

Role of the Specific–Non-specific Distinction in the Acquisition of English Articles by Japanese Learners of English and Stages of Article Acquisition

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Abstract

The fluctuation hypothesis (Ionin et al., 2004) holds that learners of English as a second or foreign language (ESL/EFL) will continue to make errors in their use of English articles until they switch their criteria for English article selection from specificity to definiteness. However, L1 language acquisition research indicates that young children who are L1 speakers use English articles accurately on the basis of whether the referent is specific or non-specific before they acquire the definite–indefinite distinction. It is possible that Japanese EFL learners, like young L1 learners, can accurately use English articles employing the specific–non-specific distinction even before they master the definite–indefinite distinction. This study examined this hypothesis using Bickerton’s (1981) semantic wheel-based taxonomy and Díez-Bedmar and Papp’s (2008) tag-coding system. An analysis of 38 essays from the Nagoya Interlanguage Corpus of English Reborn showed that the specific–non-specific distinction can contribute to a highly accurate use of English articles for non-specific referents and relatively accurate article use for specific referents by Japanese EFL learners who have difficulty applying the definite–indefinite distinction. The pedagogical implications of the results were discussed.

1. Introduction

Japanese learners of English as a foreign language (EFL) have difficulty using English articles correctly. It is widely believed that the use of the specific–non-specific distinction (SNSD) instead of the definite–indefinite distinction is the main cause of the incorrect use of English articles by learners of English as a second or foreign language (ESL/EFL). According to the fluctuation hypothesis (Ionin et al., 2004), a widely known and well-accepted theory in the study of second language acquisition (Slabakova, 2016), ESL/EFL learners use the SNSD as a criterion for their choice of English articles and consequently make errors until the point that they begin to use the definite–indefinite distinction as an alternative criterion. The choice of article made by learners is thought to fluctuate based on which criterion applies, until they finally move away from the SNSD and apply the definite–indefinite distinction instead when selecting English articles. Thus, it is generally thought that the SNSD can play no role in the acquisition of English articles by ESL/EFL learners. However, study of L1 language acquisition (e.g. Brown, 1973; Maratsos, 1974, 1976) indicates a positive role for the SNSD in the correct use of English articles by the age of 3, which is far earlier than the time in which L1 learners are expected to have acquired the definite–indefinite distinction (Bickerton, 1981, p. 147). Thus, the same principle may be applicable to the acquisition of a second or foreign language. The purpose of this study is to examine this possibility, using production data from Japanese EFL university students using a large learner corpus, the Nagoya Interlanguage Corpus of English Reborn (NICER) (Sugiura, 2020).

2. L1 Language Research Results

Using data from a longitudinal study of the use of *a* and *the* by three L1 children, Brown (1973) found that non-specific referents, represented by category D in Table 1, are correctly referred to with the indefinite article *a*: ‘A wheel looks like *a* Q’ (any instance of a class), ‘This doesn’t have *a* wheel on it’ (negatives) (Brown, 1973, p. 353; see also Maratsos, 1979, pp. 235–236). No errors at all were found in category D, in which the reference was non-specific for both the child and the listener (Brown, 1973, p. 355). Similarly, specific referents, as shown in category A, used the definite article *the* correctly.

Table 1

The relation between definite and nondefinite forms and specific and nonspecific reference in speaker and listener

Listener (as conceived by speaker)	Speaker	
	Specific	Non-specific
Specific	A Definite: the <i>Let's move the desk.</i>	B Nondefinite: a <i>You once wrote an article on superstition.</i>
Nonspecific	C Nondefinite: a <i>I saw a funny-looking dog today.</i>	D Nondefinite: a <i>I don't have a car.</i>

(Adapted from Brown, 1973, p. 342)

According to Maratsos (1974, 1976), the SNSD is handled virtually without error by 3-year-olds, 'well ahead of the earliest date by which the child masters the definite–nondefinite distinction' (Bickerton, 1981, p. 147). In the experiment that Maratsos (1974) conducted, the child participants heard two types of stories. One was designed to elicit a definite noun phrase (such as when a boy is mentioned and then later referred to). In the other, an indefinite noun phrase was elicited (as where many boys are first mentioned and then the speaker later refers to one of them). The 'children could differentiate clearly between indefinite noun phrases which had (a) non-specific reference and those which did not' (Maratsos, 1974, p. 454). Thus, it seems clear that the children had a critical understanding of 'the difference between the notion of any member (or no member) of a class and that of particular class members' (Maratsos, 1974, p. 454).

