

# 1 Specificity Affects Determiner Choice Even When Definiteness Transfers

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## 1 Introduction

Specificity and definiteness, Ionin *et al.* (2004) argued, are two features that parametrically determine article lexicalization choice in the languages of the world. To account for the characteristic specificity effect that describes errors that second language (L2) learners have been observed to make in their determiner uses, Ionin *et al.* (2004) proposed that second language learners with determiner-less first language (L1) access the Article Choice Parameter available from Universal Grammar (UG) and initially fluctuate between its definiteness versus specificity settings. After an initial fluctuation phase, L2 learners fix the parameter, settling on the appropriate value, so that specificity driven misuse disappears. Second language research on the acquisition of determiners has subsequently been concerned with the question of whether the article parameter remains accessible to L2 learners.

In this chapter, we argue that specificity effects on determiner acquisition, unlike definiteness effects, are not due to fluctuating access of a parametrized universal semantic feature system, as they appear to occur even in cases of predicted transfer, when the L1 and L2 both feature the same parameter setting. Here, we look at the acquisition of L2 French by native speakers of English. Both languages have articles that mark definite versus indefinite noun phrases (NPs). We explore the possibility of full transfer of the article system from the L1 to the L2. However, as we show, the acquisition data also reveal an effect of specificity in some contexts. The rest of the paper is structured as follows. In Sections 1.1 and 1.2, we review the Article Choice Parameter hypothesis and related second language acquisition studies. Section 2 introduces our experimental techniques, followed by results in Section 3 and a discussion of the possible

source of the observed specificity effect in Section 4. In Section 5, we conclude that specificity should be viewed as a pragmatic notion rather than a grammaticalized parameter.

## 1.1 The Article Choice Parameter

Acquisition of determiners is a well-known challenge for speakers of languages that lack overt articles. Such L2 learners have been observed to overuse the definite article in [+specific, –definite] contexts (Huebner, 1983; Master, 1987; Parrish, 1987; Thomas, 1989), and overuse the indefinite article in [–specific, +definite] contexts (Ionin *et al.*, 2004; Leung, 2001). Ionin *et al.* (2004) developed an account that traces these two types of errors to the same source: learners initially fluctuate between the two settings of the Article Choice Parameter and therefore sometimes use the definite determiner to mark [+definite] and sometimes [+specific] NPs. In the developing L2 grammars, the indefinite determiner marks either [–definite] or [–specific] NPs. This view of early stages of language acquisition became known as the Fluctuation Hypothesis.

Ionin *et al.* (2004) conceptualize definiteness and specificity as semantic features that they informally define as follows (Ionin *et al.*, 2004: 5) (for formal definitions, see Heim, 1982):

- If a determiner phrase (DP) of the form [D NP] is [+definite], the speaker and the hearer presuppose the existence of a unique individual in the set denoted by the NP.
- If a DP is the form [D NP] is [+specific], 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.

In English, the definite determiner *the* marks definite NPs, independent of whether these NPs are specific (1a) or nonspecific (1b) (examples from Ionin *et al.*, 2004: 8). As the following examples show, the definite article *the* is used to encode uniqueness whether or not the referent is known to the speaker with a noteworthy property.

- (1) a. I'd like to talk to *the winner of today's race* – she is my best friend!  
 b. I'd like to talk to *the winner of today's race* whoever that is; I'm writing a story about this race for the newspaper.

Unlike English, languages such as Samoan, according to Ionin *et al.* (2004), have determiner systems based on specificity. Thus, the Samoan article *le* marks specific singular DPs, while the article *se* appears with nonspecific singular DPs (Mosel & Hovdhaugen, 1992). Plural DPs are not marked.

