

The Role of Specificity in the Acquisition of English Articles and its Pedagogical Implications for Japanese EFL learners

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Abstract

According to the Fluctuation Hypothesis proposed by Ionin, Ko and Wexler (2004), which is a widely known and well accepted theory in the field of SLA research, the main reason behind the incorrect use of the English articles is ESL/EFL learners' inability to distinguish between the two criteria for selecting English articles: 'definite' and 'specific.' However, there are several problems with this hypothesis. First, the definite criterion ('context unique' for both the speaker and hearer) is difficult to apply in uncountable noun contexts. Second, unlike what is predicted by the original Fluctuation Hypothesis, overuse of *a* with non-specific definites is rare in natural language data. Third, the positive role of specificity in guiding the selection of English articles is ignored. Fourth, choosing appropriate articles requires sharing the same viewpoint rather than the distinction between two types of specificity. Fifth, the selection of appropriate articles is not completely independent from noun countability. Therefore, it is necessary to take noun countability into consideration when we try to understand how ESL/EFL learners acquire the English article system. Based on evidence obtained from previous research, an alternative solution for selecting appropriate articles is proposed. Finally, based on the detailed analysis, the pedagogical implications are discussed.

1. Introduction

Japanese EFL (English as Foreign Language) learners have difficulty accurately selecting English articles. According to the Fluctuation Hypothesis proposed by Ionin, Ko and Wexler (2004), which is a widely known and well accepted theory in the field of SLA research (Slabakova, 2016), the main reason behind the incorrect use of the English articles is ESL/EFL learners' inability to distinguish between the two criteria for selecting English articles: 'definite' and 'specific', which are defined by Ionin et al. (2004) as in the following.

If a Determiner Phrase (DP) of the form [D NP] is ...

- a. [+definite], then the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP.
- b. [+specific], then the speaker intends to refer to a unique individual in the set denoted by the NP, and considers this individual to possess some noteworthy property.

(Ionin et al., 2004, p. 5)

The Fluctuation Hypothesis predicts that ESL learners with an L1 that does not have articles do not have full access to universal grammar. As a result, they have no way of knowing that the definite article should only be used in a 'context unique' setting (the Definite setting) rather than in the '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 the referent to be context unique for both the speaker and the hearer, they continue to fluctuate between the Definite and Specific settings.

According to Ionin et al. (2004), world languages are categorized into two types of language: a language where article choice is made on the basis of definiteness like the English language and a language where article choice is made on the basis of specificity like the Samoan language. If this is the case, ESL learners with an L1 that does not have articles are expected to start from the Specific setting and are gradually shifting to the Definite setting. In the meantime, ESL learners continue to fluctuate between these two settings

and make incorrect choices of English articles where the two settings do not overlap as shown in the shaded areas below.

Table 1: Predicted Areas of Overuse of English Articles (Shaded Areas)

	+definite	-definite
+Specific		
-Specific		

(Ionin, 2004, p. 18)

Ionin et al. (2004) showed that learners fluctuating between the Definite and Specific settings overuse “the” for indefinite referents when the referents are ‘specific’ and overuse “a” for definite referents when the referents are not specific, which was just as predicted by the Fluctuation Hypothesis.

Thus, these results seem to show that there isn’t any role of specificity in the acquisition of English Articles: If this is the case, the pedagogical implication of this would be that it is crucial for ESL/EFL learners to use the definite criterion, not the specific criterion to make appropriate selection of English articles.

However, there are problems with this hypothesis. For example, although previous research has found that many ESL/EFL learners have difficulty selecting the definite article in uncountable noun contexts, the criterion of definiteness is considered to be difficult to apply in uncountable noun contexts because you need to know whether the referent is context ‘unique’ for both the speaker and the hearer in order to determine whether the referent is definite (cf. the definition of ‘definite’ by Ionin et al., 2004). When something is uncountable, it is very difficult to count the number of an entity (especially abstract concept without individuated boundaries) and difficult to judge whether it is only one (‘unique’) in the context for both the speaker and the hearer.