3. Second or Foreign Language Acquisition Research Results

According to Ionin et al.'s (2004) fluctuation hypothesis, ESL learners who speak a first language (L1) that does not have articles do not have full access to this part of universal grammar. As a result, they have no way of knowing a priori that the definite article should only be used in a context unique setting (i.e. the definite setting), rather than in a specific setting (Ionin et al., 2004). Until the learner is exposed to sufficient L2 data (with the help or hindrance of L1 transfer) and realises that the use of the definite article requires that the referent be context unique for both the speaker and the listener, the definite

article tends to be used in both context unique and specific settings. If so, then ESL learners with an L1 devoid of articles are expected to begin with the specific setting and gradually shift to the definite setting. In the meantime, as indicated in Table 2, ESL learners fluctuate between the two settings and make incorrect choices regarding English articles when the two settings do not overlap (i.e. the shaded areas in Table 2).

Table 2

Predicted areas of overuse of English articles (shaded areas)

	+definite	-definite
+specific		
-specific		

(Ionin et al., 2004, p. 18)

Ionin et al. (2004) have shown that, as predicted by their fluctuation hypothesis, learners fluctuating between definite and specific settings overuse the definite article *the* for indefinite referents when those referents are specific and overuse the indefinite article *a* for definite referents when those referents are not specific. This seems to show that specificity plays no role in the acquisition of English articles. However, the fluctuation hypothesis has some problems as well. First, although it presupposes the Article Choice Parameter (ACP) (Ionin, 2003) which hypothesises that speakers of a language choose articles based on either definiteness or specificity, but this choice might not constitute a parameter. As Tryzna (2009) indicates, ACP is ‘too restrictive’ (p. 86), and the relationship between specificity and definiteness does not need to be strictly binary and exclusive.

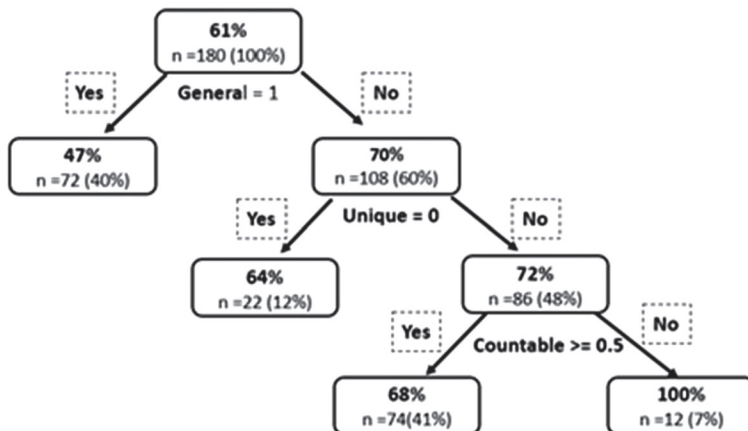
Second, the predictions of the fluctuation hypothesis do not match the performance data of ESL/EFL learners. The fluctuation hypothesis indicates that ESL/EFL learners with an article-less first language (L1) will fluctuate between the two language settings postulated by the ACP (i.e. specificity and definiteness) and to make over-generalisation errors in the use of English articles in semantic contexts where these language settings do not overlap. Although the ACP predicts overuse of *the* with specific indefinites and that of *a* with non-specific definites, the latter has not been exhibited in ESL child learners (Ionin et al., 2009). Similarly, Zdorenko and Paradis (2008) found that

