

# Accounting for patterns of article choice by EFL learners

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## Abstract

The present paper reports a study on article choice by speakers of Mandarin Chinese. Our study is essentially a replication study of Trenkic (2008). In her study she tested Mandarin Chinese L2 learners who were in the UK. L2 learners who study in the target-language environment are ESL learners (*English as a Second Language*). In our study we test *English as a Foreign Language* (EFL) upper intermediate learners currently studying in China. The aim of our study is to find out whether learners around the same proficiency level as Trenkic's learners perform less well on a forced choice elicitation task given that they are not in a target-language (English) environment.

## 1. Introduction

The aim of the current study is to find out if EFL learners perform less well than ESL learners on a similar forced choice elicitation task used by Ionin et al (2004) and Trenkic (2008). Many of the previous L2 studies investigating article choice (Huebner 1985, Murphy 1997, Parrish 1987, Shikano 2001, Thomas 1989, Trademan 2002) are based on Bickerton's (1981) four way semantic feature distinction [ $\pm$ Specific Referent] [ $\pm$ Hearer Knowledge]. But, to our knowledge, most of the previous studies concentrated solely on the order learners acquired the articles *the/a/Ø*. A parameter setting approach to article acquisition has been proposed by Ionin, Ko & Wexler (2004). They argue that articles (in two-article systems) encode either definiteness (e.g., English) or specificity (e.g., Samoan) -these are the two options made available via Universal Grammar (UG). Ionin et al. (2004) originally proposed the Fluctuation Hypothesis (henceforth FH) for L2 acquisition. The FH predicts that L2 learners from article-less languages will fluctuate in article choice between definiteness and specificity. Definiteness is one setting and specificity is another setting of an Article Choice Parameter (see section 2). They proposed that speakers of languages that lack articles will fluctuate between these two options in acquiring a language with articles. In Trenkic's (2008) study all the participants were Mandarin Chinese (MC) ESL learners recruited at the University of York, in the U.K. None of the participants had lived in an English speaking environment for more than 3 months. The aim of Trenkic's (2008) study was to investigate whether article choice is influenced by the objective identifiability of referents as L2 learners treat articles as adjectives under the syntactic misanalysis account (Trenkic 2007).

We assess Ionin et al's (2004) fluctuation account and Trenkic's (2008) claim that the objective identifiability of referents influences article choice by examining MC upper intermediate

learners. We predict that as they are learning English in a non-English speaking environment the learners are likely to perform less accurately in article choice when compared to the results of Trenkic's ESL learners. They may fluctuate between the two settings of the Article Choice Parameter and, under the syntactic misanalysis account, if learners are influenced by whether a referent can be identified in the discourse context we may expect to find that learners choose articles based on how they interpret the discourse situation. This paper is organized as follows. Section 2 provides an overview of the parameter setting account and the syntactic misanalysis account. Section 3 reports the study of EFL Chinese learners' article use in a forced choice elicitation task. Section 4 provides a general discussion of the findings and considers the theoretical and methodological implications. Section 5 concludes the paper.

## 2. Accounts of article choice in L2 English

### 2.1 Fluctuation between parameter settings

Ionin et al. (2004) argue that the problem for learners from L1s which lack article semantics<sup>1</sup> is selecting the target parameter setting for the L2. The Article Choice Parameter essentially is a binary parameter with the settings (1) definiteness and (2) specificity. Ionin et al. (2004) define definiteness and specificity as the following in (1).

#### 1.) Definiteness and Specificity

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

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

The feature [+definite] and [−definite] receive morphological expression in English through the articles *the* and *a* respectively. Examples in (2a) and (2b) show that the article *the* encodes definiteness, not specificity, but under Ionin et al's (2) 004 definition of specificity in (1) example (2a) is specific as the speaker intends to refer to a particular individual (Bill) with the noteworthy property of being unreliable. In (2b) the speaker has no intent to refer to a particular individual with a noteworthy property as the speaker cannot remember the student who is absent. In example (3a) the article *a* encodes indefiniteness, not specificity, but the context is interpreted as specific as the speaker refers to a unique dog called 'Lulu' with the noteworthy property of sitting by the fire. Example (3b) is indefinite but classified under Ionin et al's (2004) definition of specificity as non-specific as it lacks speaker intend to refer to a particular dog.