Nevertheless, the validity of this classification is questioned by Tryzna (2009). She conducted an experiment to find out whether the article *se* in

Samoan could appear in definite nonspecific contexts. If Samoan lexicalizes articles based on their specificity values, *se* is predicted to be able to occur in nonspecific definite and indefinite contexts, and *le* in specific definite and indefinite contexts. Tryzna (2009) created a data-elicitation questionnaire. The test sentences in Samoan contained DPs in four contexts: specific definite, specific indefinite, nonspecific definite, and nonspecific indefinite ones. The Article Choice Parameter (Ionin *et al.*, 2004) predicts that *se* should appear in definite nonspecific contexts. However, as Tryzna (2009) shows, the nonspecific definite context requires the article *le*, as in (2). The article *se* only appears in nonspecific indefinite contexts.

- (2) A'fai 'ete mana'o 'e tautala i\*se/le malo fa'atali se'i uma  
 If you want you speak to ART winner wait till over  
 le tautuuna.  
 ART race.

'If you want to talk to the winner, stay until the race is over.'

(Tryzna, 2009: 72)

The author proposed the following system of articles in Samoan (see Table 1.1) (Tryzna, 2009: 71).

Additional evidence that questions the status of specificity as a grammaticalized feature come from typological studies. Contrary to early accounts of the article systems in French-based Creoles, recent studies (e.g. Déprez, 2011) show that definite articles encode familiarity – that is, presupposed unique existence by speaker and hearer – rather than specificity, and that indefinite determiners can be used in both specific and nonspecific contexts (see also Déprez, 2013, 2016).

Ionin *et al.* (2009) addressed this cross-linguistic evidence by modifying their original Fluctuation Hypothesis. They argued that the article system in Samoan is more complex than initially assumed. Samoan uses the article *se* to mark NPs in nonspecific indefinite contexts, while *le* appears with specific indefinites and all definite NPs (specific and nonspecific). Drawing

**Table 1.1** Specificity and definiteness interaction in Samoan

Context type	An example of a test sentence (target DP in bold)	The corresponding Samoan DP
1. Nonspecific indefinite	I'm looking for a <b>hat</b> to go with my new coat.	<b>se polou</b>
2. Specific indefinite	I'm looking for a <b>hat</b> . I must have left it here yesterday.	<b>le polou</b>
3. Specific definite	I want to talk to <b>the winner</b> of the race. She is a good friend of mine.	<b>le malo</b>
4. Nonspecific definite	If you want to talk to <b>the winner</b> , wait until the end of the race.	<b>le malo</b>

from typological work on other topics, Ionin *et al.* (2009) showed that a similar division is relevant in a number of domains. Thus, specific indefinite and definite NPs require the same marker in Spanish, for example, the dative preposition *a* ‘to’ (Aissen, 2003; Leonetti, 2004; Torrego, 1998) receive accusative case marking in Turkish (Enç, 1991; Keleşir, 2001), and trigger the appearance of an initial vowel in nominals in Luganda (Ferrari-Bridgers, 2004). Ionin *et al.* (2009) note that in their 2008 experiments (Ionin *et al.*, 2008), L1 Russian speakers acquiring L2 English made more specificity-related errors with indefinites than with definites. The authors attribute the larger number of errors with indefinites to the natural language pattern described above: specificity distinguishes between different classes of indefinites. Here the specific indefinites pattern with definites and appear with the definite article, and nonspecific indefinites are marked with a separate article (the indefinite one).

In sum, the updated version of the Fluctuation Hypothesis (Ionin *et al.*, 2008) makes a different set of predictions. If L2 learners have access to the semantic features in UG, they should make errors with specific indefinites, namely manifest overuse of the definite *the* in [-definite, +specific] contexts – as this is an option available in natural languages, such as Samoan. At the same time, errors with nonspecific definites should not occur, since, according to Ionin *et al.* (2009), no known language makes an article distinction between specific and nonspecific definite NPs. In fact, Ionin *et al.* (2009) discovered that children made more specificity-related errors with indefinites, while adults made such errors both with indefinites and definites. The authors argue that the adults’ data may show the effect of explicit strategies that adult learners apply in choosing an article.

Further studies on the acquisition of articles show that there are other factors that may influence article choice in L2 learners of languages, such as English. Ionin *et al.* (2012) examine how speakers transfer the semantics of demonstratives into their L2. For example, native speakers of Korean learning L2 English show different preferences in choosing between the definite article *the* and a demonstrative *that*, possibly reflecting the influence of their L1 that only has demonstratives and lacks overt articles.