among child L2 learners of English, ‘overuse of *a* with definites was practically non-existent’. Ionin et al. (2009) modified the original hypothesis and argued that ‘only specificity-related errors with indefinites, not specificity-related errors with definites, reflect L2-learners’ access to the semantic universal of specificity’ (Slabakova, 2016, p. 311). However, Ionin et al. (2009) did not explain why a lack of overlap between two settings should lead to virtually no specificity-related errors with definites. In addition, Zdorenko and Paradis (2008) found that child L2 learners of English fluctuated between definiteness and specificity, regardless of whether their native language has articles. Thus, specificity seems to be universally available to L2 learners, which makes it very difficult to explain the variability in L2 learners’ production of articles using L1 transfer or limited access to the semantic universal (see Deprez et al., 2011 for a similar result).

Third, as Ionin et al. (2004) base their definition of definiteness on the concept of contextual uniqueness (Hawkins, 1978, 1991), it is very difficult to apply the criterion to an abstract unbounded entity. Because such an entity would not, by definition, have clear boundaries, it is difficult to determine whether the referent is unique for both the speaker and the listener in the given context or situation. In addition, although non-referential use of English

Figure 1

Path solution for questions employing the definite article (with the general criterion included in the analysis) (Takahashi, 2020, p. 184)



articles is considered to be integral to ESL/EFL pedagogy, it is unclear how the concept of uniqueness could account for non-referential use of English articles. No such account has been put forward by Hawkins (1991) or Ionin et al. (2004).

Fourth, drawing on the results of a decision-tree analysis of the English production of 20 Japanese university students, Takahashi (2020) showed that Japanese EFL learners may apply SNSD to determine their choice of English articles before they then apply the definite-indefinite distinction, just as was done by the L1 children studied by Maratsos (1974, 1976). For example, with reference to questions employing the definite article, Japanese EFL students' performance data was 100% explained when the general criterion (namely, whether the referent is general or specific, which corresponds to SNSD) was included as an explanatory factor (see Figure 1 above). On the other hand, 87% of students' performance data can be accounted for when the general criterion is removed from the decision-tree analysis. This indicates that Japanese EFL learners may apply SNSD first to determine the choice of article and then use the uniqueness criterion (namely, whether the referent is unique for both the speaker and the listener in the given context or situation) when required.

Fifth, although the ACP (Ionin, 2003) assumes that the choice between the definiteness criterion and the specificity criterion resembles the alternative value of a parameter, the choice may not be exclusive, and the two can coexist. As shown in Figure 1, the specificity criterion may enable learners to use the English article accurately when the referent is non-specific (i.e. when the general criterion is met), as is the case with L1 children. This seems natural, as when a general reference is being made, the referent cannot be considered definite. In addition, the specific criterion may also enable learners to make a correct choice of article, even when the referent is abstract and uncountable, which the unique context criterion (Hawkins, 1978, 1991) cannot easily account for, or when the referent is non-referential (which the concept of unique context does not account for). Furthermore, based on child L2 learners of English Tryzna (2009) showed that 'the quantificational (non-specific) use of the English indefinite article is acquired before the referential (specific) use' (Tryzna, 2009, p. 82). Thus, it may be that Japanese EFL learners use the

specific–indefinite distinction for articles early in language acquisition and then learn and employ the definite–indefinite distinction later on when they need to distinguish between specificity and definiteness. It may also be that the process of acquisition does not resemble like swapping parameters but acquiring a different distinction.

4. Hypotheses

From the literature discussed above, this study tested the following hypotheses:

Hypothesis 1: Japanese EFL learners may be able to use English articles fairly accurately when the referent is not specific to the speaker and the hearer by applying SNSD, as young L1 learners do.

Hypothesis 2: If the fluctuation hypothesis is correct, Japanese EFL learners should not have difficulty in using English articles accurately when the criteria of definiteness and specificity overlap, but they should have significant difficulty in using English articles accurately when the two criteria do not overlap.

Hypothesis 3: Japanese EFL learners may use SNSD first to determine their choice of article before using the definite–indefinite distinction, as in the case of L1 children.

