RESEARCH

Definite generic vs. definite unique in L2 acquisition

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This study examines the role of universal meanings in second language (L2) acquisition by specifically looking at whether Japanese L2 learners of English can distinguish between definite generic *the* and definite unique *the*. Japanese is a language that has no definite (or indefinite) article, but the meanings expressed with definite generic and definite unique in the L2 should be accessible to L2 learners if they have full access to universal meanings. The difficulty for L2 learners is mapping features from the L1 to new L2 morphology (Lardiere, 2016). We employed a picture matching task (PMT) and a forced-choice elicitation task (FCET). For the PMT, participants had to match a sentence with one or more than one picture in each set of four pictures. Definite generic can refer to more than one individual when it is accompanied by a predicate like *be extinct*: one picture of a single dodo bird AND a picture of a set of dodo birds can refer to the entire species of dodo bird. Definite unique is when the definite article refers to one individual. The FCET required participants to select an article to fill-in-a-blank with an article they felt most appropriate. We recruited 47 Japanese L2 learners of English in total and 26 native speakers of English. The results show that L2 learners perform as well as the native speaker controls on the PMT for definite generic and definite unique, but the FCET results reveal differences between the two groups for definite generic and definite unique.

1. Introduction

Within the acquisition of grammar there is an ongoing difficulty for many second language (L2) learners, the acquisition of the article system in English. A number of studies to date (see Snape & Kupisch, 2016 for an overview) have found that L2 learners of English who have no formal article system present in the first language (L1) tend to:

a) omit articles in obligatory contexts
b) substitute articles for demonstratives and numerals (e.g., this, one)
c) substitute the definite article for the indefinite article (*the* for *a* or vice versa)

Typically, L2 learners who produce (a) type errors is the result of an oral production task where articles are optionally dropped before count nouns like *book*, e.g., **I bought book yesterday*, (Trenkic, 2007; White, 2003). Occasionally, one may find that L2 learners produce (b) type errors in oral production tasks as they substitute the definite article *the* for other nominal morphology like *this*, *that*, and for the indefinite article *a*, substitution of *one* (Robertson, 2000). However, in written forced-choice elicitation tasks (FCET) and acceptability judgment

tasks (AJT), it is common to find (c) type errors, in which learners select a definite article for an indefinite specific context, e.g., *#I hope to meet the friend for lunch today*; grammatically correct but pragmatically odd (#), since in a first-mention discourse situation, the hearer may possess no knowledge of who the speaker is referring to, i.e., who is *the friend* in this conversation?

One way to capture what may be going on is a syntax-semantics mismatch (Cho & Slabakova, 2014). What this means is that essentially universal meanings (Jackendoff, 2002), such as definiteness, plurality, ongoing action, past event, are expressed differently between the L1 and the L2. Under this approach, L2 learners must map or remap features (Lardiere, 2016) available to them via their L1 and map the features [±definite] to the morphemes *the* and *a*. Studies that have examined article choice errors have opted to focus on the features definiteness and specificity related to the morphemes *the* and *a*, testing the Fluctuation Hypothesis (Ionin, Ko & Wexler, 2004; Snape, 2006). For instance, Ionin et al. (2004) administered a FCET where Russian and Korean L2 learners of English were instructed to select the appropriate article for the context, as in (1).

(1) Definite specific
     At a cake shop
     A: Well, I've bought everything that I wanted. Are you ready to go?

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B: Almost. I want to know more about this cake shop. Can you please wait a few minutes? I am reading about (a, the, no article) founder; she is my old friend who has become very successful.

In (1), participants of Ionin et al.'s (2004) study circled their choice of article. The appropriate choice in (1) is *the* because the context is set up as definite specific. The Russian and Korean learners performed well in definite specific contexts, correctly selecting *the* most of the time. However, other contexts in the task proved to be more perplexing as learners produced substitution errors, which Ionin et al. (2004) termed as *fluctuation* between the universal features definite and specific.

Evidence to suggest that L2 learners from article-less languages, even at advanced levels of proficiency, continue to incorrectly select articles, comes from studies on genericity (Ionin & Montrul, 2010; Ionin et al., 2011; Snape, García-Mayo & Gürel, 2013). The difficulty with the definite generic (see (2) below), as argued by Ionin et al. (2011), is the acquisition of a new feature [+species]. L2 learners must map an additional feature [+species] to the definite article. A FCET was employed by Snape et al. (2013), much like the one used in Ionin et al. (2004). The FCET had several test dialogues like those in (2). Each test item was designed so that a generic interpretation would be readily available. Participants were instructed to circle the appropriate article to fill-in-the-blank space in the dialogue. The correct article for (2) is *the* since *the potato* is the subject of a noun phrase (NP) that refers to potatoes in general, not one unique type of potato.

(2)   Definite generic context in a FCET
      In a classroom
      A: This book gives interesting facts about South America.
      B: Like what?
      A: For example, _____ potato was first cultivated in South America.

      Ø (no article)   *an*   *a*   *the*

Studies by Ionin et al. (2011), Snape (2013) and Cho (2017) have employed an AJT where the L2 learner must choose between five options. An example of the five options is provided in (3) below. Each option is rated on a scale of 1–4, 1 being unacceptable, 4 being totally acceptable. The acceptable continuations of the dialogue are (3a, b) as either the definite generic or the indefinite generic plural has an entire species interpretation. (3c–e) are unacceptable continuations as they cannot refer to *dodo bird* as an entire species.

(3)   Definite generic and indefinite generic plural context in a AJT
      I have been studying biology today and I found out that many species are no longer alive. For example, I found out …
      a.   the dodo bird is extinct.   1   2   3   ④
      b.   dodo birds are extinct.   1   2   3   ④
      c.   a dodo bird is extinct.   ①   2   3   4
      d.   the dodo birds are extinct.   ①   2   3   4
      e.   dodo bird is extinct.   ①   2   3   4

Montrul and Ionin (2010) used a truth-value judgment task (TVJT), whereby L1 Spanish L2 English learners had to look at a picture accompanied by a written prompt and judge whether the prompt matched the picture (True) or did not match the picture (False), as in (4).