## 1.2 Second language acquisition studies

According to Ionin *et al.* (2004), speakers of article-less languages should fluctuate between definiteness and specificity-based article systems at the initial stages of L2 acquisition; however, not all studies have found evidence in support of the fluctuation hypothesis. Tryzna (2009) examined the acquisition of English determiners in L1 speakers of Mandarin and Polish. Both languages lack determiners, so the Fluctuation Hypothesis predicts that speakers should alternate between using the definite article *the* to mark definite or specific NPs. In a forced choice elicitation task, participants had to complete the dialogues where determiners were missing.

The results appeared more complex than predicted by the Fluctuation Hypothesis alone. Chinese L1 speakers either adopted the target ‘definiteness’ setting or showed a fluctuation pattern. Polish speakers, on the other hand, showed a greater variety of strategies. While 21% of the advanced learners followed the fluctuation pattern, 26% showed optional use of *the* both with specific indefinites and definites. In the intermediate group, none of the speakers adopted the ‘specificity’ setting, with 11% following the fluctuation pattern and 53% using *the* optionally with all NPs. Tryzna (2009) concluded that the expected overuse of *the* in specific indefinite contexts was by far not the only pattern of errors.

Tryzna (2009) also made a proposal about the nature of specificity as a semantic feature. Since L2 learners do not overuse *the* with nonspecific indefinite NPs, they must have access to the specificity value; otherwise, we would expect no difference in the overuse of *the* with specific versus nonspecific DPs. Consequently, she views specificity as a universal semantic feature available to L2 learners regardless of their L1. The latter conclusion, however, seems to make incorrect predictions. If both specificity and definiteness are universal semantic features available to the learner, why is it that only some learners fluctuate between these settings in developing an L2 determiner system?

In another study, Jaensch (2009) looked at L3 acquisition of German by L1 speakers of Japanese and L2 learners of English. She found that Japanese speakers did not fluctuate between the settings of the Article Choice Parameter. Speakers did not successfully transfer their L2 article system into L3, and frequently omitted the articles, especially in the oral production task. Thus, this study provides only partial evidence in favor of the Fluctuation Hypothesis. As the updated Fluctuation Hypothesis (Ionin *et al.*, 2009) predicts, learners in Jaensch (2009) behaved in a more target-like manner in definite contexts than in indefinite ones. Specificity had an effect on the article misuse, but only in definite contexts: when the NP was nonspecific there was a higher rate of the indefinite article used.

The studies reviewed above focus on the acquisition of articles by speakers of article-less languages. We would now like to turn to situations where a speaker of an L1 with articles acquires an L2 with an article system. Such studies can shed light on the problem of transfer: do semantic features transfer to L2? Sarko (2009) examined L2 English acquisition by native speakers of French and Syrian Arabic. Both languages have articles, yet French is different from English as French requires overt articles for both singular and plural definites and indefinites. The article system of Syrian Arabic is also different from English, as Arabic lacks an overt article for indefinites singular and plural. In a forced choice elicitation task, Arabic speakers picked an incorrect article *the* in indefinite specific contexts (count singular nouns: 31% in the intermediate group, 23% in the advanced group), while the French

speakers did not (5% and 3% respectively). Sarko (2009) attributes these errors to L1 transfer and interprets the findings as evidence in favor of the Full Transfer Full Access Hypothesis (Schwartz & Sprouse, 1994). According to this hypothesis, L2 learners have full access to the possible parameters of any grammatical feature in a language. At the same time, learners do not start L2 acquisition from scratch; instead they bring the values of the parameters from their L1. According to this hypothesis, L1 speakers of French learning L2 English should not fluctuate between the definiteness and specificity values of the Article Choice Parameter (Ionin *et al.*, 2004). As expected, the French speakers did not differ from native speakers of English in their choice of determiners for singular nouns.

