4, respectively), and finally summarize this study (Section 5).

2. Tense and Aspect in Cognitive View of Grammar

This study bases its theoretical background on cognitive grammar, which was derived from cognitive linguistics (see Lakoff (1987) and Langacker (1987), among others). Cognitive grammar looks at language in such a view as how people construe situation/context in which language is used and how they actually use language. In learning how to use English as a tool for communication, it is crucial for the Japanese EFL learner to pay attention to the situation/context of language use and the function of language² (MEXT 2008a, 2010). In this sense, the above cognitive grammatical view fits nicely with the path Japanese EFL education has recently been attempting to take.

Under such a cognitive-grammatical view, the tense-and-aspect systems of the English and Japanese languages contrast in the way described below in (1a, b), where it is assumed that there are three tenses (present, past, and future³) and four grammatical aspects (simple, progressive, perfect, and perfect progressive).

- (1) a. When English is used, the three tenses and four grammatical aspects are combined to make 12 combinations, each of which creates distinctive meaning; and this is called the tense and aspect system (Celce-Murcia & Larsen-Freeman 1999).
- b. Japanese has only four fundamental combinations of tense and aspect, “-*suru*,” “-*shita*,” “-*shiteiru*,” and “-*shiteita*” (NINJAL 1985). In particular, “-*shiteiru*” (“-*teiru*”) has many functions.

The differences between the two languages shown in (1a, b) — the 12 combinations in English and the 4 combinations in Japanese — often creates difficulties for Japanese EFL learners when using the English tense-and-aspect system. The much smaller number of tense-and-aspect combinations in Japanese than in English may cause confusions because English sentences with different tense-and-aspect combinations can result in the same Japanese translation. Such imbalanced correspondences between the tense-and-aspect systems of the two languages often create serious difficulties for Japanese EFL learners. In this study, we consider two typical sets of such, as given in (2a, b), and discuss why these sets are problematic for Japanese EFL learners in Sections 2.1 and 2.2, respectively.

- (2) a. simple past sentence *versus* present perfect sentence
- b. present perfect sentence that denotes continuity *versus* present perfect progressive sentence

2.1 Simple Past versus Present Perfect

According to Twadell (1960), present perfect has the characteristic of “current relevance”, which simple past does not have. If the tense is present tense, then the grammatical aspect has to do with present situations. Langacker (1991) also points out this fact, comparing the two sentences in (3):

- (3) a. Have you seen the pandas at the zoo? (Langacker 1991: 212)
- b. Did you see the pandas at the zoo? (Langacker 1991: 212)

The sentence in (3a) is written in present perfect tense and has current relevance, whereas the sentence in (3b) is written in simple past tense and does not have current relevance. Thus, the difference between these two sentences is that, in sentence (3a), the pandas could still be present at the zoo, while in sentence (3b), they could no longer be present at the zoo.

When an English simple past sentence and a present perfect sentence are translated into Japanese, their Japanese translations often look and sound similar to each other because they tend to share the same surface form “-*ta*”, which is frequently used to mean simple past. The two sentences in (3a, b) can be translated into the same Japanese sentence as in (4)⁴.

- (4) Anata-wa sono doobutsuen-de panda-o mi-mashita-ka?
 you-top the zoo-at pandas-Acc see-past-Q

This may in turn mean that it is rather difficult for Japanese EFL learners to understand and distinguish between the existence and non-existence of current relevance and to appropriately use the simple past form and the present perfect form in communicating with others.

2.2 Present Perfect *versus* Present Perfect Progressive

The present perfect and the present perfect progressive forms in English can be used to denote continuity. The difference between these two forms is that the progressive aspect is added to the present perfect progressive form, creating a semantic difference between the two combinations, as indicated in the parentheses in the two examples in (5): While the sentence in (5b) emphasizes that the action of teaching is completed, it is implied that the action continues into the future in the sentence (5a).

- (5) a. I have been teaching for 25 years. (And I can't imagine doing anything else.)
 b. I have taught for 25 years. (So now it's time to think about doing something else.)

If the above two sentences are translated into Japanese, it is likely that they will be translated as the sentence given in (6):

- (6) Watashi-wa 25 nenkan oshie-tsuzukete-iru.
 I-Top 25-years teach-keeping-am

Just like the distinction between the simple past and present perfect forms discussed in Section 2.1, it is plausible that Japanese EFL learners may experience difficulties in understanding the distinction between the present perfect and present perfect progressive forms and using them appropriately when communicating with others.