#### 2.) [+definite]

- a.) We can't start the seminar because *the student who's giving the presentation* [+specific] is absent — typical of Bill, he's so unreliable.

- b.) We can't start the seminar because *the student who's giving the presentation* is absent — I'd go and find whoever it is, but no-one can remember, and half the class is absent. [-specific]
- 3.) [-definite]
- a.) *A dog* was in here last night — it's called Lulu and Fred always lets it sit by the fire on wet nights. [+specific]
- b.) *A dog* was in here last night — there is no other explanation for all these hairs and scratch marks. [-specific]

(Lyons 1999: 171 and 172)

Lyons (1999) makes two observations about definiteness and specificity which are crucial for Ionin et al's (2004) proposal. There are languages such as English with articles that encode definiteness and languages such as Samoan, Shuswap and Sango (Polynesian languages) which possess articles that encode specificity. On the basis of cross-linguistic evidence Ionin et al. (2004) propose that there is an Article Choice Parameter, as defined in (4):

- 4.) The Article Choice Parameter (for two-article languages)

A language that has two articles distinguishes them as follows:

The Definiteness Setting: Articles are distinguished on the basis of definiteness.

The Specificity Setting: Articles are distinguished on the basis of specificity.

The specificity parameter setting is observed in languages like Samoan. In Samoan, according to Mosel and Hovdhaugen (1992), articles are used to mark specificity in the language; the article *le* is used to mark DPs as [+specific] while *se* is used to mark DPs as [-specific]. An example of *le* is given in (5).

- 5.) [+definite, +specific]

Sa i ai *le* ulugāli'i'ō Papa *le* tane a 'ō Eleele *le* fafine.

PAST exist ART couple PRES Papa ART husband but PRES Eleele ART woman

[-definite]

[+definite]

[+definite]

'There was *a* couple, Papa, *the* husband, and Eleele, *the* wife.'

(Lyons 1999: 58)

Therefore, a language like English marks only the definiteness distinction with articles. Other languages, such as Samoan, mark the specificity distinction. The task Ionin et al. (2004) used to see whether or not L2 learners would fluctuate between definiteness and specificity was a forced choice elicitation task. The L2 learners were asked to choose between the most appropriate article *a*, *the* and -- (null article) to fill a gap in the dialogue, basing their choice on the preceding context. An example is provided in (6) below (other examples employed within Ionin et al's (2004) study are provided in the Appendix):

## 6.) [-definite, +specific]

*In an airport, in a crowd of people who are meeting arriving passengers*

Man: Excuse me, do you work here?

Security guard: Yes.

Man: In that case, perhaps you could help me. I am trying to find a, the, --) red-haired girl; I think that she flew in on Flight 239.

In example (6) the correct article choice is the indefinite article. According to the definition of specificity given by Ionin et al. (2004) above, if the speaker refers to a unique individual, which has a noteworthy property, then it [+specific]. If an L2 learner fluctuates in article choice we can expect fluctuation where the [+/-] values cross; in other words overuse of *a* in the [+definite, -specific] contexts is expected and overuse of *the* in the [-definite, +specific] contexts is expected. Ionin et al. (2004) found, as predicted, that the Russian and Korean speakers fluctuated between definiteness and specificity as they overused *the* in [-definite, +specific] contexts and overused *a* in [+definite, -specific] contexts. Ionin et al. (2004) provide clear evidence from a forced choice elicitation task that their informants do fluctuate between the parameter values definiteness and specificity in a way that native speakers of English do not. It is predicted that speakers of languages that have articles marking definiteness will not fluctuate, and this is confirmed in a recent study by Ionin, Zubizarreta and Maldonado (2008), who compared Spanish and Russian L2 learners, as well as other studies by Hawkins, Al-Eid, Almahboob, Athanasopoulos, Chaengchenkit, Hu, Rezai, Jaensch, Jeon, Jiang, Leung, Matsunaga, Ortega, Sarko, Snape and Velasco-Zarate (2006) comparing Japanese and Greek L2 learners, and Snape (2006) comparing Japanese and Spanish L2 learners. The problem for L2 learners from article-less languages seems to be setting the ACP (Ionin et al. 2004, Ionin 2006, Ionin et al. 2008).