However, other studies report conflicting results. Déprez *et al.* (2011) tested Dutch and Arabic speakers acquiring L2 French with a task adapted from Ionin *et al.*'s (2004) work. Their results showed that, unexpectedly, both groups of beginning L2 learners manifested specificity driven errors. Dutch learners of French overused the indefinite determiner *un/une* in definite nonspecific contexts 45% of the time, and the definite determiner *le* in indefinite specific contexts 68% of the time. The Full Transfer Hypothesis would predict a straightforward transfer from L1 to L2. Since Dutch is a definiteness based language, the 'specificity effect' should not arise in such cases. Similar error types found in child article acquisition were previously argued to stem from a child's egocentric perspective biasing the computation of the domain of reference toward a speaker center perspective (Maratsos, 1974; Schaeffer & Matthewson, 2005; among others). This explanation was rejected for adult L2 acquisition by Ionin *et al.* (2004) on the assumption that pragmatically mature adults no longer manifest such developmental pragmatic bias. However, Keysar *et al.* (2003) experimentally demonstrated that an egocentric computation of the domain of reference, favoring a speaker-centered perspective over a shared common ground is not just a developmental child strategy, but also arises with adults under cognitive pressure.

Keysar *et al.* (2003) used an experimental paradigm based on Horton and Keysar (1996), in which subjects, whose visual access to referent objects was distinct from that of a director, are instructed by this director to move objects in a grid. The question investigated was whether subjects would take into account the different visual access of the director to compute a referent based on the common ground or, on the contrary, rely on their own visual access and egocentric perspective, despite clear awareness of the difference. For clarity, let us consider an example of Keysar *et al.*'s (2003) task. At the onset of the experiment, a participant hid an object in a paper bag, say a large cup, and then placed it in a slot of the grid, crucially, occluded and hence invisible for the director but visible to the participant. Other slots of the grid, visible to both the participant and the director, contained two additional cups: a mid-size one and a small one. The director then

instructed the participant to ‘move the large cup’. A participant taking into account the visual map common to both the director and themselves (the common ground) is expected to move the mid-sized cup, as this one counts as the largest one visible to all, given that the director only sees two cups, the mid-size one and the small one. A participant who considers the cups visible to themselves only (egocentric perspective) would move the cup previously hidden in the paper bag, the largest one from their perspective, since the participant sees three cups. Strikingly, in 30% of trials, participants moved the object previously hidden in the bag, even though they knew it was visible only to them, but not to the director. About 70% of the participants moved the previously bagged cup at least once, and 46% did it half the time or more. Results showed that under cognitive pressure (increased time pressure), adult subjects behaved like children and sometimes failed to take into account the director’s perspective.

Keysar *et al.* (2003) concluded that speakers were not able to fully employ their interlocutor’s perspective, failing to take their interlocutor’s knowledge into consideration. In other words, participants behaved egocentrically, taking only their own perspective into account and not the common ground for the calculation of a referent object, even though they knew that the director had a different vision of the grid than their own. The authors argued that while adults have a fully developed theory of mind and can consciously reflect upon others’ beliefs, in real time, they sometimes fail to use it efficiently under cognitive pressure. As Keysar *et al.*’s (2003) study suggests, adults may behave egocentrically and ignore their interlocutor’s perspective when they are performing demanding cognitive tasks.

Based on these results, Déprez *et al.* (2011) propose to attribute the ‘specificity effect’ they witnessed to such pragmatic considerations. They hypothesize that under the processing load of a second language, speakers tend to consider their own speaker perspective first, and do not always take into account the common ground. As a result, they overuse the definite determiner when the referent is speaker known and overuse the indefinite determiner when the referent is speaker unknown (Kagan, 2011).