For the above reasons, we decided to investigate (a) Japanese EFL learners' comprehension of the English tense-and-aspect systems and (b) the types of difficulties Japanese EFL learners may experience, in terms of the distinctions between simple past sentences and present perfect sentences, and between present perfect sentences that denote continuity and present perfect progressive sentences.

2.3 Four Types of Verbs, Their Semantic Features, and Co-occurrence Restrictions between Verbs and Prepositions

In addition to (2a, b), our investigation considers verb types and co-occurrence restrictions in terms of verb types and prepositions in English as shown in (7).

(7) Verb types and co-occurrence restrictions in terms of verb types and prepositional phrases

Because the co-occurrence restrictions in English involving verb types and prepositions are very strong, Japanese EFL learners may experience further difficulties in acquiring the English tense-and-aspect system. To become familiar with co-occurrence restrictions, it is necessary for EFL learners to understand the different types of verbs and their semantic features, which are deeply related to the tense-and-aspect system of English. For this reason, the questionnaire survey and experiment performed in this study included (7) in addition to the items in (2a) and (2b).

The English tense-and-aspect system works by inserting verbs into grammatical aspects. The verbs can be categorized into four types depending on the semantic features of each verb. These four verb types are “stative”, “achievement”, “accomplishment”, and “activity”, and semantic features which characterize those verb types are [+/- stative], [+/- telic], and [+/- momentary]. Table 1 below shows a summary of the semantic features of the four types of verbs that are advocated by Kearns (2011: 158). Also, the relationship between the four types of verbs and their semantic features are comprehensibly illustrated with examples in Ando (2005: 72), as shown in Figure 1 below, where “A”, “B”, “C”, and “D” correspond to the semantic features of each of the four verb types, “stative”, “achievement”, “accomplishment”, and “activity”, respectively.

Table 1 Semantic Features of Verbs (Kearns 2011: 158)

Type of Verb	Stative	Telic	Momentary
Stative	+	-	-
Achievement	-	+	+
Accomplishment	-	+	-
Activity	-	-	-

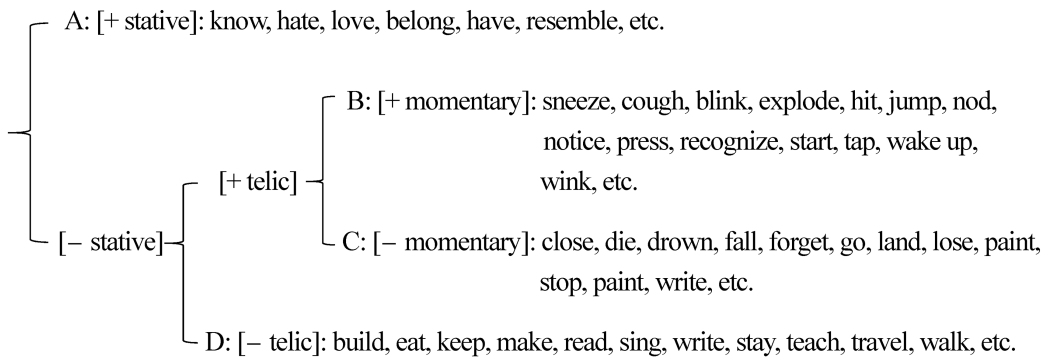


Figure 1 Category of Verbs (Ando 2005: 72)

It is often said that the acquisition of English prepositions is not easy for learners with any L1 background, and Japanese EFL learners are no exceptions to this. So, it is expected that the strong co-occurrence restrictions in English involving verb types and prepositions may cause further difficulties for them. Let us now consider such co-occurrence restrictions: First, [+stative] verbs cannot appear in the progressive forms like **I am loving Mary*. Second, the semantic features of [+/-telic] verbs show whether or not the denoted action has a goal, and there is a co-occurrence restriction between verb types and prepositions – [+telic] verbs cannot occur with the preposition *for*, which indicates duration of time, while [-telic] verbs cannot co-occur with the preposition *in*, which expresses a specific point in time. Finally, differences in the [+/-momentary] feature can be observed by comparing the progressive forms of sentences – sentences with a [+momentary] verb express repetition of action like *He was jumping for joy*. In contrast, sentences with a [-momentary] verb express the process of approaching a goal like *The bus is stopping*.