### 3.2 *The syntactic misanalysis account*

Trenkic (2007, 2008) provides an account of L2 article acquisition by Serbian speakers. She argues that the formal feature definiteness is an uninterpretable morphosyntactic feature [Def]<sup>2</sup> and follows Lyons (1999) in that articles have no lexicosemantic content. This differs to Ionin et al's (2004) account as articles encode either definiteness or specificity. Furthermore, Trenkic (2008) takes issue with the way Ionin et al (2004) operationalized specificity in their study. She argues Ionin et al's (2004) study conflates two unrelated factors; 1.) explicit speaker knowledge (ESK) or familiarity of the person or object being referred to and 2.) the intention to refer to a specific referent. In order to take into account explicitly stated knowledge Trenkic (2008) argues Ionin et al's (2004) original contexts, where definiteness is crossed with specificity, need to be modified to include the ESK value. The example in (7) shows that the [-definite, +specific] context is crossed with ESK to give the new value [-definite, +specific; +ESK] as the speaker has a specific referent in mind and explicitly states that she knows the person referred to in the conversation i. e., a red-haired girl in example (6) repeated in (7) below.

- 7.) [-definite, +specific; +ESK]

*In an airport, in a crowd of people who are meeting arriving passengers*

Man: Excuse me, do you work here?

Security guard: Yes.

Man: In that case, perhaps you could help me. I am trying to find (a, the, --) red-haired girl; I think that she flew in on Flight 239.

In example (7) the underlined part of the dialogue clearly makes it clear to the listener that the speaker knows which red haired girl is being referred to in the conversation, hence it is explicitly stated knowledge. But, the speaker denies any knowledge of the identity of the person in example (8), for this reason it is classified by Trenkic (2008) as [-definite, +specific; -ESK].

- 8.) [-definite, +specific; -ESK]

Office gossip

Gina: ...and what about the others?

Mary: Well, Dave is single, Paul is happily married, and Peter ... he is engaged to (a, the, -) merchant banker, but none of us knows who she is, or what she's like.

(taken from Trenkic 2008: 13)

In example (8) the underlined part of the dialogue indicates to the listener that the speaker is unfamiliar with the referent, in this case a merchant banker, therefore it is classified as explicitly denied knowledge. The ESL MC learners in Trenkic's (2008) study tended to overuse *the* in [-definite, +specific; +ESK] contexts, which is expected when there is explicitly stated knowledge of a referent, but correctly used *a* in [-definite, +specific; -ESK] contexts, as predicted, because knowledge of the person or object is denied. Trenkic (2008) argues that her findings can be explained by the stated/denied familiarity with 'identifying attributes' of individuals being talked about, thus considered being extra-linguistic rather than fluctuation between the parameter values definiteness and specificity. Contrary to Ionin et al. (2004), Trenkic (2008) argues that specificity as defined as speaker intent to refer plays no role in L2 article choice. The alternative proposal by Trenkic (2008) is that L2 learners do not fluctuate between positive or negative values of definiteness and specificity but rather it is a result of an extra-linguistic phenomenon. The reason for it being extra-linguistic is because for Trenkic (2007, 2008) Serbian L2 learners who lack articles in their L1 are not able to acquire features of DP due to a grammatical deficit in their interlanguage grammars. As a consequence, L2 learners treat articles in English as adjectives under the syntactic misanalysis account.

### 3. Empirical Study

Our study here replicates Ionin et al's (2004) study and Trenkic's (2008) study by focusing on

article choice by a group of EFL Chinese learners. We predict that the EFL Chinese learners will fluctuate between definiteness and specificity or base article choice on explicitly stated/denied knowledge of the referent as Chinese does not yet have a grammaticalized article system. Unlike Greek and Spanish there is no morphosyntactic cue for definiteness present in Chinese.<sup>3</sup> The predicted patterns of article choice according to Ionin et al. (2004) are provided in Table 1.