5. Method

5.1 Materials: Corpus data

This study used Sugiura's (2020) corpus data on Japanese English learners, NICER, which consists of 381 written essay data points collected from Japanese EFL university and graduate students and 71 native speakers of English (Sugiura et al., 2007, Sugiura, 2017). Similar to its older version (the Nagoya Interlanguage Corpus of English (NICE), Sugiura, 2017), the NICER (Sugiura, 2020) contains scores on the Test of English for International Communication or on the Test of English as a Foreign Language and is similar to NICE (Sugiura, 2017), with the difference that the former contains a writing

evaluation score obtained from the Criterion® Online Writing Evaluation service (<https://criterion.ets.org/criterion/default.aspx>) for each essay.

The participants in the studies conducted by Sugiura (2007, 2017) were asked to write an essay on one of three topics (i.e. education, money or sports) using more than 600 characters without referring to any dictionaries or reference sources. The time limit was 60 minutes for both the Japanese EFL learners and the native English speakers.

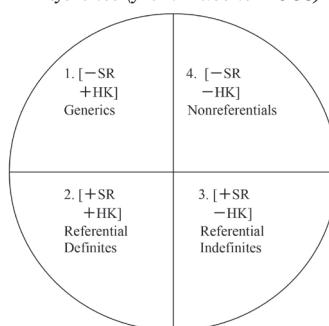
The present study used NICER because it contains proofread and edited versions of the original English expressions, which are inserted below each line of the original text. The proofreading and editing were done by a Canadian native speaker of English. During the process of editing, care was taken that as few changes as possible be made from the original while still producing a more natural, functionally equivalent expression in the target language (Sugiura, 2017). However, no

corrections were attempted when the meaning of the original sentence was not clear (Sugiura, 2017). This study used 38 of the essays in the corpus written on the topic of sports by Japanese EFL university students. The essays comprised a total of 11,624 words, each essay containing 305 words on average.

5.2 Methods of analysis: Framework

For the analysis of the corpus data, this study adopted Bickerton's (1981) semantic wheel framework, which allows the analysis of English article use with two binary features of [\pm specific reference] (\pm SR) and [\pm hearer knowledge] (\pm HK). This method originated from a work by Brown (1973). Here specific reference indicates the speaker's reference to a specific item, and hearer knowledge refers to the speaker's assumption of the hearer's familiarity with, or capability of inference of, the reference (cf. Hawkins 1978, 1991). Bickerton's (1981) framework of [\pm SR, \pm HK] features is largely the same as

Figure 2
Bickerton's (1981) semantic wheel for NP reference (from Huebner 1983)



(Huebner, 1985, p. 146)

Ionin et al.'s (2004) framework of [\pm specific, \pm definite], 'where [+Hearer Knowledge] is equivalent to [+definite] and [+Specific Referent] is comparable to [+specific], apart from one minor difference' (Snape & Kupisch, 2017, p. 77).

5.3 Methods of analysis: Coding system

The 38 essays in the NICER corpora were tagged using the coding system devised by Díez-Bedmar and Papp (2008) to examine how Japanese EFL learners select English articles on the basis of the differences between specificity and definiteness. At first, as indicated in Table 3, the instances of the correct article use were tagged on the basis of the four semantic contexts: Context 1 [-SR, +HK] (generic), Context 2 [+SR, +HK] (referential), Context 3 [+SR, -HK](referential) and Context 4 [-SR, -HK](non-referential). For example, correct uses of the definite article (DA) in Context 1 were tagged as 'DA_1', correct uses of the indefinite article (IA) in Context 3 were tagged as 'IA_3' and correct uses of the zero article (ZA) in Context 4 were tagged as 'ZA_4'.