This section introduced the theoretical background of this study and discussed our motivations in investigating the difficulties that Japanese EFL learners may experience in terms of the English tense-and-aspect system, which is very different from the Japanese tense-and-aspect system. Japanese EFL learners' cognition of the three items in (8) is focused on in the questionnaire survey and eye-tracking experiment reported on below.

- (8) a. Simple past sentences *versus* present perfect sentences
 b. Present perfect sentences that denote continuity *versus* present perfect progressive sentences
 c. Verb types and co-occurrence restrictions in terms of verb types and prepositional phrases

3. Questionnaire Survey on Japanese EFL Learners' Cognition of the English Tense-and-Aspect System

To obtain information about (a) Japanese EFL learners' cognition of the English tense-and-aspect system and (b) the types of difficulties they may experience, a questionnaire survey was carried out with a total of 25 informants. These informants consisted of two groups, an English-speaker Group (N=10) and a Japanese EFL-learner Group (N=15). While the informants in the English-speaker Group were international students from the United States and professors at Gunma University, those in the Japanese EFL-learner Group were students majoring in English education at Gunma University. The English-speaker Group served as a control group and provided information about English-speakers' cognition, from which how different the cognition of Japanese EFL learners was analyzed.

As shown in Table 2 below, the questionnaire consisted of three parts: Part I examined semantic cognition of the items listed above in (8a-c); Part II focused on the cognition of continuous actions involving the present perfect and present perfect progressive tenses; and Part III investigated to what English expressions the Japanese “*-te iru*” construction was considered to correspond. Both groups responded to Parts I and II, while only the Japanese EFL-learner Group responded to Part III, as indicated with the symbols “✓” and “–” in Table 2.

Table 2 Three Parts of the Questionnaire

Part		English-Speaker Group	Japanese EFL-Learner Group
I	Cognition of Semantic Difference	✓	✓
II	Continuity of Actions	✓	✓
III	Japanese “-te iru” Construction	—	✓

In Part I, *Cognition of Semantic Difference*, informants were asked to explain the semantic differences between 14 minimal pairs of sentences, such as (a) *I loved Mary for five years* and (b) *I have loved Mary for five years*. Unlike English-speakers’ relatively consistent understanding, the results from the Japanese EFL learners showed the following: First, Japanese EFL learners could not interpret the “current relevance” feature of the present perfect tense when achievement verbs like *explode* were used. Second, when [+telic] verbs appeared in the sentence, it was difficult for Japanese EFL learners to differentiate between the meanings of the present perfect and present perfect progressive tenses: For example, the sentences in (9) below both contain the accomplishment verb “remodel”; the remodel of Mike’s house is completed in the sentence in (9a) but not in the sentence in (9b).

- (9) a. Mike has remodeled his house.
b. Mike has been remodeling his house.

Finally, the meanings of activity verbs in the present perfect and present perfect progressive forms were difficult for Japanese EFL learners to distinguish from each other. For them, it was rather difficult to imagine situations in which the action represented by present perfect progressive will continue into the future, in comparisons with their counterparts which contained the present perfect form of the same verbs. The minimal pairs in (10) and (11) are examples of such, where the (a) sentences contain the present perfect form and the (b) sentences contain the present perfect progressive form:

- (10) a. It has rained for three hours.
b. It has been raining for three hours.
- (11) a. I have taught English for twenty years.
b. I have been teaching English for twenty years.

In Part II, *Continuity of Actions*, informants were asked to choose the more appropriate phrase for expressing continuity of actions between (1) present perfect and (2) present perfect progressive in the brackets, as shown in the example material in (12):

- (12) I’m Mari Suominen, a furniture designer from Finland. [(1) I have studied design for many years. (2) I have been studying design for many years.] I like Japanese design, especially Japanese furniture. So I came to Japan three years ago. I have lived in Midori-shi since then.

The text in (12) was excerpted from New Crown English Series 3 (2012: 12), a junior high school English textbook authorized by MEXT. Brackets and “(1)” were first added to that text, and then the choice (2) created by the authors was inserted immediately after the sentence in (1). In this way, four more materials were created for this part. None of the informants had used nor looked at the textbooks used for these five experimental materials.