As we have seen, the data on the status of the ‘specificity effect’ are conflicting. In this chapter, we take another look at the French/English language pair with L1 English speakers acquiring L2 French. As Table 1.2 illustrates, English and French both mark NPs with different articles depending on whether the NPs are definite or indefinite. The French

**Table 1.2** Articles in English and in French

	English		French	
	Singular	Plural	Singular	Plural
Indefinite	a(an)	—	un/une	des
Definite	the	the	le/la	Les

indefinite article has three forms: masculine singular *un*, feminine singular *une*, and a plural *des*. The definite article also comes in three forms: *le*, *la* and *les*. English lacks a plural form for indefinites, has a number neutral definite determiner and makes no distinction based on the grammatical gender of the nouns.

Our experiment focused on masculine singular nouns where the English and French systems are most comparable to avoid independent problems that L2 learners encounter with gender marking in the French determiners. If specificity is indeed one of the two possible values of the Article Choice Parameter, a full transfer of the definiteness-based article system of English into L2 French with no specificity effect is expected. In contrast, if, as some studies suggest, specificity reflects a pragmatic priority to the speaker perspective when the processing load is affected, we may see an increased number of article misuse in situations where the values of these two features clash, namely in [+definite –specific] and [–definite +specific] contexts. If speakers are at least sometimes driven by notions of ‘speaker knowledge’, that is, speaker known or speaker unknown rather than the common ground for the computation of the reference domain, in the cases named above, they may pick the wrong article.

## 2 Methods

We tested L1 speakers of English acquiring L2 French. One hundred and one native speakers of English completed the test; 10 subjects were eliminated from the analysis because they either failed to rate how well they understood the dialogues or rated their understanding below four on a seven-point scale. Thus, data from 91 participants were obtained from three proficiency levels: 36 low-intermediate (131 course), 42 intermediate (132 course) and 13 advanced speakers (200+ course). Participants self-rated their language proficiency also (see Table 1.3). Self-reported proficiency ratings have been shown to correlate with objective measures of language proficiency (Blanche & Merino, 1989; Shameem, 1998).

The participants had to complete dialogues with an appropriate choice of articles. We limited the choice of nouns to masculine singular to avoid added difficulty owing to gender choice. There were four types of contexts: [+definite –specific] (3), [+definite +specific] (4), [–definite

**Table 1.3** Self-reported proficiency and comprehension assessment

Question	Average rating level 131	Average rating level 132	Average rating level 200
How well would you rate your level of French?	4.73	5.29	5.66
How well did you understand these dialogues?	5.08	5.77	6.35



+specific] (5) and [-definite –specific] (6). The task was to insert *le, un, de* or nothing into the gap.

- (3) [+definite –specific] *Dans une classe:*

*La maîtresse: La plante de la classe a disparu. Savez-vous qui l'a prise?*

*Un élève: Non, madame, on cherche \_\_\_ voleur, mais on ne sait pas encore qui c'est!*

In a classroom:

The teacher: The plant of the class disappeared. Do you know who took it?

A student: No, miss, we are looking for \_\_\_ thief, but we do not yet know who that is.

- (4) [+definite + specific] *Dans une école:*

*Un enfant: Papa que fait-on dans cette école?*

*Son père: Je passe voir \_\_\_ directeur. C'est un ami à moi.*

In a school:

A child: Daddy, what are we doing in this school?

Father: I am going to see \_\_\_ director. He is a friend of mine.

- (5) [-definite +specific] *Dans un restaurant:*

*Le serveur: Bonjour! Je prends votre commande, ou est-ce que vous attendez quelqu'un ?*

*Le monsieur: Donnez-moi une minute s'il vous plaît, je vais manger avec \_\_\_ copain. Il va arriver bientôt.*

In a restaurant:

The waiter: Hello, can I take your order or are you waiting for someone?

The customer: Give me one minute, please. I will be eating with \_\_\_ friend. He is arriving soon.

- (6) [-definite –specific] *Avant les contrôles:*

*Un étudiant: Je commence à angoisser et du coup j'ai trop faim.*

*Sa copine: Tu veux manger quelque chose?*

*L'étudiant: Oui, j'aimerais bien \_\_\_ sandwich pour calmer ma faim.*

Before exams:

A student: I am starting to be nervous and so I am starving.

His girlfriend: Do you want to eat something?