Although the results of many studies are generally compatible with the Fluctuation Hypothesis, few studies have considered the issue of noun countability. The only exception has been Snape (2005), who used singular countable nouns and uncountable nouns (mass nouns) and found that Japanese ESL learners overused the definite article more in indefinite specific singular contexts than in uncountable noun (mass noun) contexts. Although the

overuse of the definite article for countable nouns in indefinite specific contexts can be explained by the fluctuation between the Definite and Specific settings (the Fluctuation Hypothesis), the same theory cannot explain why the ESL learners did not fluctuate in uncountable noun (mass noun) conditions.

In chapter 2, problems of the Fluctuation Hypothesis are discussed in more details and alternative solutions to the problems are proposed. In Chapter 3, some evidence to support the solutions is provided. Finally, in Chapter 4, pedagogical implications of the new solution are discussed.

2. Problems with the Fluctuation Hypothesis and alternative solutions

2.1 The Definite criterion is difficult to apply in uncountable noun contexts

As I discussed briefly in the introduction, it is very difficult to apply the Definite criterion (The definite article can be used only for a referent which is context unique for both the speaker and the hearer) in uncountable noun contexts.

Whereas the referent of a countable noun (particularly an imaginable, concrete noun) typically denotes a ‘bounded’ and ‘individuated’ entity, that of an uncountable noun including abstract nouns frequently represents an ‘unbounded’ indivisible entity (cf. Langacker, 2008. See also, Akamatsu, 2018; Hewson, 1972; Ishida, 2002; Lakoff, 1987; Langacker, 1987; Lock, 1996; Oda, 1982; Shinohara, 1993; Wierzbicka, 1988).

Butler (2002) found that Japanese ESL learners were often unable to make accurate distinctions between countable and uncountable nouns (particularly for abstract nouns). As abstract concepts do not have clear individuated boundaries, it is very difficult to determine whether there is ‘only one’ (unique) referent in the context or situation (‘context unique’) for both the speaker and the hearer, and therefore it is difficult to determine whether the referent is ‘definite’.

Although the definition of ‘definite’ requires that the referent to be unique (only one) for both the speaker and the hearer in the context or situation, the criterion of ‘boundedness’ is often difficult to apply to uncountable nouns (especially, abstract nouns), and therefore, it is difficult to judge whether the referent is ‘only one’ or not.

As concrete objects have clear boundaries, Japanese ESL learners are

relatively accurate when making countability judgements for bounded entities; however, they tend to have great difficulty in ‘drawing boundaries around certain conceptual items’ (Butler, 2002, p. 471, cf. Akamatsu, 2018, p. 13).

From a pedagogical view, demarcation is very important. If learners do not know if something is ‘context unique’, they are not able to make appropriate judgements about the use of the definite article.

However, according to the Fluctuation Hypothesis, the major criterion for the use of the definite article is whether the referent is ‘context unique’ (only one in the context) for the speaker and the hearer irrespective of whether the referring noun is countable or uncountable. However, it is very difficult to apply this criterion when the reference is an ‘unbounded’ abstract entity. Despite this problem (i.e. the ‘context unique’ criterion is not appropriate when determining whether a referent is ‘definite’ and whether a definite article should be used), previous SLA research has not provided an alternative answer as to when the definite article should be used in uncountable noun conditions (especially in cases of abstract nouns).

2.2 The original Fluctuation Hypothesis is considered not valid

The Fluctuation Hypothesis proposed by Ionin et al. (2004) predicted overuse of *the* with specific indefinites as well as overuse of *a* with non-specific definites, and obtained results to support the predictions of the hypothesis. However, later it was found that the Samoan language, which Ionin et al. (2004) cited as the sole example of natural language that marks the specificity distinction with both definites and indefinites, only distinguishes specificity between indefinites (as convincingly shown by Tryzna, 2009). This indicates that overuse of *the* with specific indefinite is consistent with natural language data, but the overuse of *a* with non-specific definites has no parallel in natural language data. Ionin, Zubizarreta, and Philippov (2009) examined articles use in the L2-English of adult and child speakers of Russian, an article-less language, found that the overuse of *the* with specific indefinites was exhibited with both adult and child ESL learners, but the overuse of *a* with non-specific definites was only exhibited with adults, which Ionin et al. (2009) attributed to possible use of explicit strategies such as “Use *a* when there isn’t a particular referent”(p. 355) . Thus, Ionin et al. (2009), in effect, have modified

the original Fluctuation Hypothesis proposed in Ionin et al. (2004) and now argue 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). Thus, unlike what is predicted by the original Fluctuation Hypothesis, it seems that overuse of *a* with non-specific definites is rare.