A summary of the results from Part II is presented in Table 3 below, where the target verb included in each material is listed in the column on the left, and “PP” and “PPP” indicate Present Perfect and Present Perfect Progressive forms of the target verb, respectively, from which informants were asked to declare their preferences. Note that only the English-speaking Group has an *Other* column, because to each of four items was one response (from different persons) that wrote “Unable to choose (1) or (2)”, although the choices given in the questionnaire were only two, (1) and (2). The frequency of responses in Table 3 is presented in percentiles to show the differences between the two groups easily. As shown in the table, English speakers tended to choose the present perfect progressive over the present perfect in most questions, whereas Japanese EFL learners chose present perfect over present perfect progressive in four questions out of five.

Table 3 Choices between the Present Perfect and the Present Perfect Progressive

Target Verb ¹	Native Speakers of English (N=10)			Japanese EFL Learners (N=15)	
	PP	PPP	Other	PP	PPP
enjoy	20%	80%	0%	27%	73%
study	50%	40%	10%	67%	33%
live	20%	70%	10%	73%	27%
live	0%	90%	10%	93%	7%
work	0%	90%	10%	53%	47%

¹ The texts containing each of the verbs listed here were adapted from junior high school English textbooks authorized by MEXT. These texts were from Total English 3 New Edition (2012: 34) for *enjoy*, New Crown English Series 3 (2012: 12) for *study*, Sunshine English Course 3 (2012: 17) for *live*, and New Horizon English Course 3 (2012: 15, 17) for *live* and *work*.

Finally, in Part III, *Japanese “-te iru” Construction*, only Japanese EFL learners were asked to translate 14 Japanese “-te iru” sentences into English. This part primarily aimed to examine whether or not Japanese EFL learners have difficulty in using English present perfect progressive forms. The Japanese EFL learners were presented with the sentences in (13a) and (14a), and they were asked to translate each underlined part into English. The sentences in (13b) and (14b) were expected English translations for (13a) and (14a), respectively — (13a) is a “-te iru” sentence containing an accomplishment verb whose English counterpart should be in present perfect progressive form, as in (13b), because the picture is not completed; and (14a) is a “-te iru” sentence containing an activity verb, whose English counterpart should also be in present perfect progressive form, as in (14b), because the action is in progress now and will continue in the future as well. Of the 15 EFL learners, only five were able to use the appropriate English form for (13a), and only three were able to use the appropriate English form for (14a).

- (13) a. *Chichi-wa ichinen-ijou e-o kaite-iru. Kansei-wa raishuu-da-souda.*
 b. My father has been painting a picture for more than one year. He says he will complete it next week.
- (14) a. *Watashi-wa kotoshi kappatsu-ni hon-o yonde-iru. Moo go-satsume-da.*
 b. I have been reading books actively this year. I am reading the fifth book now.

To summarize, the major information obtained through this questionnaire survey is as follows: First, the feature of current relevance (Langacker 1991) associated with present perfect was difficult for Japanese EFL learners to construe when an achievement verb was presented in that form, as in *Mt. Asama has exploded* (recent past). Second, native speakers of English chose present perfect progressive over present perfect to express continuity of actions. Under the current Course of Study for English (MEXT 2008a, 2010), the present perfect progressive is introduced not at the junior high school level but at the high school level; the introduction of the present perfect form at the junior high school level typically emphasizes three functions: experience, completion, and continuity. Such a juxtaposition in the introduction of the present perfect and present perfect progressive forms might have resulted in difficulties for the informants in the Japanese EFL-learner Group in understanding and using the appropriate combinations of the English tense-and-aspect system. Finally, the present perfect and present perfect progressive forms of accomplishment verbs were semantically ambiguous for native speakers of Japanese: For example, sentences such as *Mr. Smith has written a book this year* (completed action) and *Mr. Smith has been writing a book this year* (ongoing action) can be translated into the same Japanese sentence *Sumisu-sensei-wa kugatsu-kara hon-o okakini-natte-iru*. In this way, the Japanese “-te iru” form has many functions, and its appropriate meaning is determined by the internal and/or external context of the sentence containing that form. The errors observed in the questionnaire, overall, are considered to give us helpful information about teaching/learning English tense-and-aspect system. Unlike traditional Japanese EFL grammar instructions, which tend to introduce English sentence structure to the learner together with one Japanese counterpart, it is important to teach/learn not only the form but also the core meaning of each tense and aspect of English. This is because each tense and aspect in English has a strong core meaning unlike Japanese.