Then, as indicated in Table 4, incorrect uses of English articles were

Table 3

Tagging for correct English article uses based on Díez-Bedmar and Papp (2008)

	Context 1 [-SR, + HK] generics	Context 2 [+SR, + HK] referential	Context 3 [+SR, -HK] referential	Context 4 [-SR, -HK] non-referential
the contexts	DA_1	DA_2		
a contexts	IA_1		IA_3	IA_4
∅ contexts	ZA_1		ZA_3	ZA_4

(Adapted from Díez-Bedmar & Papp, 2008, p. 160)

Table 4

Tagging for incorrect English article uses based on Díez-Bedmar and Papp (2008)

	Context 1 [-SR, + HK] generics	Context 2 [+SR, + HK] referential	Context 3 [+SR, -HK] referential	Context 4 [-SR, -HK] non-referential
the contexts	GA_IA_1 GA_ZA_1	GA_IA_2 GA_ZA_2		
a contexts	GA_DA_1 GA_ZA_1		GA_DA_3 GA_ZA_3	GA_DA_4 GA_ZA_4
∅ contexts	GA_DA_1 GA_IA_1		GA_DA_3 GA_IA_3	GA_DA_4 GA_IA_4

(Adapted from Díez-Bedmar & Papp, 2008, p. 161)

tagged on the basis of the four semantic contexts, using on Díez-Bedmar and Papp's (2008) error tagging system. According to the ICLE error tagging manual (Granger et al., 2022, p. 12), the general error tag 'GA' was also assigned to the incorrect instances. For example, incorrect use of the IA in Context 2 (where the DA would have been used by a native speaker) was tagged 'GA_IA_2'. In the same way, incorrect use of the DA in Context 3 was tagged 'GA_DA_3'.

Having tagged the correct and incorrect uses of English articles, instances of these uses in obligatory contexts were retrieved and counted using WordSmith Tools Version 8 (Scott 2021).

5.4 Methods of analysis: Treatment of data

The appropriateness of the choice of English articles in each sentence is determined relative to the choice of the proofread and edited version of the same sentence by a native speaker of English. For example, in the following example, a student used the DA in front of the noun phrase 'game'. However, because the referent does not meet either of the conditions [+SR, +HK] and [+specific, +definite], the DA should not be used, as the correction by the native speaker indicates.

Original sentence: I heard that foot ball has started from the game of kicking a ball of sheep wool in Britain.

Corrected sentence: I heard that football started from a game of kicking a ball of sheep wool in Britain.

Thus, if there is a gap between the language production of a Japanese EFL student and a native speaker in the use of English articles, it is considered an instance of inappropriate article use by the Japanese student. Any sentences not revised by the native speaker, as well as those that did not closely overlap (did not overlap more than 70%) with the original sentences, were excluded from the analysis.

Also excluded from the analysis were all instances of English article use that seem to reflect the use of memorised chunks of language or frequently occurring expressions (including idiomatic expressions) (e.g. around the world,

in the future, after Ø school, make Ø money, as a result, had a wonderful time, for example, in conclusion, in fact, in addition, on TV, at night, at first, in the end and so on) as well as proper names and school subject names, following the method of Díez-Bedmar and Papp (2008, p. 151). This was done because it is very hard to determine whether the choice of an English article is made based on certain criteria or on a memorised sequence.

6. Results and Discussion

6.1 Results of analysis of Hypothesis 1

The correct/total ratios for Japanese EFL learners' use of English articles in Contexts 1–4 are shown in Table 5. As seen from the results in Context 4 (non-referential context), Japanese university students' responses were highly accurate when a general reference is made to a referent; see Díez-Bedmar (2015) for similar results among Spanish EFL learners. In Context 4, the ZA was used correctly in 97 percent of instances (625 of 640). The accuracy was a little worse in the use of the IA in Context 4; the IA was accurately used in 66.5 percent of instances (78 out of 119). However, as seen in Table 6, of the 41 (i.e. 119–78) errors of the IA, only 4 used the DA when they should have used the IA (cf. GA_DA_4), while 37 used the ZA (cf. DA_ZA_4). Thus, Japanese EFL learners seemed to understand the specific-non-specific distinction very accurately in Context 4. This seems to be compatible with the results of previous study of L1 acquisition (Brown, 1973; Maratsos, 1974, 1976), which shows that young L1 children could 'differentiate clearly between indefinite

Table 5
Correct/total ratios for Japanese EFL learners' use of English articles in Contexts 1–4

	Context 1 [-SR, +HK] generics	Context 2 [+SR, +HK] referential	Context 3 [+SR, -HK] referential	Context 4 [-SR, -HK] non-referential
the contexts	2/6	195/258		
a contexts	0/0		11/22	78/119
Ø contexts	1/1		0/4	625/640

noun phrases which had non-specific reference and those that did not' (Maratsos, 1974, p. 454).