In fact, by examining longitudinal data from child ESL learners with both [+article] and [-article] first languages, Zdorenko & Paradis (2008, pp. 242-244) found that overuse of *a* in definite context was quite low ([+article] $M = .013$ %, [-article] $M = .010$ %).

Thus natural language data and the L2 literature do not seem to support a symmetrical relationship between the Definite setting and the Specific setting, as originally hypothesized in Ionin et al. (2004).

2.3 The positive role of specificity in guiding the selection of English articles is ignored in the Fluctuation Hypothesis

The following figure (Figure 1) is the famous semantic wheel proposed by Huebner (1983), which is based on work by Bickerton (1981). Huebner (1983) explained that the definite article can be used only in Context 2 where the referent is specific (+SR) (=Specific Referent) and known to the hearer (+HK) (=Hearer Knowledge). In all the other contexts, the indefinite articles (i.e. the indefinite article *a* or the zero article) should be used. As Snape (2017, pp. 76-77) explains, [+HK] (meant as [+SR +HK]) is equivalent to [+definite] (Ionin et al., 2004) and [+SR] is comparable to [+specific] (Ionin et al., 2004), apart from one difference which I discuss in the next section.

Since whether the referent is [+definite] (‘context unique’ for both the speaker and the hearer) or [+SR +HK]) does not give any substantial difference to the eventual results of article choice in Contexts 2 and 4, the Specific criterion may be considered to be as useful as the Definite criterion is. Since Contexts 2 and 4 in Figure 1 correspond to the non-shaded areas in Table 1, a small number of errors by ESL/EFL learners are expected and that was exactly what Ionin et al. (2004) found in their study (See also Zdorenko & Paradis (2008) which showed that child ESL learners they investigated were more accurate with use of *the* in definite contexts than with *a* in indefinite

contexts, regardless of L1 background).

This has a very important implication. For example, in Context 4, the learner can easily determine whether the definite article should be used because the definite article is not used as generality is non-definite. This is particularly useful when the referent is uncountable and it is difficult to determine whether the referent is context unique for both the speaker and the hearer.

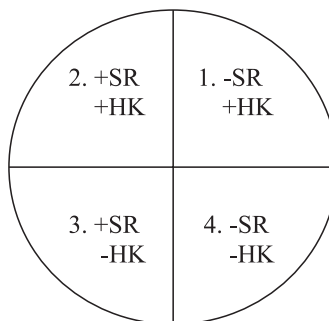


Figure 1:
Heubner's (1983) semantic wheel (p. 133)

2.4 The focus should be on HK, instead of the Definite/Specific distinction

Based on what we have discussed above, it seems that the only remaining problem context for ESL/EFL learners is overuse of *the* with specific indefinites: The definite/specific distinctions do not make any substantial difference in cases of Contexts 2 and 4 and overuse of *a* with specific definites are rare in Context 1. According to Ionin et al. (2004), overuse of *the* with specific indefinites are caused by ESL/EFL learners' inability to distinguish between the Specific and Definite criteria. However, the overuse may be due to learners' insensibility to the criterion of whether the referent is known to the hearer (= [\pm HK]).

Before going any further, an important distinction has to be made between Heubner's (1983) [+SR](=Specific Referent) and Ionin et al.' (2004) [+Specific]. According to Ionin et al. (2004), the referent is considered to be [+specific] when "the speaker intends to refer to a unique individual in the set denoted by the NP, and considers this individual to possess some noteworthy property." For example, according to Heubner (1983), (1a) and (1b) are [+Specific Referent] ([+SR]) because the man is trying to find a particular individual in both cases. But for Ionin et al. (2004, p. 5), the first one is 'specific'([+specific]) (the speaker makes reference to the noteworthy property of the referent) while the second one is non-specific (the speaker does not know anything about the referent).