Table 1. Predictions for article choice in Chinese L2 English if learners are fluctuating between definiteness and specificity

	[-specific; -ESK]	[+specific; +ESK]	[+specific; -ESK]
[-definite] (target: <i>a</i> )	correct use of <i>a</i>	<b>overuse of <i>the</i></b>	overuse of <i>the</i>
[+definite] (target: <i>the</i> )	<b>overuse of <i>a</i></b>	correct use of <i>the</i>	correct use of <i>the</i>

Trenkic (2008) proposes that learners do not fluctuate but rather the problem lies with whether there is explicitly stated knowledge of the person (referent) vs. explicitly denied knowledge of the person (extra-linguistic knowledge). The predicted patterns of article choice are shown in Table 2.

Table 2. Predictions for article choice in Chinese L2 English if learners are influenced by stated/denied familiarity with 'identifying attributes' of the person or object being discussed

	[-specific; -ESK]	[+specific; +ESK]	[+specific; -ESK]
[-definite] (target: <i>a</i> )	correct use of <i>a</i>	overuse of <i>the</i>	<b>correct use of <i>a</i></b>
[+definite] (target: <i>the</i> )	overuse of <i>a</i>	correct use of <i>the</i>	<b>overuse of <i>a</i></b>

### The participants

The goal of our study is to find out whether ESL Chinese learners behave the same or differently to the ESL Chinese learners in Trenkic's (2008) study. We recruited 15 participants for our study. All the participants were asked to take the Oxford Quick Placement Test (2001). The results of the placement test allowed us to place the learners into the upper intermediate band. The mean age of the participants is 24.8 years and the age range is between 23 to 28 years. All the EFL MC participants were currently studying at Shaanxi Normal University in China at the time of testing. Most of the participants had only been in the graduate program for six months and received one course given in English once a week which lasted two hours.. Five native speakers were recruited as controls.

### Forced choice elicitation task

The task consisted of short dialogues which the participants were asked to read. For each short dialogue there was a gap with the choice of four possible items that could fill the gap. They were asked to choose the item that they felt was most appropriate to fill the gap and put a circle around it. The elicitation task given to the Chinese speakers consisted of 86 short

dialogues containing singular contexts (see Appendix). Most participants took 40 to 45 minutes to complete the task. There were 62 target items in total along with 24 distractors. 36 target items (count singular) were originally used in Ionin et al's (2004) study and 26 target items were based on the items used in Trenkic (2008). Two versions of the task were created in order to avoid ordering effects.

## Results

The five native speakers performed as expected in all contexts correctly choosing the in all [+definite, +/-specific; +/-ESK] contexts and a for [-definite, +/-specific; +/-ESK] contexts. The results of the EFL group's performance on the task are provided in Table 3.

Table 3. EFL Upper Intermediate Chinese group ( $n=15$ )

	[-specific ; -ESK]	[+specific ; +ESK]	[+specific ; -ESK]
	<b>5 % <i>the</i></b>	<b>9 % <i>the</i></b>	<b>12% <i>the</i></b>
[-definite] (target: <i>a</i> )	90% <i>a</i>	90% <i>a</i>	87% <i>a</i>
	5 % $\emptyset$	1 % $\emptyset$	1 % $\emptyset$
	87% <i>the</i>	92% <i>the</i>	82% <i>the</i>
[+definite] (target: <i>the</i> )	<b>13% <i>a</i></b>	<b>7 % <i>a</i></b>	<b>18% <i>a</i></b>
	0 % $\emptyset$	1 % $\emptyset$	1 % $\emptyset$