The 37 instances of incorrect use of the ZA in place of the IA may be due to a lack of distinction between countable and uncountable nouns because many of the instances contained abstract nouns such as 'disease', 'feeling', 'decrease', 'special power', 'major way', 'foreign language', 'great effect', 'waste of money', 'opportunity', 'award', 'hobby', 'lack of time', 'high calorie diet', 'sports competition', 'better life' and 'relationship'. Because abstract nouns represent vague, general concepts, they may not be easily recognised as countable. The result appears to be in line with White (2009), which reported that Japanese learners tend to regard an abstract countable noun as uncountable and use the ZA for the referent (see Butler, 2002, p. 464 for a similar finding).

On the other hand, there are several instances of incorrect use of the ZA for concrete (non-abstract) nouns, such as 'very strict teacher', 'Japanese Sumo wrestler', 'cool team', 'batting centre', 'pitcher', 'closer', 'small and weak boy' and 'strong table tennis country'. It seems that even with concrete nouns, the need for an article is less likely to be perceived when the noun is modified by an adjective phrase, as Trenkic (2008) suggests.

Table 6
Inaccurate use of English articles in Contexts 1–4

	Context 1 [-SR, + HK]	Context 2 [+SR, + HK]	Context 3 [+SR, -HK]	Context 4 [-SR, -HK]
	generics	referential	referential	non-referential
the contexts	GA_IA_1	GA_IA_2		
	0	2		
	GA_ZA_1	GA_ZA_2		
	4	61		
a contexts	GA_DA_1		GA_DA_3	GA_DA_4
	0		3	4
	GA_ZA_1		GA_ZA_3	GA_ZA_4
	0		8	37
∅ contexts	GA_DA_1		GA_DA_3	GA_DA_4
	0		0	13
	GA_IA_1		GA_IA_3	GA_IA_4
	0		4	2

6.2 Results of analysis of Hypothesis 2

Table 7 and Figure 3 show the accuracy in the use of English articles by

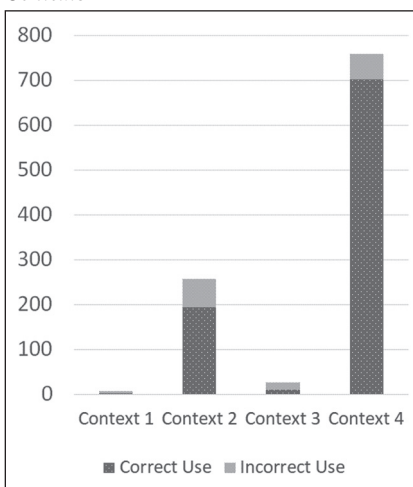
the 38 Japanese university students in Contexts 1–4. The fluctuation hypothesis predicts that article selection errors are most likely to occur when the criteria of specificity and definiteness do not overlap. In other words, article selection errors are most expected in Context 3 but are least expected in Contexts 2 and 4. (As noted above, Ionin et al., 2009, modified the original fluctuation hypothesis and argued that ‘only specificity-related errors with indefinites, not specificity-related errors with definites’ could be expected to be related to the existence of the ACP. Therefore, learners’ performance in Context 1 was excluded from analysis.)