(4)   Definite generic or specific context in a TVJT
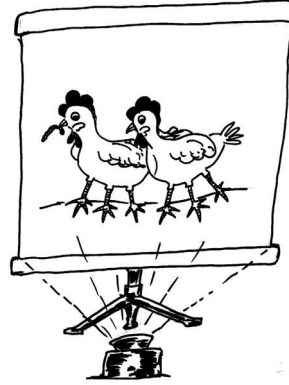
Last night, I saw a movie about two very strange chickens. They have three legs, instead of two! That's so weird. Everyone knows that a chicken normally has two legs! The chickens have two legs.

      Native English speakers: FALSE (specific reading)
      L1 Spanish L2 English learners: TRUE (generic reading)

The FCET, AJT and TVJT outlined above show that it is possible to collect judgements about article choice from L2 learners. However, each task has its own drawback. The FCET forces participants to choose one article only when in fact some L2 learners may be conflicted about which article is most appropriate. For example, one day the FCET could be administered and a participant decides to choose *the* for (2); on a different day the same participant may choose *a*. The AJT gives five options, but L2 learners may feel that they have to rank their responses thereby giving an inaccurate picture of what participants believe is the most appropriate article for the context in (3). The TVJT asks for a truth value judgement which means it is a binary answer for (4). Some L2 learners may be unsure about giving a True or False answer.

In this paper, we focus on definite generic and definite unique interpretations to test whether L2 learners can make a distinction between the two types of definite article functions on a picture matching task (PMT). An important distinction to make here between previous studies and the current study is that we use a PMT and compare the performance on the PMT with the performance on a FCET for definite generic and definite unique sentences.

2. Definite Generic and Definite Unique in English

English is one of the world's languages with an article system that encodes definiteness. In comparison with Romance languages (e.g., Spanish) and Germanic languages (e.g., German), the article system in English is morphologically and syntactically simple as there are only two articles, the definite article *the* and the indefinite article *a*; the articles lack gender and number agreement with the noun, as found in Spanish, and there is no case marking like there is for the German article system.[1] However, despite its simplicity, the English article system is semantically and pragmatically complex. This section outlines two such complexities associated with the definite article *the*, genericity and uniqueness.

A certain type of genericity found in English is outlined in Krifka et al. (1995). There is what is termed NP-level generics and sentence-level generics.[2] The NP-level generic is a special case as the noun phrase is accompanied by what Krifka et al. (1995) term as a kind predicate. An example is in (5).

(5)   Definite generic (NP-level)
      Fact is, the panda is protected by law in China.

The NP in (5) is characterized as NP-level generic because the subject NP *the panda* + kind predicate *be protected* can refer to the entire species of panda, not one single panda.[3] The subject NP must denote a kind: an individual panda or a group of individual pandas cannot *be protected*, but a kind can be (Ionin et al., 2011). The indefinite article + kind predicate, e.g., **A panda is protected by law in China*, is deemed as ungrammatical as the indefinite article fails to capture 'the species as a whole' interpretation. Other kind predicates that can provide a generic reading with the definite article in subject position are *be cultivated*, *be extinct*, *be widespread*, and *be common*. A formal semantic definition of definite NP-level genericity is provided in (6).

(6)   Uniqueness with taxonomic entities: A sentence of the form [the$_{gen}$ α] β presupposes that α contains at least one element X and at most one element X, and asserts that X is β, where X ranges over entities in the taxonomic domain.
      (from Ionin et al., 2011, p. 250)

When *panda* denotes a property of species, *the panda* in (5) refers to a unique taxonomic entity. A unique taxonomic entity simply means that *panda* represents the entire species of panda, not a sub-group or certain type of panda. Conversely, the NP in (7) below is referred to as definite unique as *panda* is either introduced into the discourse context by an indefinite article, e.g., *A panda in China is famous. The panda is large and cuddly*, or through the use of a picture where there is a contextually salient panda to establish uniqueness.

(7)   Definite unique
      It's obvious, the panda is large and cuddly.

The speaker presupposes that there is one salient panda based on its attributes, being large and cuddly. The NP in (7) would be infelicitous if there is more than one salient panda in the discourse or no panda. A formal semantic definition of uniqueness is given in (8).

(8)   Uniqueness: A sentence of the form [the α] β presupposes that α contains at least one element x and that α contains at most one element x, and asserts that the unique x which is α is also β.
      (based on Heim, 1991)

To sum up briefly, two types of definite singular have been outlined here, definite generic (NP-level generic) and definite unique. The definite generic can refer to a kind, whereas the definite unique denotes one unique individual. The main difference between the two formal definitions in (6) and (8) is that there is an additional feature besides [+definite] for the definite generic: this is referred to as a [+species] feature (see Dayal, 2004). The additional feature [+species] must be mapped onto the definite article for it to have a generic interpretation.

3. Universal Meanings: Genericity and Uniqueness

Languages like Russian may lack articles, but it has word order or morphology that can mark definiteness (see Cho & Slabakova, 2014). Mandarin Chinese has classifiers, numeral *yi* (one) and demonstrative *nei* (that) which are regarded by some linguists (e.g., Cheng & Sybesma, 1999; Li & Thompson, 1981) to be evidence that a definite or generic interpretation is available. Korean is another article-less language, though it is possible to obtain a generic meaning with topic marker *-nin* in (9) and a definite unique interpretation with nominative marker *ka* in (10) (Lee, 1989).

(9)   Topic marker *-nin*
      kae-nɨn   cic-nɨn   -ta.
      dog-TOP   bark-PRES −DEC
      'The dog barks.'

(10) Nominative marker *-ka*
      kae-ka   cic-nɨn   -ta.
      dog-NOM   bark-PRES −DET
      'The dog is barking.' OR 'The dogs are barking.'

Japanese, like Korean, has no article system, though it is possible to obtain a difference in interpretation between the concepts generic and unique with the use of topic marking and nominative marking (Kuroda, 1992). Topic and nominative marking are used to differentiate between a generic and definite unique interpretation in examples (11–12).

(11) Topic marker *–wa* (sentence-level)
      tori-wa   tobun-da.
      bird-TOP   fly-COP
      'A bird flies.' OR 'Birds fly.'

(12) Nominative marker –*ga*
     tori-ga   tonde-iru.
     bird-NOM   flying
     'The bird is flying.' OR 'The birds are flying.'

In example (11), the bare noun *tori* (bird) with topic marker –*wa* is typically generic, not unique. Thus, (11) can refer to one or more than one bird and the context in which (11) is uttered should make it clear if there is more than one bird. Example (12) is a bare noun with nominative marker –*ga* that has a definite unique/definite plural interpretation.