The student: Yes, I would love to eat \_\_\_ sandwich to ease my hunger.

Each of the four conditions had 16 dialogues, with a total of 64 items; one item was dropped from the analysis owing to a coding error. We initially tested the experiment with six native speakers of French, who performed as expected: they picked the definite determiner in definite contexts and the indefinite determiner in indefinite contexts, regardless of whether these contexts were specific or not.

### 3 Results

Two types of analyses were performed. First, to test whether specificity and definiteness were factors that affected article choice in L2 French, we fitted a binomial logistic regression model with subjects and items as random intercepts. The independent variables were definiteness and specificity, and the dependent variable was the article choice. Definiteness clearly turned out to be a significant predictor of correct article choice ( $\beta = 4.739$ ,  $SE = 0.555$ ,  $p < 0.01$ ). But neither specificity by itself ( $\beta = -0.735$ ,  $SE = 0.55$ ,  $p = 0.181$ ) nor its interaction with definiteness ( $\beta = 0.62$ ,  $SE = 0.778$ ,  $p = 0.425$ ) were significant factors in this model. These results indicate that learners successfully transferred definiteness as a determining feature of an article system in their L2. As predicted by the Full Transfer Hypothesis, they generally appropriately used *le* to mark NPs in definite contexts, and *un* to mark indefinite NPs both in specific and nonspecific contexts. This result provides additional evidence that definiteness is a grammaticalized feature that is susceptible to transfer.

In the second type of analysis, we looked at the accuracy of the article choice in different conditions (Figure 1.1) and focused on article misuse. Recall that four conditions were tested, crossed for definiteness and specificity. The Full Transfer Hypothesis predicts that specificity should not affect article choice in any of the conditions, since the L1 English does not grammaticalize the specificity value in its article system. Since the full model with a three-way interaction of definiteness, specificity and proficiency level did not converge, we performed separate analyses for definite and indefinite contexts, and adjusted the p-values for multiple comparisons. In definite contexts, we saw no effect of specificity ( $\beta = 1.237$ ,  $SE = 1.039$ ,  $p = 0.234$ ) or specificity by proficiency level interaction ( $\beta = -0.003$ ,  $SE = 0.006$ ,  $p = 0.605$ ) on the amount of article misuse. In other words, participants did not choose *un* more often in [+definite –specific] contexts (3) compared to [+definite +specific] contexts (4). The amount of errors decreased as proficiency increased ( $\beta = 0.015$ ,  $SE = 0.006$ ,  $p < 0.05$ ).

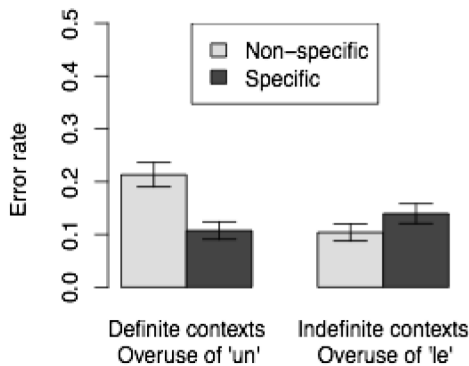


Figure 1.1 Article misuse depending on the type of context

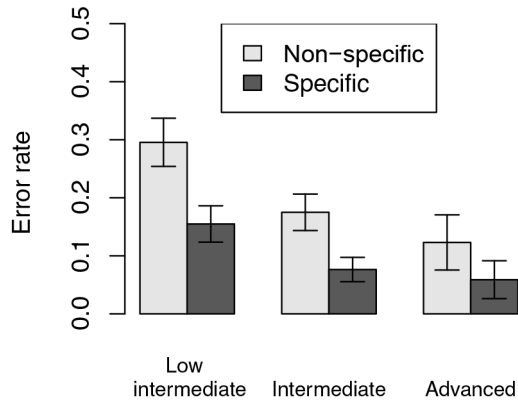


Figure 1.2 Overuse of *un* in definite contexts

However, when we looked at the error rates in definite contexts more closely, a tendency for an increase in the number of errors when the definiteness and specificity features clash (Figure 1.2) was observed. Even though the differences in error rates did not reach statistical significance owing to item variability, speakers at all proficiency levels made more errors in nonspecific definite contexts than in specific definite contexts. In other words, participants possibly driven by speaker-related pragmatic considerations used *un* to mark nonspecific NPs where the referent was speaker unknown as in examples such as (3), missing the fact that the context called for the definite article *le* based on the uniqueness of the referent.