- (1) a. Peter intends to marry a merchant banker - even though he doesn't
get on at all with her.
b. Peter intends to marry a merchant banker; I have no idea who it is.
(Adopted from Ionin et al., 2004, p. 9; cf. Lyons, 1999, p. 167)

As you can see, the definition of the semantic feature adopted by Ionin et al. (2004) ([+specific]) is vastly different from the view of specificity adopted by Heubner (1983) and from many other L2 researchers such as Thomas (1989) ([+SR]).

Despite the vast difference of the two definitions, it should be noted that Heubner's (1983) semantic features of [+SR][-HK] (the referent is not specifically known to both the speaker and the hearer) can account for why the indefinite article should be used for both of the above sentences ((1a) and (1b)) just in the same way as the feature [-definite](the referent is not context unique for both the speaker and the hearer) can (As Snape & Kupisch (2017, pp. 76-77) explains, [+SR][+HK] is considered to be equivalent to [+definite] (Ionin et al., 2004)). Here the crucial point is whether the speaker and the hearer shares the same viewpoint, not which of the two definitions of specificity should be used: If the referent is specifically known to both the speaker and the hearer or when the referent is 'definite' (i.e. context unique) for both the speaker and hearer, the definite article is used and if not, the definite article is not used (for example, a singular object which is 'specific'([+SR]) to both the speaker and the hearer is virtually the same as the one which is context unique ([+definite]) for both the speaker and the hearer).

There is evidence in the L1 literature to indicate that the sharing the same referent by the speaker and the hearer is crucial for determining whether a definite article should be used. For example, Brown (1973) studied the use of the indefinite articles *a* and *the* by observing three L1 children longitudinally. He found that "when the child and listener shared the same viewpoint, the child's observation of the specific-nonspecific dimension appeared very good. Nonexistent or nonparticular referents were referred to with *a* correctly" (e.g. *I don't have a spoon* or *I want a spoon.*) (Maratsos, 1979, pp. 235-236). The definite article *the* was also used appropriately for specific referents. On the other hand, Brown (1973) found many errors, making

comprehension difficult “when the children’s viewpoints diverged from those of their listeners” (e.g. ‘Sarah: *The cat’s dead*. Mother: *What cat?*’ (Maratsos, 1979, p. 237).

2.5 The selection of appropriate articles requires is not completely independent from noun countability

It is often said that “definite articles in English need not take number and the count/mass distinction into account” (cf. Lardiere, 2004, p. 335). Using a forced-choice elicitation task adopted from Ionin et al. (2004), White (2009, p. 24) investigated how semantic contexts [\pm definite, \pm specific] and noun countability influenced the choice of English articles. This study was very exceptional because no other studies had investigated the relationship between semantic contexts and noun types that included uncountable and abstract nouns within definite contexts. White (2009) found that uncountable nouns and abstract countable nouns favoured a zero article choice, whereas imaginable countable nouns strongly disfavoured this choice, which was consistent with ESL learner tendencies to use an indefinite article when they think the noun is countable and zero article when they think the noun is uncountable (Butler, 2002, p. 464).

Table 2: Article Choices where Countasbility Labeled Correctly

Context	Imaginable count		Abstract count		Noncount	
	[+definite]	[-definite]	[+definite]	[-definite]	[+definite]	[-definite]
Article choice	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>
the	14	1	7	1	14	6
a	9	36	1	11	0	0
Ø	0	1	0	1	22	45
Total	23	38	8	13	36	51

Note. Bold font reflects accurate article choices.

(Adapted from White, 2009, p. 26, the circles are my addition)

As Table 2 shows, the zero article is selected irrespective of whether the referent is [+definite] or not when learners think the noun is uncountable. As Table 3 shows, the zero article is selected for [+definite] referents when abstract nouns are mistakenly considered to be non-countable (It should be noted that when the noun is correctly judged as abstract nouns, there is no instance of the zero article selected for [+definite] referents). Furthermore,

when non-countable nouns are mistakenly regarded as countable, there is no instance of the zero article selected for the referents. These results seem to indicate that the selection of the definite article is not completely independent from noun countability and that it is necessary to take noun countability into consideration when we try to understand how ESL/EFL learners acquire the English article system. On the other hand, it should be noted that semantic contexts play an important role: As Table 2 shows, the definite article is selected when the referent is [+definite] in a majority of cases. Therefore, it was found that the only factor affecting the choice of article was semantic contexts, not noun types.