4. L2 Acquisition of Articles
Many studies to date have investigated article choice by adult L2 learners (see García Mayo & Hawkins, 2009). One of the aims of such studies is to investigate whether L2 learners can map features from the L1 to new morphology in the L2. In the case of generics, learners have to map the [+definite] feature and the [+species] feature to the definite article. An advantage of using a FCET is that, as the name implies, it forces participants to make one choice only and to ignore any other options on offer. Snape et al. (2013) examined L1 transfer effects by comparing three L2 learner groups at upper intermediate and advanced proficiency levels, Spanish (n = 50), Turkish (n = 88) and Japanese (n = 33). The focus of the study was on whether L2 learners of English could distinguish between NP-level generics and sentence-level generics in subject and object positions (with count and mass nouns). A FCET was administered and the results showed that indeed L1 transfer played a large role in determining how successful each L2 learner group would be (see **Figure 6** below for results of the native speaker controls). The authors predicted that the Spanish learners would be more successful in article choice compared with the Turkish and Japanese learners because Spanish has an article system. The Spanish L2 learners performed better than the Turkish and Japanese L2 learners due to L1 transfer effects. Japanese L2 learners were the least accurate at selecting the definite generic with a kind predicate compared with the Turkish L2 learners and Spanish L2 learners. The fact that Japanese and Turkish lacks a definite article that can refer to kinds in part explains why even at advanced levels, Japanese and Turkish speakers of English cannot identify the appropriate article for NP-level generics.

A follow-up study conducted by Snape (2013) partially replicated a task used by Ionin et al. (2011) to test Japanese speakers on their understanding of kinds. Rather than a FCET, Ionin et al. (2011) and Snape (2013) opted to use an AJT. Instead of forcing participants to select only one article for each context, as in a FCET, learners were given the option of rating each article choice from five options (see (3) above) based on the acceptability of each sentence with the preceding context. Snape (2013) found that native speaker controls rated the definite generic highly whereas the Japanese L2 learners rated the definite generic low. In fact, the unacceptable choice of the indefinite article was rated higher than the definite generic to refer to kinds. The Spanish L2 learners were more accurate in their choices than the Japanese L2 learners. However, in both Ionin et al. (2011) and Snape (2013), Russian, Korean and Japanese L2 learners performed much better on the definite anaphoric singular and plural test items, which are similar to definite unique and definite plural in the PMT used in the current study.[4]

The results of the studies on L2 article choice suggest there is a syntax-semantics mismatch between what is available through universal meaning (discussed in section 3) and how that is mapped onto specific morphology in the L1 and L2 (Slabakova, 2008). If articles and associated features like [+definite] and [+species] are not present in the L1, mapping features to L2 morphology may prove to be difficult. Features in the L1 must be reassembled and mapped onto the new L2 morphology, but for L2 learners who lack such morphology in the L1, i.e., articles, and thus have no direct one-to one correspondence with the L2 morphology, problems in acquisition may arise and persist (Lardiere, 2016).

5. The Study
5.1. Participants
The current study aims to find out whether Japanese L2 learners of English can make a distinction between what is definite generic and what is definite unique. In order to achieve this, we administered a PMT to 32 Japanese L2 learners of English and 26 native English speaker controls. In addition, we gave a separate group of 15 Japanese L2 learners of English a FCET using the same items employed in the PMT. The L2 participants' proficiency level in English was measured via the Test of English for International Communication (TOEIC) scores, a listening and reading standardized test used throughout many Asian countries. The highest score one can achieve is 990. These scores were subsequently converted to the Common European Framework of Reference (CEFR) for proficiency (see **Tables 1** and **2** below).

5.2. Research questions
Our research questions are formed on the basis of whether Japanese L2 learners are able to make a distinction between different types article-related meanings in English. The research questions are as follows:

> RQ1. Can Japanese L2 learners distinguish between definite generic and definite unique on a PMT?
> RQ2. Can Japanese L2 learners correspondingly select the definite article for definite generic and definite unique on a FCET?

RQ1 was formulated on the basis of whether L2 learners can tell the difference between the two types of definites. RQ2 seeks to find out whether L2 learners differ between

Table 1: PMT L2 participants divided into CEFR proficiency groups.

C1 (advanced)	N = 3
B2 (upper intermediate)	N = 6
B1 (intermediate)	N = 23

Table 2: FCET L2 participants divided into CEFR proficiency groups.

| B2 (upper intermediate)	N = 5
B1 (intermediate)	N = 10

choosing the definite article for definite generic and choosing the definite article for definite unique. If Japanese L2 learners have successfully mapped the [+species] feature to the definite generic, then we would expect to find appropriate selection of the definite article for the two types of definites on the FCET.

The aim of the current study is to examine L2 learners' understanding of definite generic and definite unique. Definite generic sentences refer to those sentences where the definite article appears in subject position followed by a count noun, e.g., *The dodo bird is extinct.* Definite unique sentences are similar to definite generic as the definite article is in subject position followed by a count noun, e.g., *The dodo bird is fast on its feet.* Definite unique sentences are different to their definite generic counterparts in that the definite generic can refer to the entire species of dodo bird whereas the definite unique is limited and can only refer to one individual dodo bird. A PMT was employed for one group of L2 learners and a FCET was administered to another group of L2 learners. One of the advantages a PMT has compared with a FCET is that it simplifies decision-making for the participant. In other words, instead of having to read a series of short dialogues and decide which article is appropriate for each context, a PMT only requires participants to read one sentence and judge which picture or pictures match the sentence.

5.3. Picture Matching Task

Examples of test items and distractor items in the PMT are given below. The picture or pictures that match the sentence are circled.

(13) You may be surprised to learn, the snow monkey is indigenous to mountainous areas of Japan. (definite generic).
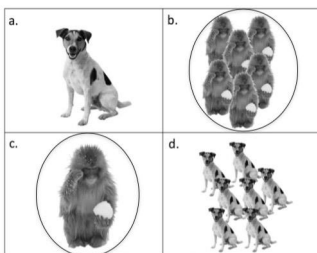

In (13), there are two possible pictures that match the sentence, (13b) and (13c), as both one monkey and more than one monkey are acceptable choices to refer to snow monkeys in general. This is because the use of the kind predicate *be indigenous* accompanied by the definite article in subject position can refer to the entire species of snow monkey. However, compare (13) with (14), where there is no kind predicate that can provide a reading of snow monkeys in general.