4. Eye-Tracking Experiment: Japanese EFL Learners’ Cognition of Co-occurrence Restrictions of English between Verb Types and Prepositions

The major goal of this eye-tracking experiment was to collect information about Japanese EFL learners’ cognition of co-occurrence restrictions in English between verb types and prepositions (see the category of verbs (Ando 2005; Kearns 2011) in Section 2.3), focusing on the two given in (15):

- (15) a. Verbs which have semantic features of [+telic] (i.e., achievement verbs and accomplishment verbs) cannot co-occur with the preposition *for*.
 b. Verbs which have semantic features of [-telic] (i.e., stative verbs and activity verbs) cannot co-occur with the preposition *in*.

For the experiment, eight grammatical/ungrammatical minimal pairs of sentences (a total of 16 sentences) were created, as exemplified by the sentence pair in (16):

- (16) a. Mary lived in Nagoya for two years.
 b. *Mary lived in Nagoya in two years.

The sentence in (16a) is grammatical because the stative verb *live* can co-occur with the preposition *for* whereas its counterpart in (16b) is ungrammatical because *live* cannot co-occur with the preposition *in*.

In the experiment, a total of 26 subjects participated to make two groups: English-speaker Group (N=10) and Japanese EFL-learner Group (N=16). Each subject was asked to sit in front of the display of an eye-tracking machine, Tobii TX 300, and read each English sentence presented on the display. The camera attached to the display tracked and recorded each subject's eye movements during the task.

Before the experiment, *Areas Of Interest* (hereafter, AOI) were decided on for later data analyses in the verb and preposition positions in each test sentence, as shown in Figure 2:

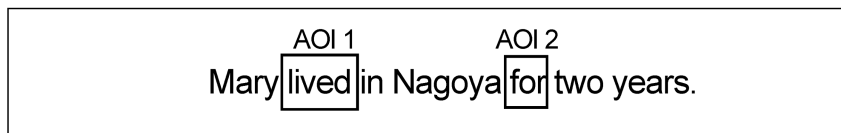


Figure 2 Example of AOI Placed on Verb and Preposition in Sentence

As illustrated in Figure 2, the two AOIs, *live* and *for*, were placed for the grammatical sentence in (16a) above, and those were also placed on *live* and *for* its ungrammatical counterpart in (16b). Note that the two AOIs were set invisibly, so that the task asked of the subject was to read the simply-typed (with no highlighting, italicizing, bolding, underlining, and so on) sentence he/she saw on the screen and tried to understand its meaning. The idea behind placing the AOIs on the verb and preposition was that sentences are difficult to process when the verb and preposition do not agree grammatically, and that differences in the subject's eye-movements involving those AOIs would be observed between grammatical sentences and their ungrammatical counterparts. Thus, it was expected, for example, that the sentence in (16a) would be processed faster, i.e., more easily, than (16b), and that such differences would be indicated in the subject's eye-movements.

The data were analyzed based on two measures for verbs, Total Fixation Duration and Visit Count, and one measure for prepositions, First Fixation Duration. Fixation Duration and Visit Count measured how long the subject gazed at an AOI and how many times the subject saw an AOI, respectively. Table 4 presents a summary of means of First Fixation Durations at the preposition by milliseconds.

Table 4 Mean of First Fixation Duration at Preposition

Type of Verb	Preposition	Mean ¹ (Standard Error)	
		Japanese EFL Learners	English Speakers
Stative Verbs (N=4)	for	159 (15)	147 (35)
	*in	142 (21)	191 (36)
Achievement Verbs (N=4)	for	129 (24)	205 (20)
	*in	185 (14)	151 (23)
Accomplishment Verbs (N=4)	for	108 (17)	180 (40)
	*in	142 (19)	151 (24)
Activity Verbs (N=4)	for	171 (25)	126 (17)
	*in	106 (19)	239 (39)

1 The unit here is milliseconds.

Analyses using the Linear-Mixed Effect Model (hereafter, LME model) showed no significant differences in processing verbs. However, significant differences were observed for prepositions: The English-speaker Group showed longer First Fixation Durations of prepositions when reading ungrammatical sentences of activity verbs than when reading their grammatical counterparts ($P=0.0057^{**}<0.01$). The same tendency was observed for the processing of prepositions with achievement verbs in the Japanese EFL-learner Group ($P=0.0341^{*}<0.05$). In addition, one tendency was observed in a numerical analysis: In all sentences, Japanese EFL-learner Group gained their First Fixation Durations at the preposition *in* longer than at the preposition *for*, while English-speaker Group showed opposite results. Given that the preposition *for* and *in* are related to [-telic] and [+telic], respectively, the above results of the experiment are considered, overall, to indicate that the Japanese EFL-learner Group failed to distinguish between [+telic] events and [-telic] events.