In indefinite contexts, a different picture emerged (Figure 1.3). Here, again, we saw a decrease of the amount of errors with the growth of proficiency ( $\beta = 0.016$ ,  $SE = 0.007$ ,  $p < 0.05$ ). There was also a marginally significant effect of specificity ( $\beta = 2.284$ ,  $SE = 1.092$ ,  $p = 0.07$ ). The analysis also revealed a significant interaction between specificity and proficiency

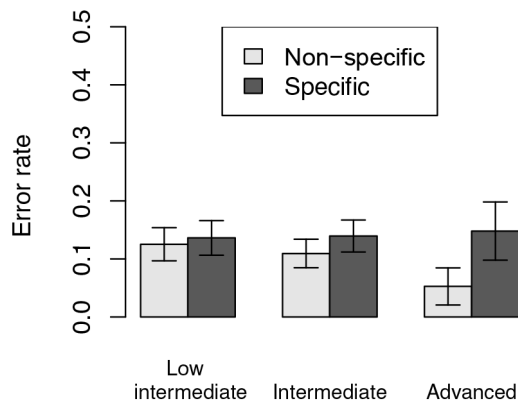


Figure 1.3 Overuse of *le* in indefinite contexts

level ( $\beta = -0.018$ ,  $SE = 0.007$ ,  $p < 0.05$ ), suggesting that the effect of specificity is not the same for all proficiency levels. And, indeed, in Figure 1.3 we see that this effect is partly driven by the most advanced group, who shows a reduced amount of errors in indefinite nonspecific contexts as compared to less advanced speakers and to indefinite specific contexts. It is not quite clear why only the most advanced group displayed an apparent specificity effect. This might be due to the smaller number of participants (i.e. 13) in this group and its greater heterogeneity with students having quite diverse self-reported levels of proficiency ( $SD = 1.85$  as compared to  $SD = 1.12$  for the low intermediate and  $SD = 1.36$  for the intermediate group).

One final note concerns the cases of specificity-based errors that are the most expected from a theoretical standpoint. If, like Ionin *et al.* (2009) suggest, languages of the world group together specific indefinites with definites, participants would be expected to make more errors picking *le* to mark specific indefinite NPs. However, Figures 1.2 and 1.3 suggest that this was not the case in our experimental data. The differences in error rates between specific and nonspecific NPs are more apparent in the overuse of *un* in definite contexts than in the overuse of *le* in indefinite contexts.

#### 4 Discussion

In this chapter, we tested whether specificity affects article misuse in an L2 acquisition situation where transfer is possible. There is conflicting evidence concerning the effect of transfer. While some studies argued for full transfer to L2 if L1 had the relevant features, other studies suggested that the transfer may not be the only factor that affects determiner use by L2 learners. Here, we provide evidence in favor of the Full Transfer Hypothesis: our participants clearly mainly relied on definiteness when choosing an appropriate article in L2 dialogues. At the same time, we saw some effect of specificity. There was a tendency for an increased number of errors in definite contexts that were nonspecific, with some subjects overusing the indefinite article *un*.

The presence of some specificity effect in the use of L2 French determiners by English learners, and the lack of typological evidence for a specificity-based article system in the languages of the world, suggests that the status of specificity as a semantic feature parametrically available in UG may need revisiting. Some studies reviewed in Section 1.2 (e.g. Déprez *et al.*, 2011) argued that specificity, rather than a semantic feature, should be viewed more as a pragmatic strategy related to speaker-perspective taking with respect to the domain of reference. Our data provide some evidence in favor of this pragmatic view, and suggest that specificity affects L2 determiner acquisition, independently of the L1. Transfer from L1, when possible, clearly facilitates article choice in L2, and therefore makes

specificity effects less pronounced in learners who have definiteness-based articles in both their L1 and L2.