(14) You can see, the snow monkey is small and cute. (definite unique).
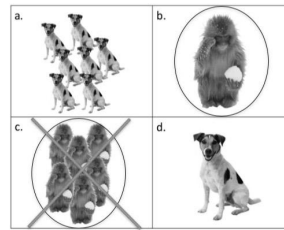
The only acceptable picture that matches the sentence is (14b) since the snow monkey is not being referred to in general, but rather the definite article has the function of specifying only one individual snow monkey. Picture (14c) does not match the sentence, hence for ease of understanding, an X mark has been placed over picture (14c) to indicate to the reader that it is an unacceptable choice on the task. Other items in the PMT were distractor item sentences where the subject was a definite plural, indefinite generic plural or an indefinite generic singular, as in examples (15–17).
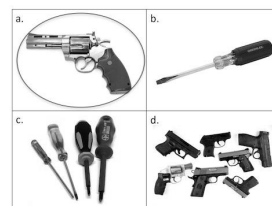
(15) You can see, the snow monkeys are small and cute. (definite plural).
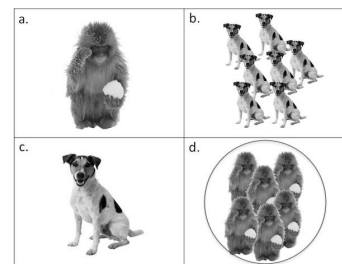
(16) Buildings are constructed of many materials. (indefinite generic plural).
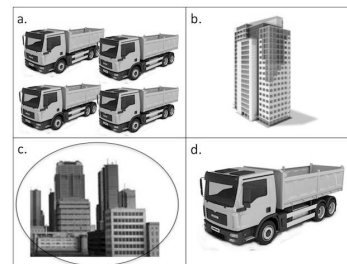
(17) A gun is dangerous for children to handle. (indefinite generic singular).

Example (15) refers to a definite unique set of snow monkeys. Thus, (15d) would be the appropriate picture to match the sentence. (16) provides a general description

about *buildings*, therefore picture (16c) is the appropriate choice. (17) is a general description of *a gun* with picture (17a) matching the sentence. The PMT consisted of a total of 30 items of the type illustrated in (18).[5]

(18) Item categories in the PMT
    a. Definite generic category (n = 5)
    b. Definite unique (singular) category (n = 5)
    c. Definite plural category (n = 6)
    d. Indefinite generic plural category (n = 6)
    e. Indefinite generic singular category (n = 8)

The indefinite generic plurals, definite plurals and indefinite generic singulars all served as distractors in this study since the main aim of the study was to determine whether L2 learners could draw a distinction between definite generic and definite unique. Two versions of the task were created to avoid any ordering effects. The two versions were given out to the participants randomly. The set of pictures were either printed out or shown on a projector which all participants could clearly see. The pictures were accompanied with an answer sheet where the participants could look at the sentence and pictures and choose what they believed was the correct answer or answers. The instructions made it clear that the participants had to look at the set of four pictures with each sentence and consider which picture or pictures matched the sentence description. There was an example and practice item for the participants to complete before the main task began. They were instructed to make sure they understood the instructions and to ask the experimenter if anything was unclear before starting the task. They were further told that they should not go back and change any answers once they had circled their choice or choices.

5.4. Forced-Choice Elicitation Task
The FCET is based on Ionin et al.'s (2004) task. All 50 items were included in the task. The FCET was administered to a new group of 15 Japanese L2 learners of English.

(19) Item categories in the FCET
    a. Definite generic category (n = 10)
    b. Definite unique category (n = 10)
    c. Definite plural category (n = 10)
    d. Indefinite generic plural category (n = 10)
    e. Indefinite generic singular category (n = 10)

The aim of the FCET is to elicit article choices to see if L2 learners can select the definite article for (19a, b); (19c, d, e) serve as distractors. Two online (web page) versions of the task were created to avoid ordering effects from the use of a single version. The two versions were randomly distributed to participants. Instructions, an example and three practice items were provided to participants before they began the FCET. The choices available to the L2 learners via a drop-down menu were *the*, *a*, no article and 'don't know' to fill-in-the-blank. The three article options were always randomized in the drop-down menu. Examples are provided in (20–21).

(20) Definite generic
    You may be aware, _____ tulip is prevalent throughout many parts of the Netherlands.

    the   a   no article   don't know

(21) Definite unique[6]
    Kelly received a tulip in May. _____ tulip is beautiful.

    a   no article   the   don't know

The FCET was not timed, but participants were instructed to read each sentence and make a decision and not to go back and change their answers.

5.5. Predictions
We predict that L2 learners are able to recognize the difference between definite generic and definite unique because there is a distinction between the two interpretations in Japanese. By providing a sentence with pictures, L2 learners may find the PMT easier than a FCET. If L2 learners have basic article mastery, they should be sensitive to the choice of the definite article (Ionin et al. 2011), hence the feature [+definite], for definite unique sentences rather than definite generic sentences on the FCET. The difficulty for learners is mapping the [+definite] and additional feature [+species] to the definite generic to represent NP-level genericity.

5.6. Results of the PMT
Figure 1 illustrates the number of pictures chosen for definite generic and definite unique by native speaker controls.

    A within-group chi-square test shows that a significant difference was found between the two definite conditions (Pearson $\chi^2 = 10.9$, $p = 0.00$) as the native speaker controls chose two pictures for definite generic (39%) and one picture of one referent for definite unique (8%). In the opposite direction, the native speaker controls selected definite unique for one picture (92%) more than definite generic (61%). **Figure 2** compares the choice of pictures for definite generic and definite unique by the L2 learners.

    A within-group chi-square test shows that there is a significant difference between the choice of pictures for definite generic and definite unique (Pearson $\chi^2 = 4.8$, $p = 0.02$). The L2 learners selected two pictures for definite generic more often (22%) than for definite unique (8%). Conversely, the learners were more likely to select one picture for definite unique (92%) than for definite generic (78%). **Figure 3** shows the choice of pictures for definite generic for the L2 group and native controls group.