As seen in Table 7 and Figure 3, Context 3 showed lower accuracy than Context 2, which appears to be compatible with the prediction given by the

Table 7
Number of correct and incorrect English uses of the article in Contexts 1–4

	Context 1	Context 2	Context 3	Context 4
Correct Use	3	195	11	703
Incorrect Use	4	63	15	56

Figure 3
Accuracy in the use of English articles for Contexts 1–4



fluctuation hypothesis. However, as seen in Table 6, overuse of the DA in Context 3, predicted by the fluctuation hypothesis, was hardly observed. Of 15 errors, only 3 were instances of DA overuse in Context 3 (cf. GA_DA_3).

Furthermore, as shown in Table 6, the largest number of errors (63) was observed in Context 2, where the specificity criterion [+SR] and the definiteness criterion [+Definite] overlap and the fluctuation hypothesis predicts the least number of errors in the choice of English articles. Thus, those errors are not considered to derive from Japanese learners' lack of understanding of the difference between specificity and definiteness.

Of the total 63 errors, 61 were caused by the use of the ZA. These errors may lie in the types of definite expressions that occur in the context. For example, it may be that Japanese learners 'are treating the items as proper nouns' (Snape, 2008, p. 74), e.g. 'And now, <GA_ZA_2> Climax Series is held in Hiroshima'. Or '<GA_ZA_2> "Tokyo Olympic" will be held in Japan'. Further, it may be that the learners did not understand the discursual relationship between the referent and the preceding text and were considering that the language was making a general reference. E.g. 'they might sleep better than now. <GA_ZA_2> Benefits of sports are not limited to ...' or 'I, my karate friends, the parents, <GA_ZA_2> teachers cried'. It may also be that the presence of an adjective modifier (especially the ranking adjective) made the use of the DA (i.e. existence and uniqueness) redundant for the Japanese learners (cf. Trenkic, 2008, pp. 9–10). e.g. 'And maybe <GA_ZA_2> most important thing is to keep...', '<GA_ZA_2> second strongest position is Ozeki'.

Table 8
Accuracy in English Article Usage Across Different Contexts

the contexts	0.746	197/264
a contexts	0.631	89/141
∅ contexts	0.971	626/645

6.3 Results of analysis of Hypothesis 3

As seen in Table 8 and Figure 4, the use of the ZA showed most accuracy (97.1%), followed by the use of the DA (74.6%) and in the use of the IA (63.1%).

When the speaker refers to something in general, the referent is obviously non-specific. As discussed in 6.1, the students tend to make correct judgements on whether the referent is non-specific or not, resulting in a highly accurate

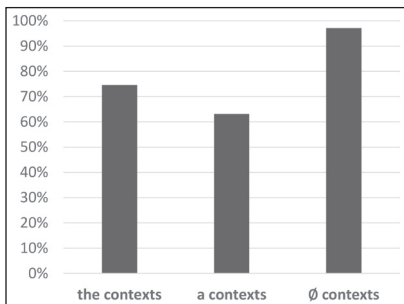
use of the ZA.

Accuracy in the use of the DA ranked second. This may be because ‘DAs in English need not take number and the count/mass distinction into account, which makes them less featurally complex than indefinites in at least one respect’ (Lardiere, 2004, p. 335). Therefore, if the speaker can determine correctly whether the

referent is specific or non-specific, this allows the speaker to use the DA accurately. This result is consistent with the findings of Thomas (1989), which found that L2 learners rarely overused the DA in non-specific contexts and exhibited early and accurate control of the definite article in [+SR +HK] contexts, while correct use of the IA was significantly delayed (p. 349).

Figure 4

Accuracy in English Article Usage Across Different Contexts



7. Conclusion

7.1 Summary and discussion

Hypothesis 1 states that Japanese EFL learners may be able to use English articles fairly accurately when the referent is non-specific to the speaker and the hearer through the application of SNSD, as in the case of L1 young learners. The results of the present study seem to support this hypothesis, as the learners tended to have a high rate of accuracy in using the ZA when the referent was non-specific to the speaker and the listener. Although the accuracy in the use of the IA was lower, the learners made almost no errors in using the DA for non-specific referents. The result seems to be most explainable as the result of the learners’ employment of SNSD for non-specific referents.