Despite our expectations, significant differences obtained in the analyses were limited this time only to the English-speaker Group's longer First Fixation Durations of prepositions in ungrammatical activity-verb sentences than that of their grammatical counterparts, and other results were not clear-cut. Further investigations are necessary, particularly about the combination of lexical items used in the sentence, with larger numbers of test items and subjects. Moreover, it was expected that the English-speaking Group would spend much longer times processing ungrammatical sentences in which the verb and preposition did not agree, but the results of the analyses failed to show that. Interestingly, the answers of the English-speaking Group in the grammaticality judgment test, which was given immediately after the eye-tracking experiment, did not always completely match the rules of co-occurrence restrictions (Ando 2005). At this point, it is speculated that this tendency might have reflected on the results of the experiment. It is also speculated that the subjects of the English-speaking Group might not have spent their time to (re-)confirm agreement of the verb and preposition once they noticed ungrammaticality of a sentence, due to its short length that could be read at a glance. More detailed investigations are necessary about these issues, as well, with larger numbers of test items and subjects.

5. Summary

This study aimed to investigate possible difficulties associated with the cognitive differences between the tense-and-aspect systems of English and Japanese through a questionnaire survey and an eye-tracking experiment. It also aimed to consider the application of the information obtained towards the development of Japanese EFL learners' communication abilities when using English.

Traditionally, Japanese EFL classrooms focused heavily on grammar instruction. As a result, the Japanese learner's attention tended to be inclined toward form-meaning correspondences between English and Japanese, disregarding the function of grammatical items and their usage. Moreover, such form-meaning correspondences tended to be instructed as if they corresponded in a one-on-one manner. Although grammatical ability is very important to develop accurate and fluent communication ability, there are also many other concerns. Even though many communicative classroom activities are performed, they may not be effective unless the above form-meaning one-on-one correspondence belief is completely changed.

In this study, one of the most typically different items, tense-and-aspect system, was focused on: Unlike the Japanese language, which has only four combinations of tense and aspect, English has three tenses and four grammatical aspects, which are combined into twelve combinations in actual use – and this difference creates difficulties for Japanese EFL learners in using the English tense-and-aspect system. The results of our questionnaire survey showed that (a) the feature of current relevance (Langacker 1991) associated with present perfect was difficult for Japanese EFL learners to construe when an achievement verb was contained in that form, and (b) the present perfect and present perfect progressive forms of accomplishment verbs were semantically ambiguous for native speakers of Japanese. Also, the results of our eye-tracking experiment showed that the Japanese EFL-learner Group failed to distinguish between [+telic] events and [-telic] events. Taken together, these results suggest that the current relevance feature of present perfect and the differences of continuity meanings between present perfect and present perfect progressive are difficult to understand. These difficulties may be overcome by understanding each core meaning and feature of English tense and aspect. Moreover, it is important for Japanese EFL learners to understand lexical aspects such as category of verb types, particularly the semantic feature of telicity: The difference of [+/-telic] is whether the action has goals or not. This has also to do with understanding core meanings. In conclusion, understanding core meanings of tense, grammatical aspect, and lexical aspect is crucial to using the English tense-and-aspect system correctly and appropriately.

It may not be an easy task to change the curriculum in regards to what grammatical items should be introduced, in what order, and when, but as long as the objective of our EFL education is to develop sufficient practical communication using English, it is crucial to revisit and change these issues, taking into account the differences between the English and Japanese tense-and aspect systems.

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Notes

1. The majority of the contents of this paper are based on the first author's unpublished Master's thesis, which was submitted to Gunma University in March 2016.
2. While the Courses of Study for Junior High School (MEXT 2008a) and High School (MEXT 2010) state the situation/context of language use and the function of language, that for Elementary School (MEXT 2008a) states the situation/context of communication and the function of communication instead.
3. Note that "future" is often treated as "future expressions", not as tense, unlike "present" and "past". Here, however, for the sake of simplicity of discussion, "future" is included in the same category as "present" and "past".
4. If the sentence in (4a) has an adverbial phrase, such as *many times* (frequency) or *already* (completion), then its corresponding Japanese sentence may have *mi-takotoga-aru* (denoting experience) or *mi-owatta* (see-finished) and become distinguishable from the sentence in (5).