日本人学習者の英語冠詞理解：第二言語としての英語における冠詞の学習と使用に関する予備研究

Japanese Students and their Grasp of English Articles
A Preliminary Study of L2 English Article Learning and Usage

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【要旨】

日本語は、多くの言語同様、冠詞を有さない。これは、日本語を母語とする学習者は、英語を学ぶ場合、新しい文法の法則をはじめから学習することを意味するため、学習者にとって難題となっている。今後、学習者の手助けとなるための英語学習法を考案するにあたって、本論文は、次年度から大学に入学する日本人高校三年生を対象として、冠詞をいかに理解し、どのように把握しているかについて調査した予備研究を紹介するものである。

調査に用いたのは、入学前教育として、英語の聞き取り（ディクテーション）課題だ。学習者の解答にみられる冠詞の聞き取り・書き取りの正確さと、課題全体の評価点とを統計学的に分析した。その結果、学習者は、評価点から判断するところの英語習得度が高ければ高いほど、冠詞も正確に記入していること、そしてその比例の度合いも極めて高いことが分かった。さらに詳しく分析したところでは、まず、文頭にある冠詞、特に定冠詞の the がもっとも正確に解答されており、文中・文末名詞修飾の冠詞はこれに比して漏れていたり別の単語に置き換えられたりすることが多かった。しかし、文中・文末であっても、定冠詞は不定冠詞よりも正確に解答されていることが多かった。これは、先行研究によると、冠詞を有さない他の言語を母語とする英語学習者でも同様であるが、日本で英語教育を受けた学習者の特殊な冠詞についての理解を示してもいる。

この双方において、どのように考えるべきか、日本語の特性等を視野に、いくつもの角度から考察を加えて、今後の研究の展望について述べる。

1．Introduction

L1 Japanese learners of L2 English face numerous difficulties in terms of

both vocabulary and grammar differences between the two languages. These challenges are not unique to L1 Japanese learners of English, and many L2 English learners from numerous other languages encounter similar problems. One area of particular interest to both teachers and researchers is the challenge experienced by learners of L2 English with acquiring and successfully employing the English article system. Recent research into this area has focused on numerous issues connected to article use by learners whose L1 does not feature an article system. Jarvis (2002) explores topic continuity and the use of English articles by L1 speakers of Swedish and Finnish, while Ekiert (2016) looks at the acquisition of English articles by Slavic speakers. Both studies take an extensive look at the background of the question of learning the English article system, how articles are handled in English, and the theoretical background to their examination. The current study, however, will focus on L1 Japanese learners and some apparent difficulties they encounter.

The article system is a feature of English that, while not strictly essential to communication, can be said to aid clarity and understanding for both speakers/writers and hearers/readers. In addition, according to Hultfors (1986-1987), while incorrect use of articles does not significantly impact understanding, correct use can lessen the impression of "foreignness" of the L2 speaker's use of language. This no doubt arises from the fact that articles in English are a common feature of many, if not most, sentences, and incorrect usage is a hallmark sign of a non-native speaker. As such, the mastery of articles, while not an absolute necessity for bare communication, should nonetheless be considered desirable by L2 English learners as well as made a priority by teachers.

The chief difficulty faced by L1 Japanese learners of L2 English in acquiring the English article system is no doubt its absence in Japanese, requiring students to learn the rules of usage and apply them with little referential basis in the L1. Beyond the strategies common to many learners of avoidance (not employing the use of articles at all, or infrequently) and overgeneralization (using articles even when inappropriate, or only using one kind of article), a number of methods Japanese students use to decide whether an article is warranted have been uncovered in Goto Butler (2002), which uses quantitative analysis to determine learner's understanding of the English article system and qualitative analysis to examine the strategies Japanese students develop in order to deal with the difficulties of using articles. The

chief finding of the qualitative analysis was that learners developed a variety of hypotheses regarding how and when to employ articles in English, and these hypotheses were tied to the proficiency level of the learner: "Lower proficiency learners were strongly influenced by a set of rules that they believed were given by teachers, textbooks, and so on. Those who realized that such rules did not work in all contexts formed various ad hoc hypotheses as a result of their efforts to grasp the article system." (p. 472) In contrast to this were the more proficient learners: "However, one could see a clear difference in metalinguistic knowledge of the English article system by higher proficiency learners in their detection of both SR and HK in dynamic contexts and their nonstatic notions of noun countability," SR being "specific referent", HK "hearer known", used as a basis to determine the appropriate article for a situation, as outlined in the Semantic Wheel in Huebner (1983).