Hypothesis 2 states if the fluctuation hypothesis is correct, Japanese EFL learners should not have difficulty in using English articles accurately when the criteria of definiteness and specificity overlap, whereas they should have greater difficulty when the two criteria do not overlap. Contrary to the prediction of the fluctuation hypothesis, the overuse of the IA is rarely

observed in Context 3. A majority of errors are due to either the incorrect use of the ZA instead of the IA or the incorrect use of the IA instead of the ZA. In either case, the learners were highly accurate in the distinction they made between specific and non-specific. On the other hand, a large number of errors were observed in Context 2. Because both the specificity criterion ([+SR]) and the definiteness criterion ([+definite]) equally require the DA for Context 2, lack of the distinction between specificity and definiteness is not considered to be the main cause of these errors. Thus, the result does not seem to support the fluctuation hypothesis and the ACP on which the fluctuation hypothesis is based upon. If the choice of English articles does not constitute a parameter, the relationship between specificity and definiteness does not need to be strictly binary and exclusive. The present study indicates that a positive role can be played by specificity in the acquisition of the correct use of English articles.

Hypothesis 3 states that Japanese EFL learners may apply SNSD first to determine the choice of English articles before using the definite-indefinite distinction, as in the case of L1 children. The results of the present study showed that with respect to accuracy in the use of English articles, the ZA ranked first, followed by the DA and the IA. In other words, the accuracy in the use of English articles was highest in Context 4, followed by Contexts 2 and 3. As predicted, the Japanese EFL learners were very accurate in the use of the English articles in the non-specific context where general or non-specific reference was made to a referent. This seems to show that Japanese EFL learners can determine whether the referent is specific or non-specific at an early stage of second language acquisition. Accuracy in the use of the DA was second highest. Because the opposite of non-specificity is specificity, or definiteness and DAs in English do not take number or the count/mass distinction, it is not surprising that the acquisition of the definite article came second in the acquisition sequence. Following this came the IA. Although the use of the IA for non-specific noun phrases was relatively accurate, the Japanese learners need to learn to appreciate the distinction between 'the notion of any member (or no member) of a class and that of particular class members' (Maratsos, 1974, p. 454) in the case of singular countable nouns, unlike the case of bare plural nouns, which are more likely to denote a generic,

non-specific reading.

7.2 Pedagogical implications

The results of the present study show that Japanese EFL university students can make accurate judgements regarding whether a referent is non-specific. This seems to indicate that they have acquired SNSD. By employing it, the learners may be able to use the ZA appropriately (in particular in front of non-specific plural count nouns), as L1 children do.

There was an effect of noun countability on the accuracy in the use of the IA. Because the errors were not caused by either the lack of the specific/non-specific distinction or the lack of specific/definite distinction (as shown by almost no instances of the overuse of the DA in Context 3), more emphasis on teaching English noun countability would be needed to improve the accuracy in the use of the IA. It may also be necessary to incorporate instruction in relation to abstract nouns, which typically denote abstract, hence, non-specific, concepts and are naturally recognised as uncountable, although there may be some exceptions. In addition, it may be important to teach that the presence of an adjectival modifier does not obviate the need for the use of English articles.

Although most previous research denies the relevance of SNSD, it may play an important role to play in the acquisition of English articles, as even advanced Japanese learners have not acquired the definite–indefinite distinction. For such learners, the employment of SNSD may be useful in the choice of English articles, as with L1 children.

According to Ionin et al. (2004) definition, ‘definiteness’ presupposes the concept of context uniqueness ‘whether the referent is unique (only one) for both the speaker and the listener in the context’. However, the criterion for whether the referent is unique (only one) in the discourse is difficult to apply to abstract entities, as abstract entities do not have discrete individual boundaries and are difficult to count. If the criteria of specificity and definiteness are not exclusive to each other, it is reasonable to suppose that teaching SNSD may contribute to greater accuracy in the use of English articles for abstract entities, as non-specific referents are least likely to be definite and should not require the use of the DA.

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