    A between-groups chi-square test indicates a significant difference between the number of pictures chosen for the definite generic between the two groups (Pearson $\chi^2 = 8.0$, $p = 0.00$). The native speaker controls were better at identifying that the definite generic can refer to both pictures (definite generic and indefinite generic plural, 38%)[7] out of a set of four (see examples (4) and (8) above) as the definite generic with
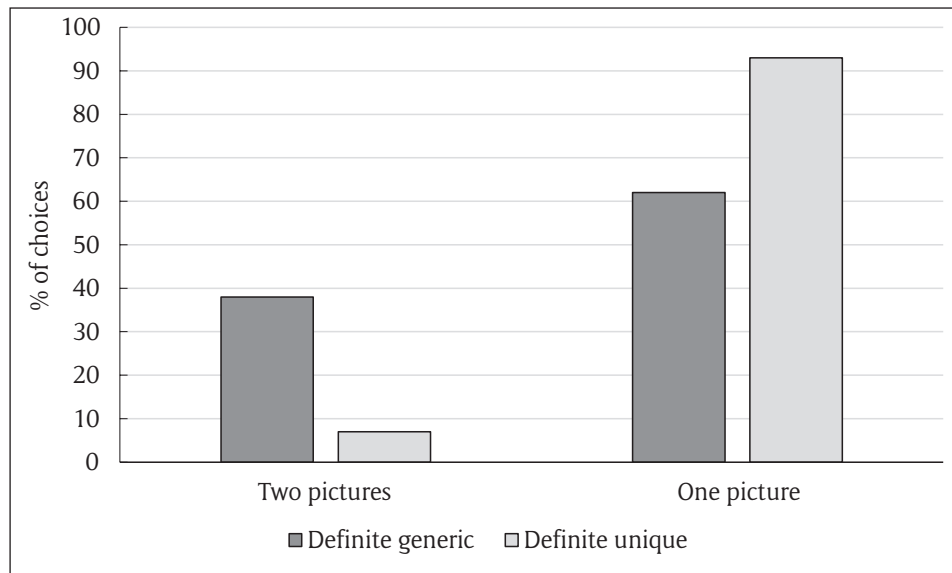
Figure 1: Choice of pictures for definite generic and definite unique (native speaker controls).
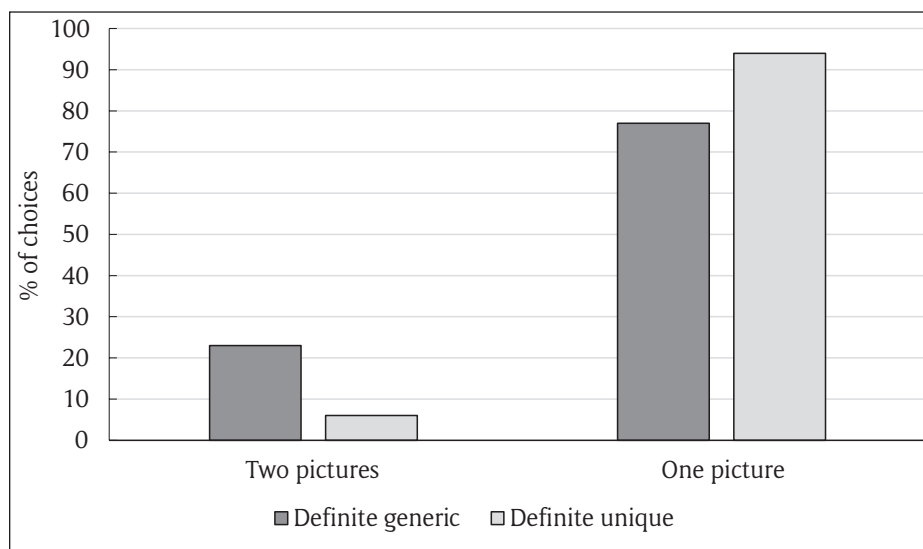
Figure 2: Choice of pictures for definite generic and definite unique (L2 learners).

a kind predicate like *be indigenous* denotes the entire species of snow monkey. However, the L2 learners recognize that definite generic can refer to both pictures (23%) as both pictures were selected on the PMT. There is no difference between proficiency levels in picture selection.

Figure 4 presents of the number of pictures chosen by both groups for definite unique.

A between-groups chi-square test shows no significant difference between the number of pictures chosen for the definite unique between the two groups (Pearson $\chi^2 = 2.00$, $p = 0.157$). Both groups performed over 90% correctly in selecting one picture to refer to the definite unique sentences on the PMT. **Figure 5** shows that when only one picture is selected on the PMT, a picture of more than one referent, definite generic is preferred to definite unique by both groups. In other words, only definite generic can refer to more than one referent and both groups recognize that definite unique cannot.

A between-groups chi-square test reveals no significant difference between the definite generic and definite unique (singular) between the two groups (Pearson $\chi^2 = 0.33$, $p = 0.565$). Both groups correctly rejected the definite unique sentence to refer to more than one snow monkey, though L2 participants did not completely reject definite unique (19%). The 19% acceptance of two pictures for the definite unique sentence seems to be tied to the proficiency level of the L2 participants as far more B2 participants choose two pictures compared to the C1 participants.[8] Both groups (NS controls = 18%, L2 learners = 28%) selected a picture of more than one snow monkey to match a definite generic sentence.

5.7. Results of FCETs
The results from FCETs (Snape, 2006; Snape et al. 2013) are shown in **Figures 6** and **7** for native speaker controls.[9]