It should be noted that while students do develop numerous strategies to deal with the English article system, these do not appear to cross over entirely into the realm of meaning. That is, articles appear to be viewed as an appendix to language usage, as opposed to units of meaning intrinsic to understanding. This no doubt derives from the fact that in Japanese articles are not present, even if words and grammatical structures with similar functions are. Further research into how L1 Japanese learners of L2 English view articles from the standpoint of meaning will be needed to more thoroughly uncover the answer to whether and at what stage articles cross the boundary from appendage to meaningfulness.

The present paper, however, will seek to explore the place of articles in the understanding of L2 English by L1 Japanese speakers. It is hoped that by gaining insight into how articles are treated by learners in a receptive capacity, namely in the context of a dictation exercise, some light may be shed on how articles are both recognized and understood by L1 Japanese learners.

2. Method and limitations

In order to further understand how L1 Japanese learners of L2 English understand and relate to articles, this paper will examine the analysis of results obtained from a dictation exercise given to high school students set to begin university the following academic year. The exercise was originally intended to serve as a review of the English they learned through three years middle school and three years high school education, as per the Japanese

governmental standards, as well as to expose students to a small degree of university level English. As such, it was not originally intended for research purposes, the problems of which will be discussed below.

The exercise consisted of 100 problems, each problem featuring one to two sentences of varying length and complexity. The problems were read aloud by the author and recorded onto CDs, which were sent to students along with a sheet for recording answers. For longer and more difficult problems, portions of the sentence were provided on the answer sheet. Although there was a deadline for submission, no restrictions were made on students as to when, where, or how many times the CD could be listened to. Completed exercises were returned to the university and were graded in such a way that one point was taken off per error in transcription, including spelling, up to ten points per problem, for a total of 1000 points for the exercise. The graded exercises were then returned to students and, at that time, they were asked for permission to use the exercise in the present research on condition of anonymity. 72 agreed.

To obtain data for this survey, students' answer sheets were examined individually to see where articles were missed. Misses were counted when no article was written, or were misinterpreted (such as writing "those" for "the") when present in the audio. Instances in which an article was written but was incorrect (such as writing "the" or "an" instead of the expected "a") were also counted as a miss. As already noted, overall scores were given out of 1000, with 10 points per problem, and one point deducted per error down to 0 per problem. Unanswered problems were automatically graded as 0.

There are several reasons for the selection of this exercise for examination. One is that the students have received exposure to English as a second language chiefly, or in large part, from middle and high school education within the Japanese education system. This lends two unique aspects to the results. First, students will generally have received at least six years of English language education, with some supplementation via after school education. The precise degree of education received by students beyond Japanese schools has not been examined. However, the base level of education received is believed to be similar. Second, these students have been chiefly exposed to and expected to learn the English language as dictated by the official guidelines of the Japanese Ministry of Education. These two aspects, while not explicitly necessary for examination of the results, lend nuance to understanding how L1 Japanese learners of L2 English who have been exposed

to the Japanese education system understand and relate to English, and in this case in particular, the article system. That is to say, this group of students will generally have had a similar level of exposure to English while also having learned it in a similar manner.

Another reason for the selection of this exercise for examination is that the size of the exercise provides a large base of information for looking at the overall understanding of the participants. The length of the exercise no doubt made it a daunting task for students to complete, and among the exercises examined, there are several places where students were not able to provide an answer for entire problems. Such instances are in the minority, however, and are not believed to have significantly affected the results.

Using an exercise of this nature has a number of problems with regards to accuracy in assessing student understanding of the English language. The exercise was not conducted in ideal experimental conditions, being completed by students outside a controlled environment. This opens the possibility to students not completing the exercise on their own, possibly employing the aid of other people to complete the exercise, or even using dictation software to transcribe the audio before copying it to their answer sheet (all answer sheets were hand written). At present, there is no clear reason to believe this has occurred, but the possibility remains. Another issue is the time devoted by each student to completing the exercise. While some students may have only taken a single pass at completing it, skipping problems that were not easily understood, others may have devoted large amounts of time to each problem. A blind questionnaire included with the exercise revealed that the majority of students (63%) who completed the exercise spent more than 5 hours on it. The entire audio recording used by students was just under thirty minutes, meaning that the majority of students did appear to have spent a large amount of time relistening to the recording. It is unclear, therefore, whether students who spent less time simply gave up on the exercise due to its difficulty, or if these were the ones who had the easiest time and simply finished quickly. It may be that students who spent extensive time were in fact the ones who struggled the most. In either case, the exercise can be said to serve as a measure of English language ability if only because, in any scenario, students are assumed to have been unaided in its completion.