The explanation for the L2 determiner errors advocated here relates to the view of egocentricity (failure to take the interlocuter's perspective into account) in language acquisition suggested in Déprez *et al.* (2011). In our tasks, the specificity-driven errors could arise from participants failing to fully take into consideration the common ground in the speaker's and the hearer's perspective as the relevant domain of reference. The definite article in French marks a familiar or unique referent in a common ground, and hence its appropriate use involves computing the common ground that the speaker and the hearer share and in which uniqueness can be established. What some learners appear to do instead is to base their choice of articles on speaker identifiability – when an entity is known to them – or perhaps rather the lack of such identifiability, differently marking an entity that is unknown to them. If the referent is unknown to them, learners tend to overemploy the indefinite article. Kagan (2011) refers to such NPs as antispecific. She views specificity as a pragmatic notion, rather than as a semantic notion affecting the truth conditions. Unlike the parametric view of specificity (Ionin *et al.*, 2009), the pragmatic approach (Kagan, 2011) predicts that L2 learners can make errors both in definite and indefinite contexts.

It has been argued that performing a task in a foreign language may place additional processing costs on the subjects (e.g. Hyönä *et al.*, 1995; Roussel *et al.*, 2017), which could lead them to fail to fully take into account the hearer's perspective and hence the common ground. That is, while under the added cognitive pressure of speaking a foreign language, a learner may choose to prioritize their own perspective rather than the common ground. We refer to this behavior as specificity-driven: learners tend to mark speaker-known NPs with the definite determiner and speaker-unknown NPs with the indefinite determiner, failing to fully take into account the common ground that is shared with their interlocutor in their determiner use.

## 5 Conclusion

Our data show that while an L1 definiteness system transfers into L2, specificity can also affect the choice of articles in second language learners, although less so than in languages without article systems. This, we speculate, may be in part due to how computational load could affect the calculation of the common ground by speakers. The learners sometimes choose between an indefinite and a definite determiner based on whether the referent is known or not known to them. If the referent is speaker-unknown (antispecificity for Kagan, 2011), as in (3) above, the overuse of *un* increases in contexts that call for a (nonspecific) definite. If the referent is speaker-known, we see some overuse of *le* in contexts that call for an

(specific) indefinite. The lack of parallelism for the two types of errors in our results suggests that the concept of antispecificity (i.e. being unknown to the speaker) may be of stronger relevance to L2 learners for whom definiteness transfer is available.

We interpret these facts as evidence for a pragmatic view of specificity. On this view, learners rely on their own knowledge of the referent when they cannot establish whether the referent is unique or familiar within a common ground domain or are under added cognitive pressure. As demonstrated by Keysar *et al.* (2003), calculating what is in the speaker's perspective is easier than calculating what is both in the speaker and the hearer's common ground. This could be why an adult learner under an increased cognitive load resorts to a domain that is more immediately accessible – the speaker domain – and mainly uses articles to mark what they know or, perhaps more strongly, do not know (antispecificity). It could be that using *un* is a strategy of caution: if speakers are not sure that the referent is unique or familiar in the common ground or if speakers are under cognitive pressure when calculating reference, they use *un* when a referent is unknown to them, failing to consider whether uniqueness could be established in a different way.

In order to be able to use the definite article correctly, a speaker needs to establish the uniqueness or familiarity of a referent for both the speaker and the hearer. When under pressure, a learner may take a shortcut by choosing an article on the basis of speaker's familiarity or lack thereof. When doing so, the indefinite article may serve as a default marker as it poses fewer requirements on its felicity conditions. In order to test this hypothesis, we could further look at the plurals in L2 French. We would predict that English speaking learners of French would make more article omission errors with nonfamiliar definites than with familiar definites, as familiarity provides additional cues in establishing the uniqueness of a referent.

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