Table 3: Article Choices where Countability Labeled Incorrectly

Context	noncount → count		abstract count → noncount	
	[+definite]	[-definite]	[+definite]	[-definite]
Article choice	<i>N</i>	<i>N</i>	<i>N</i>	<i>N</i>
the	2	0	6	4
a	1	10	1	1
∅	0	0	12	21
Total	3	10	19	26

(Adapted from White, 2009, p. 26, the circle is my addition)

2.6 Alternative solution

The Fluctuation Hypothesis explains that until the learner is exposed to sufficient L2 data and realises that the use of the definite article requires the referent to be context unique for both the speaker and the hearer, they continue to fluctuate between the Definite and Specific settings.

Although SLA research on English articles has been concerned with testing the validity of the Fluctuation Hypothesis, it has not explained how ESL learners select the definite article in uncountable noun contexts. The Fluctuation Hypothesis, which is currently the most popular theory in SLA literature, explains that when the referent is context unique ([+definite]), the definite article is used. However, as discussed above, this criterion is difficult to apply to uncountable abstract entities due to their unbounded nature (for example, it is difficult to decide whether there is only one ‘happiness’ in the context). There are also other problems with the theory as discussed above. Although the Fluctuation Hypothesis presupposes a dichotomous parameter of either the Definite or Specific settings, thereby denying any positive role of

specificity in the acquisition of English articles, this presumption may not hold if the theory itself is not valid.

As an alternative solution to this problem, the present study proposes using a criterion of non-specificity (the General criterion) (here the word 'specificity' is used in the sense of $[\pm SR]$ rather than $[\pm \text{specific}]$). When referring to something in general (that is, something non-specific), it cannot be 'definite.'

In addition, since the most problematic context for ESL/EFL learners is considered to be overuse of *the* in indefinite context (Context 2), particular focus should be placed on this context (See also Zdorenko & Paradis (2008, pp. 242-244) which showed that overuse of *the* misuse in the indefinite context was the predominant error among child ESL learners they investigated). In so doing, it is very important to teach ESL/EFL learners the importance of sharing the same viewpoint (the concept of $[+HK]$ or $[+\text{definite}]$).

3. Evidence to support the alternative solution

3.1 How L1 children differentiate definite and non-definite

When talking about things in general, the definite article is not used as generality is non-definite. Although this may sound like a convenient alternative to the real solution, there is evidence to indicate that this is how L1 children determine whether a definite article should be used.

Maratsos (1974, 1976) found that the article system was acquired at a very early age and the definite article was used correctly to mark referents that were uniquely given in previous discourse. Maratsos (1974, 1976) reported that the specific-nonspecific distinction (henceforth SNSD) was made virtually without error by three-year-old American children. As children acquire the definite and non-definite distinction much later than the age of 3, these results seemed to indicate that it is possible for L1 English-speaking children as young as 3 years old to use correctly the definite article using SNSD. Therefore, it may be possible for adult ESL learners to use SNSD to determine whether a definite article should be used in uncountable (abstract) noun contexts.

According to Tryzna (2009), L2 English learners do not overuse *the* with non-specific indefinite DPs. Thus specificity may be a semantic universal which is available to L2 learners.

Because the accurate use of the definite article requires the referent to be known to both the speaker and the hearer, both L1 and L2 learners need to shift to a criterion of definiteness in their language development at some point. However, it is still possible that L1 and L2 learners use the definite article when the referent is not general (i.e. non-specific) (it seems illogical to suppose they do not, as non-definite referents cannot be definite).

3.2 What affects the choice of a definite article for uncountable nouns

The following path model was the result of a path analysis for questions employing a definite article from Takahashi (2016). Since the stimuli used were taken from ‘difficult’ questions (answered with less than 70% accuracy in Takahashi (2008)) to examine the difficulties Japanese ESL learners faced, 66.6 % of the stimuli (the noun phrases of the article insertion questions) contained uncountable and abstract nouns. Thus, the path solution obtained reflected the Japanese ESL learners’ selection decisions for the definite article in questions that had many uncountable or abstract nouns.