Beyond questions of how the exercise was completed is the more basic one of the use of dictation for student evaluation. The history of the use of dictation in both instruction and evaluation is outlined in Stansfield (1985),

noting that dictation's validity "is so widely accepted that it is now recommended for use on locally constructed proficiency tests utilized for placement purposes" (p.126). Despite constant shifts in attitudes towards dictation as a valid measure of language ability and its use in instruction, this opinion of dictation appears to still be valid. Indeed, the general validity of dictation as attested to by Oller and Streiff (1975) is generally still seen to be valid (see Weir (2013)). As such, the use of both the overall score of the exercise and the examination of how articles were treated by students therein as a gauge of student ability and understanding is believed to be valid.

3. Results

The overall results were as follows. As noted, the total number of exercises examined (n) was 72. Overall scores had a mean of 659.6, attesting to the overall difficulty of the task and the general spread of abilities of students. Numbers of articles missed ranged from a low of 3 and high of 74 out of a possible 84, with a mean miss number of 30.4. Analyzing the trend in scores, the coefficient of correlation (r) between individual scores for the exercise and missed articles was found to be -0.94, showing a strong negative correlation. That is, the higher an individual's overall score, the fewer missed articles. While this correlation was expected, the degree of correlation was greater than anticipated.

Next, frequency of misses in the case of individual articles will be examined. The total number of "the" in the exercise not provided to students on the answer sheet came to a total of 65. The mean of "the" missed was 19.9. The mean miss rate as a percentage of total instances is 30%. "a" and "an" were examined together. Out of 19 total instances, the mean for misses was found to be 10.6, with a mean miss rate of 55.6%.

To examine the possibility that the position of the article within the sentence might affect the rate of misses, articles were categorized into initial (beginning of the sentence), final (modifying a noun in the final position in the sentence), and mid-sentence. Article type was also examined. Total articles in the three position, mean number missed, and the miss rate (mean miss number as a percentage of the articles per position) are given.

Articles in the initial position totaled 16, with a mean miss number of 1.2 and miss rate of 7.5%. There were 15 instances of "the" with a mean miss of 1.0 and miss rate of 6.8%, and only 1 instance of "a/an" and a mean miss

number of 0.2 and miss rate of 18.1%.

Articles in the final position totaled 19 with a mean miss number of 7.3 and mean miss rate of 38.5%. There were 11 instances of "the" with a mean miss number of 2.9 and miss rate of 26.6%, and 8 instance of "a/an" and a mean miss number of 4.4 and miss rate of 54.9%.

Mid-sentence articles totaled 49, with a mean miss number of 21.9 and miss rate of 44.7%. There were 39 instances of "the" with a mean miss number of 15.9 and miss rate of 40.8%, and 10 instances of "a/an" and a mean miss number of 6.0 and miss rate of 60.0%. To further examine mid-sentence articles, these were further divided into articles adjacent to nouns ("a tree") and those separated by other modifiers ("the lecture room"). For mid-sentence articles adjacent to nouns, there were 29 instances with a mean miss number of 12.1 and miss rate of 41.9%. For mid-sentences articles separated by modifiers there were 20 instances with a mean miss number of 9.8 and a miss rate of 48.9%.

4. Discussion

It is clear that higher proficiency in English for L1 Japanese students translated out to a lower rate of articles missed in the dictation exercise. Given that dictation is not merely a listening task, but one that calls upon numerous different skill sets, including the ability to anticipate grammatical structures, it appears on the surface that individuals with better L2 English skills are better able to recognize, identify, or otherwise include articles in English sentences. That is, even if students did not explicitly hear articles being used, there is the possibility that they recorded them anyway, since they would anticipate their presence in the sentence being recorded.

For article types, an average of 30% of "the" were missed, while 55.6% of "a/an" were missed. This indicates that "the" was easier for students to detect than "a/an", a trend that is generally reflected in the studies to date for all learners from an L1 without an article system, and is not exclusive to L1 Japanese learners.

At the same time, when articles come at the beginning of a sentence, students clearly had an easier time recognizing articles as opposed to other sentence positions. Of the three positions examined, articles in the initial position had a much lower miss rate (7.5%), the lowest miss rate of any position. In contrast, when articles were located mid-sentence, the miss rate

was significantly higher (44.7%), with a small difference found when the article was adjacent to or separated from the noun (41.9% versus 48.9%). Articles in the final position had a slightly lower miss rate (38.2%), but still much higher than the initial position.

These results indicate that, in the dictation task, the definite article ("the") in the initial position in the sentence is the most likely to be recognized and recorded by students, while articles in other positions, especially the indefinite articles ("a/an"), less so. Mid-position and final position articles appear to be "lost" among the other words in the sentence, with a slight increase in attention towards the sentence's end.