Figures 8 and **9** provide the results of the FCET for all 15 participants from the current study. A Mann-Whitney
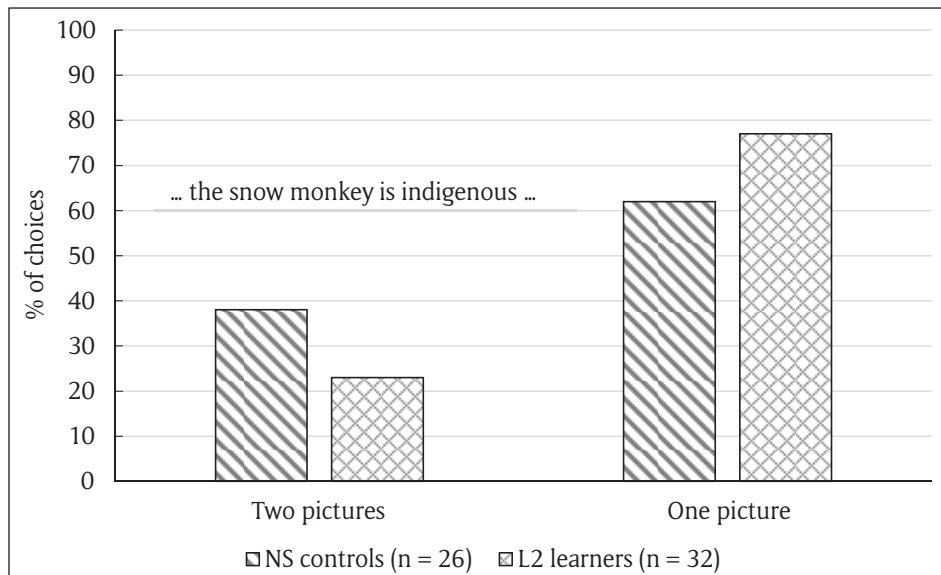
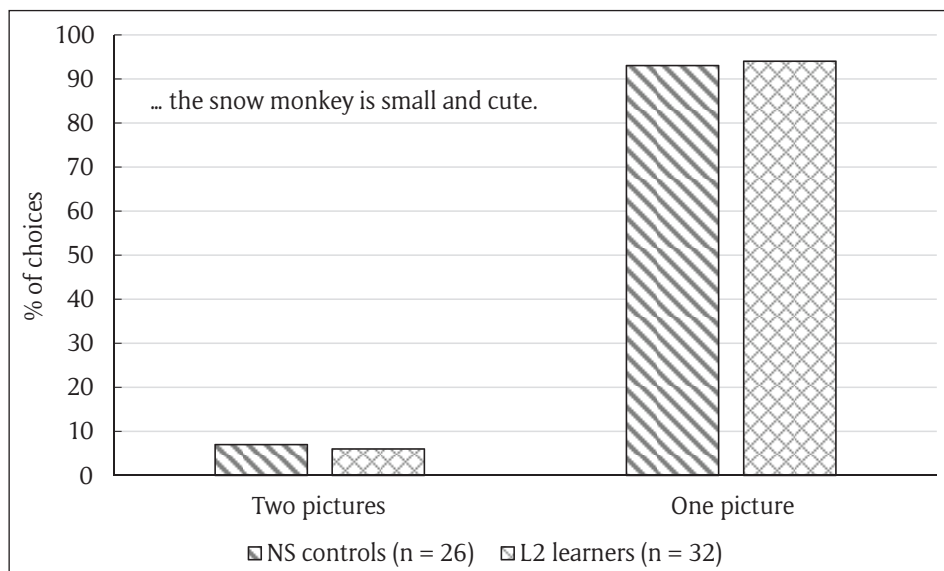**Figure 3:** Choice of pictures for definite generic (both groups).

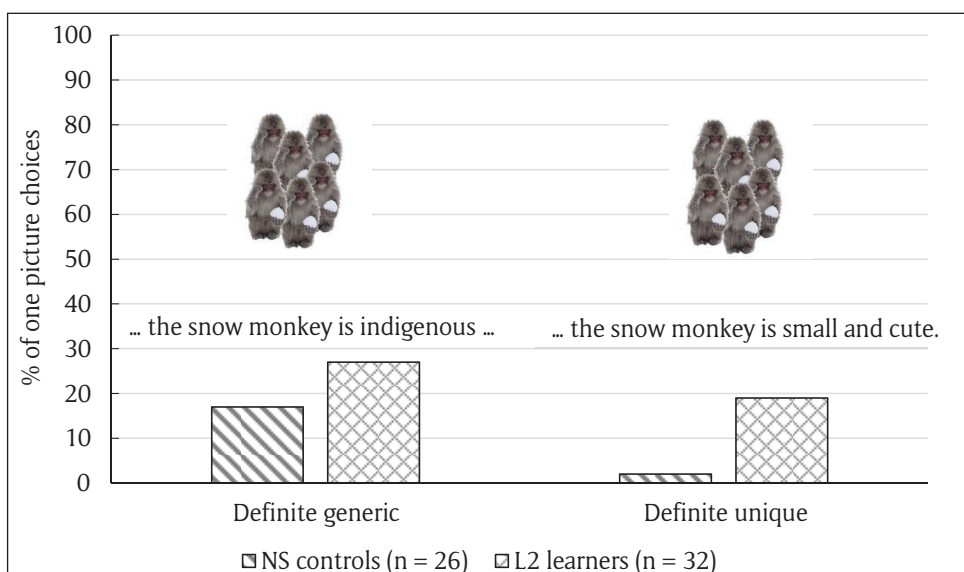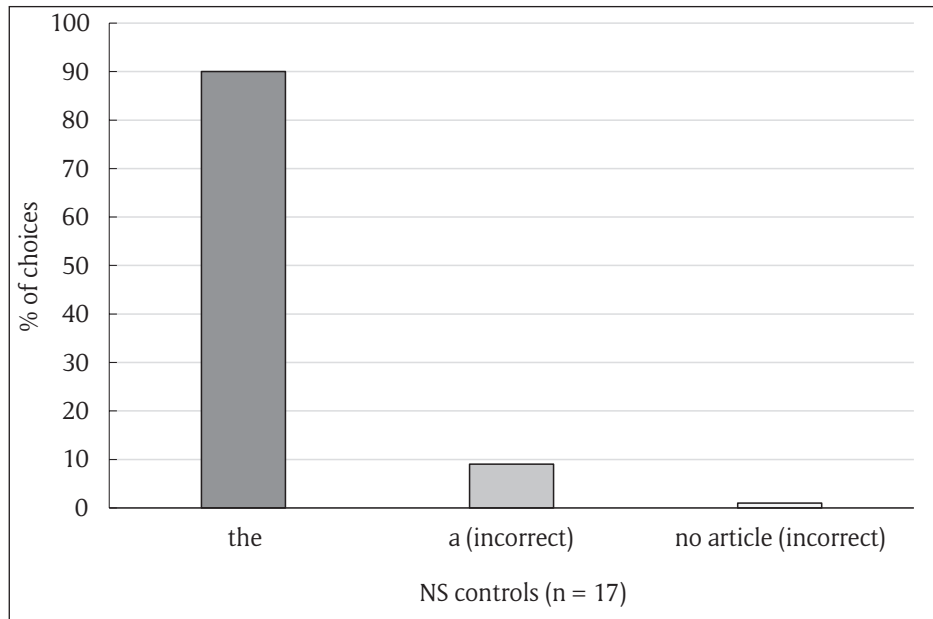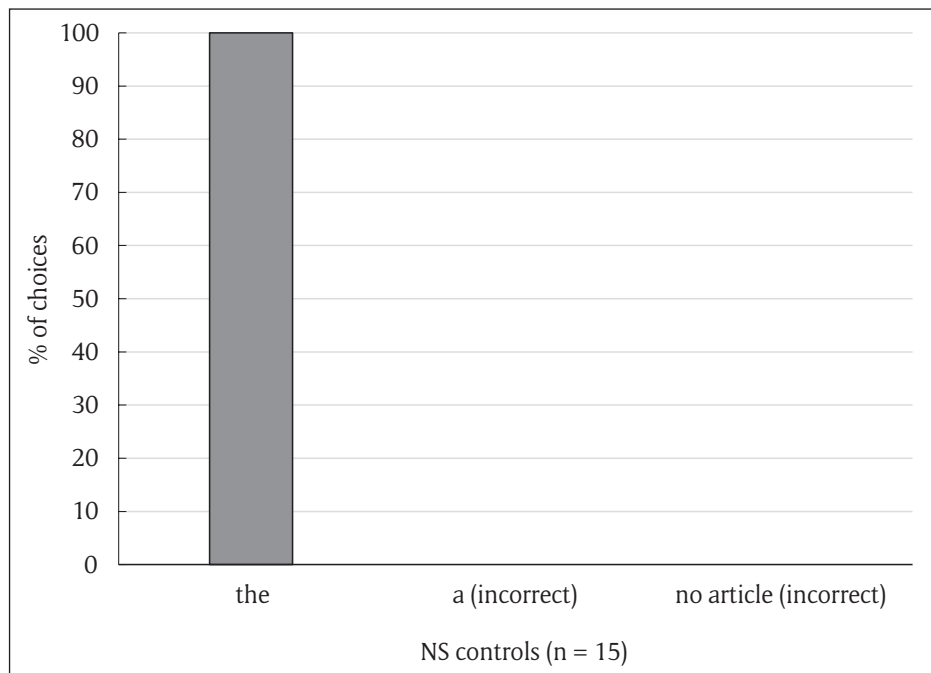**Figure 4:** Choice of pictures for definite unique.