The path model presented in Figure 2 indicates that the Japanese ESL learners selected the definite article when they thought the referent was specifically known to the hearer ($[\pm SR \pm SR]$ is represented as SR_HK in Figure 2) irrespective of whether the referent was general or not (General), whereas they appeared to use the definite article when they thought that the referent was not

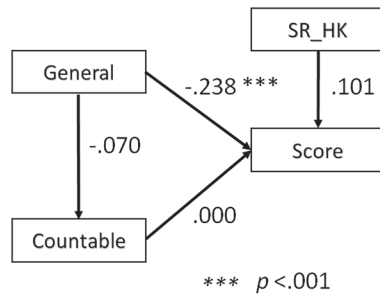


Figure 2:
Path Solution for Questions Employing the
Definite Article by Takahashi (2016, p. 258)

general, irrespective of whether the referent was specifically known to the hearer (SR_HK), which was consistent with the model in Master (1990). Here, it should be noted that a significant relationship was only found between the General criterion (or the criterion of non-specificity) (whether the referent was general or not) and the accuracy in the definite article (Score). It seems that as the questions on the English articles contained many uncountable or abstract nouns, the learners had difficulties applying SR_HK (or any other

criteria) when determining the definiteness of the NP; therefore, the General criterion was the only solution they could use to determine whether a definite article should be used. In other words, the path solution indicated that the learners tended to select the definite article when the referent was not general (as the negative path coefficient (-0.238) indicates).

It should be noted also that the path solution found no interactions between noun countability and accuracy for the definite article (Score). The reason for this is discussed in more detail in the following section.

4. Conclusion

4.1 Summary of the study and pedagogical implications

Previous research has found that many ESL learners have difficulty selecting English articles (including the definite article) in uncountable noun contexts (particularly in cases of abstract nouns). However, previous research and more recent research on the Fluctuation Hypothesis have examined the use of the Unique criterion only and have not examined how ESL learners select definite articles if they are unable to apply the Definite criterion (e.g. in uncountable noun contexts). The present study proposed an alternative method for the selection of a definite article in uncountable noun contexts and provided evidence to support the proposal.

Based on the detailed analysis in the present study, the following pedagogical implications are given for ESL teachers to assist students select appropriate articles.

- (1) In singular countable contexts (especially imaginable, countable nouns), the criterion as to whether the referent is 'only one' (unique) in the context or situation for both the speaker and hearer is appropriate.
- (2) It may be important to note that the referent needs to be unique (or specific) and known to both the speaker and the hearer (not just to the speaker).
- (3) In uncountable noun contexts (especially abstract nouns), the criterion as to whether the referent is not general (non-definite) could be useful.
- (4) It is not correct to suppose that uncountable nouns do not require articles. When the referent is definite, the definite article should be used irrespective of whether a noun is countable or not.

4.2 Do the findings of White (2009) contradict the path solution obtained in Takahashi (2016)?

White (2009) found that the Definite criterion (the referent is 'context unique' for both the speaker and the hearer) was the only factor that influenced the choice of the definite article. However, White (2009) did not consider a General criterion (or a criterion of non-specificity) in his study. Therefore, it is possible the General criterion may have been one of the major factors affecting the choice of the definite article. Furthermore, in White's (2009) study, a third of the materials included examples of 'second mention' and another third included examples with countable singular nouns. Therefore, the Definite criterion may have been readily applicable in two thirds of the question items used in the study. On the other hand, two thirds of the questions included uncountable nouns in Takahashi (2016). As the criterion of definiteness is difficult to apply in uncountable noun contexts, this difference may explain the significant contribution of the General criterion to the accuracy found in the use of the definite article (cf. Figure 2).

4.3 Further study needed

The present study did not examine how adult L1 speakers of English select the definite article. It remains to be seen whether L1 speakers of English (especially adults) use the General criterion to determine whether the definite article should be used in uncountable contexts.

Acknowledgements

The author would like to thank Enago (www.enago.jp) for the English language review.

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