Looked at as simply an exercise in mechanical listening and recording, this can be explained in several ways. The first is simple vowel reduction. While vowel reduction occurs in both kinds of articles, the article "the" accompanies a clear initial consonant. In contrast, when "a" or the "a" in "an" is reduced, it may render the article difficult to detect as most if not all of the vowel sound is removed. It should be noted that, while vowel reduction can occur in Japanese, it is far less common and to a lesser degree than in English. This, in addition to English featuring more than twice the number of vowel sounds as Japanese, potentially creates one more area of difference between the L1 and L2 for students to overcome.

Moving beyond phonetics is the issue of content versus structure words. Articles in English serve to clarify meaning, and as such are structure words. Missing or mistaken use of articles does not appear to significantly impact understanding for native English speakers, as already discussed in the beginning of this paper, and very likely seen as unnecessary by L1 Japanese learners as well. As such, the attention payed by students with regards to actively attempting to hear the article may be reduced in order to focus more on content words. However, as has already been discussed, dictation is not merely an exercise in mechanical listening and recording. Rather, it engages a student's language faculties across numerous realms. As such, it also has the potential to demonstrate L1 interference in the L2 beyond simple phonetic differences. Since Japanese does not feature an article system, the perception of its necessity in English sentences may, as shown by the overall negative correlation between score and misses, be something that develops over time in students as they become more familiar with the language overall, and not necessarily just the rules of usage for English articles.

Further, the definite article "the" is phonetically similar to "this", "that",

“these”, and “those”, all words for which there is a clear Japanese equivalent（この、その、あの、これらの、それらの）. For the indefinite articles “a/an”, however, the nearest equivalent is “one”, which does not share an initial vowel sound, and which diverges from “a” in particular due to the presence of the final consonant sound. This difference may offer an additional explanation as to why “the” is more often recognized in the dictation exercise than “a/an”: the presence of a linguistic equivalent offers an anchor for not only understanding, but may also aid word recognition within the sentence. In contrast, however, when there is no direct equivalent in Japanese and also no word with phonetic similarities to allow for this kind of anchoring, as in the case of “a/an”, there may be a tendency to not only not recognize the need for the indefinite article within the sentence, but also not to recognize its presence while listening. That is, it is difficult for students to recognize words for which they not only have no L1 equivalent for, but also have no other words with a phonetic similarity in the L2 to connect meaning to.

5. Conclusion

While it appears clear that there is a strong correlation between L1 Japanese learners of English overall abilities in the English language as revealed through dictation and their ability to correctly identify articles, the exact reason for this is not. If, as Goto Butler observes, this has to do with Japanese learners of English evolving in their understanding of the article system as their overall grasp of English improves, abandoning erroneous and overgeneralized rules that they believe they have been taught in school or elsewhere for more nuanced and precise ones, one must next question how these early notions of article use arose, and through what process new assumptions were created. A more detailed examination utilizing both qualitative and quantitative analysis as per the Goto Butler study, but focusing more specifically on this evolution of understanding, would be the next logical avenue of exploration.

In addition to this is the question of intrinsic meaning of English articles and how those are understood by L1 Japanese learners. For learners who pass through the standard Japanese curriculum to learn English, do articles evolve at some point beyond a “necessary appendage” into a unit of functional meaning for them, or do they remain something that can only be used and understood through grammatical rules? Answers to these questions can only

come through the examination of L1 Japanese speakers of English who have obtained a high degree of fluency following exposure to the standard curriculum. It may also require a questioning of the ways in which Japanese textbooks approach the subject of articles, how teachers approach it, and finally, how the enormous English "after-market" of study guides and high school and college preparatory schools (so-called cram schools) handle it.

The English article system will no doubt continue to present problems for learners of L1 languages which do not feature a similar system. However, it is believed that a careful examination not only of the outputs of learners, but also a closer look at how these outputs are arrived at will reveal a greater understanding of the ways in which L2 learners of English approach the article system and assign it meaning. This in turn will no doubt lead to further advances in how to approach it in the classroom setting.

At present, regardless of apparent student beliefs that classroom learning is responsible for their current understanding of articles, it is clear that the creation of a system by which to supplement this learning done within the classroom and through which they can gain access to an improved and more accurate understanding is needed. While the present study only examined where misses occurred, there were many instances in which students transposed articles with other words (for example "those" in place of "the") or appeared to ignore or combine them with other phonemes to form words not present in the audio (such as combining "a joint (meeting)" into "appoint"). Due to the preliminary nature of this study, these instances were not examined in detail, but should be made part of any future examination. Untangling the web of intricacies in the English article system, while not in and of itself an absolute necessity to communicating or comprehending clearly in English, can clearly benefit learners by reducing the likelihood of mistaking articles for other words or parts of words, thereby improving overall abilities in English.

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