Figure 5: Definite generic and definite unique (one picture with more than one animal).

Figure 6: Correct choice of *the* and incorrect choice of *a* and *no article* for definite generic (adapted from Snape et al., 2013).

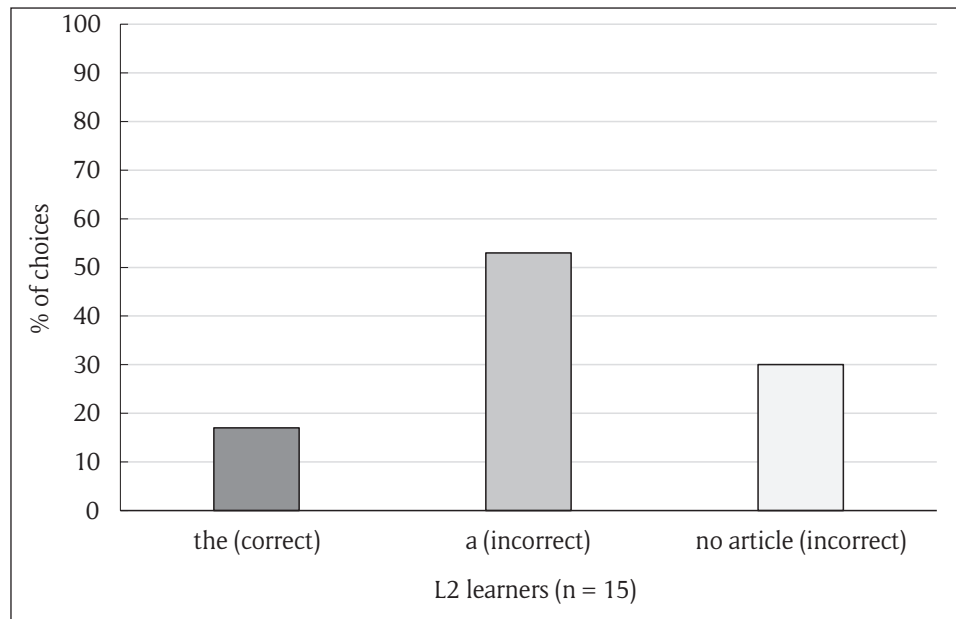**Figure 7:** Correct choice of *the* and incorrect choice of *a* and *no article* for definite unique.

U test revealed no significant differences between proficiency levels in participants' article choices for definite unique (B1 proficiency group: M = 0.89; SD = 0.31, B2 proficiency group: M = 0.74; SD = 0.44, $p > 0.05$) and definite generic (B1 proficiency group: M = 0.16; SD = 0.36, B2 proficiency group: M = 0.18, SD = 0.38, $p > 0.05$).[10]

Figure 8 shows that L2 learners are poor at selecting the definite article for definite generic sentences (less than 20%). Conversely, in **Figure 9**, L2 learners are far better at choosing the definite article for definite unique sentences (more than 80%). A within-group chi-square test shows that there is a significant difference between the correct choice
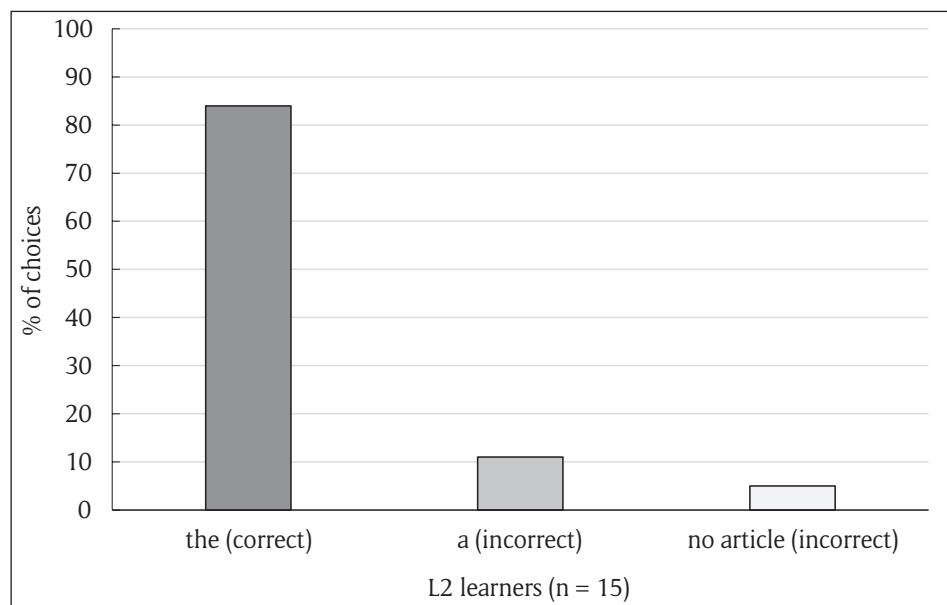
of *the* and incorrect choices of *a/no article* for definite generic and definite unique (Pearson $\chi^2 = 44.86$, $p = .0001$).

6. Discussion

In summary, our study set out to test whether L2 learners could make a distinction between definite generic and definite unique sentences by using a PMT and a FCET. The reason for including a FCET was to be able to show that the type of task can produce different results for L2 learner groups. We argue that the findings from this study show that Japanese L2 learners can access universal meanings of genericity and uniqueness. Some Japanese L2 learners correctly selected two pictures for

Figure 8: Correct choice of *the* and incorrect choice of *a* and *no article* for definite generic.

Figure 9: Correct choice of *the* and incorrect choice of *a* and *no article* for definite unique.

definite generic and one picture for definite unique on the PMT and were no different to the native controls in their selections. What emerges from previous studies is that even if L2 learners are unable to understand the difference between indefinite generic singular (sentence-level generic) and definite generic (NP-level generic), it is clear from this current study that when learners are shown definite generic and definite unique in picture form, they are able to make a distinction between the two types of definites on the PMT. However, the results from the PMT are also rather surprising as both native controls and Japanese L2 learners selected two pictures for the definite generic less than 40% of the time. An item analysis and individual analysis (see Appendix, Tables 2–4) reveal that some definite generic items on the PMT are more prone

to be interpreted as generic by some participants; this may be related to the type of kind predicate that appears with the definite article.

The results of the FCET, in comparison with the results from the PMT, are striking because all participants from the two proficiency groups failed to select the definite article for definite generic around 83% of the time, across all items and all individuals (see Appendix, Tables 5 & 6). This is not the case for definite unique where accuracy is high across all items and all individuals (see Appendix, Tables 7 & 8). Notwithstanding previous studies' findings, Japanese L2 learners' understanding of definite generic and definite unique have been somewhat revealing because even though L2 learners typically have been shown to be less accurate than native English speakers in article choice

on a FCET or AJT,[11] some participants are able to match a sentence to the correct picture or pictures on a PMT.

7. Conclusion

Our findings from the PMT confirm that learners from article-less languages are able to make a distinction between definite generic and definite unique. The results from the FCET support the claim made by Lardiere (2016) and Cho and Slabakova (2014) that mapping features (available through the L1) to new morphology, i.e., the definite article, in the L2 continues to be challenging, even at higher levels of proficiency. In particular, mapping the feature [+species] to the definite article to represent definite generic is problematic (see Ionin et al., 2011; Snape, 2013 for similar findings). Clearly, the type of task[12] administered in a study can produce different outcomes.

Notes

[1] See Lyons (1999) for a detailed analysis of languages with and without article systems.

[2] Sentence-level generics are sentences that provide a general description. For instance, *An orange is full of vitamin C*, describes all oranges in general.

[3] As an anonymous reviewer points out, in a case where *the panda* appears with a kind predicate followed by a prepositional phrase, e.g., *The panda is protected at the house of my uncle*, *the panda* has a definite unique interpretation if *the panda* has already been introduced into discourse.

[4] Definite anaphoric is the type of definite article used when someone refers back to a previously mentioned referent in the discourse, e.g., *A man walked into a bar. The man wore a long dark coat.*

[5] See Appendix Table 1 for a complete list of all the items that were created. 50 items in total were produced, but only 30 items were included in each version of the PMT because we felt that the task was too long with all 50 items. We wanted to include a lot of distractors, but as an anonymous reviewer points out, the fact that there is not an equal number of items in each category may have influenced the results somehow.

[6] The definite unique is somewhat similar to definite anaphoric (see Snape, 2013) as it refers to a particular entity in the discourse.

[7] An anonymous reviewer correctly highlights that the native controls only chose two pictures 38% of the time for the definite generic. Ideally, this should be much higher. It may be that there is a preference for NP-level indefinite generic plural rather than the definite generic, e.g., *Snow monkeys are indigenous to mountainous areas of Japan.*

[8] The 19% result should be interpreted cautiously because there are far more participants in the B2 group (n = 23) compared with the C1 group (n = 3). More participants at an advanced proficiency level would need to be tested to see, if indeed it is the case, that they are more accurate with definite unique sentences than the intermediate proficiency group.

The PMT results are divided for each proficiency group by individual performance (see Appendix, Tables 2–4).

[9] The FCETs used by Snape (2006) and Snape et al. (2013) feature different test items to the ones used in the current study, thus the results of the native controls are not directly comparable with the L2 learners. However, the results give readers an idea how accurate native controls typically are on this type of task.

[10] See Tables 5–8 in Appendix for individual performance on the FCET.

[11] Snape and Umeda (to appear) found that native speaker controls showed a higher rating of *a* than *the* in definite nonspecific contexts compared with definite specific contexts. There should be no difference in ratings between the two definite contexts as only *the* is the appropriate article. Likewise, for indefinite specific contexts, there was a higher rating of *the* than *a* compared with indefinite nonspecific contexts. When native speakers of English were given a FCET in Ionin et al. (2004) and Snape (2006), no such article choice patterns were observed. All native speakers correctly selected the appropriate article to fill the gap, i.e., *the* for definite nonspecific contexts and *a* for indefinite specific contexts. Therefore, it seems that if native speakers are given options rather than being forced into a choice, they behave more like L2 learners.

[12] The current study employed offline tasks to obtain article judgements. The use of online self-paced reading tasks (Kim & Lakshmanan, 2008) may also be used in conjunction with an offline task in order to gain further insight into article choices.

Additional File

The Additional file for this article can be found as follows:

· **Appendix.** Tables of items and individual analysis of results. DOI: https://doi.org/10.22599/jesla.46.s1

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