Table 3 shows that the EFL group fluctuate between *the/a* in the [+def, -spec; -ESK] context (around 13%) and in the [+def, +spec; +ESK] contexts (around 7%). There is fluctuation in the [-def, +spec; +ESK] context (around 9%), and in the [-def, -spec; -ESK] context (around 5%). According to the FH, fluctuation should not occur in [+def, +spec; +ESK] or the [-def, -spec; -ESK]. Correct use of *a* is predicted in the [-def, +spec; -ESK] context according to Trenkic's (2008) predictions of article choice (see Table 2 above). However, overuse of *the* was found here. But, overuse of *a* was found in the [+def, +spec; -ESK] context as predicted by Trenkic's (2008) account of article choice. To address this repeated measures ANOVAs were performed (with Definiteness and Specificity as a within-subjects factors) on the use of *the* and *a* by category. The results of the EFL group show that there is a significant effect of definiteness since most learners are able to distinguish definites from indefinites ( $F_{(1,14)}=997.107$ ,  $p<0.05$ , *the* appears in [+definite, +specific; +ESK] contexts and  $F_{(1,14)}=551.511$ ,  $p<0.05$ , *a* appears in [-definite, -specific; -ESK] contexts). However, there is no significant effect found on article choice for specificity ( $F_{(1,14)}=2.186$ ,  $p>0.05$  for *the* and  $F_{(1,14)}=0.008$ ,  $p>0.05$  for *a*). To address whether explicitly stated / denied knowledge influences article choice a repeated measures ANOVA were performed to see whether there is a significant difference between the combination of definiteness and ESK values on the overuse of *the* in indefinite environments, and the overuse of *a* in definite environments by context type. The results of the ANOVAs show that there is a significant difference between [+def, +spec; +ESK] and [+def, +spec; -ESK] contexts in the suppliance of *the* ( $F_{(1,14)}=6.013$ ,  $p<0.05$ ) and in the suppliance of *a* ( $F_{(1,14)}=6.921$ ,  $p<0.05$ ). This supports Trenkic's (2008) proposal that learners are influenced by whether or not there is explicitly stated or denied knowledge of the referent.

But, learners do not correctly use *a* in the [-def, +spec; -ESK] context. No significant difference was found between the suppliance of *the* ( $F_{(1,14)}=0.863$ ,  $p>0.05$ ) and *a* ( $F_{(1,14)}=1.207$ ,  $p>0.05$ ) in the [-def, +spec; +ESK] and [-def, +spec; -ESK] contexts. Trenkic (2008) suggests if article choice is influenced by accessing the [+specific] semantic feature overuse of *the* is expected in the [-def, +spec; +ESK] context. Overuse of *the* is not expected in the [-def, +spec; -ESK] context if learners are influenced by explicitly stated / denied knowledge of the referent.

#### 4. Discussion

Ionin et al. (2004) claim that L2 learners have full access to UG's semantic features definiteness and specificity. L2 learners from article-less languages are unable to choose the correct feature because triggers related to article choice in English are particularly subtle. L2 learners need to assess what Ionin et al. (2004) term as the 'discourse situation' to know how to use articles in different contexts. We tested EFL learners from an article-less language and proposed that EFL Mandarin Chinese learners would fluctuate between definiteness and specificity, but if the target language plays a role in setting the ACP the EFL learners would be at a disadvantage as they live in China i.e., a non-English speaking environment. It is clear from our findings that the EFL learners are comparable to the ESL counterparts in Trenkic's (2008) study on a forced choice elicitation. Compare Table 4 below with Table 3 above.

Table 4. ESL Upper Intermediate Chinese group (n=43)

	[-specific; -ESK]	[+specific; +ESK]	[+specific; -ESK]
	<b>1.74% <i>the</i></b>	<b>17.44% <i>the</i></b>	<b>2.33% <i>the</i></b>
[-definite] (target: <i>a</i> )	94.77% <i>a</i>	81.40% <i>a</i>	95.35% <i>a</i>
	3.49% Ø	1.16% Ø	2.33% Ø
	74.42% <i>the</i>	87.21% <i>the</i>	62.79% <i>the</i>
[+definite] (target: <i>the</i> )	<b>18.02% <i>a</i></b>	<b>5.81% <i>a</i></b>	<b>30.81% <i>a</i></b>
	7.56% Ø	6.78% Ø	6.40% Ø

(taken from Trenkic 2008: 13)

The main difference between the EFL group in the current study and Trenkic's (2008) ESL group is that there is more overuse of *the* by the EFL group in [-definite, +specific; -ESK] contexts. A possibility for accuracy overall in the task could be due to eight of the fifteen Chinese participants currently taking French as a language course. French is another language which encodes definiteness for articles, not specificity. French has the same features as English as the articles encode [+/-definite] and [+/-count]. However, differences between the articles in English and French are that French articles carry gender and number features. The important point for our discussion relating to the forced choice elicitation task is that though French articles encode definiteness, they can appear in specific and non-specific contexts. Examples are provided in 9-11 below.



## 9.) [+def, +spec]

Isabelle et Joyce ont essayé un restaurant à Paris. Le restaurant est connu pour son steak.

Isabelle and Joyce have tried a restaurant in Paris. The restaurant is famous for its steak.

## 10.) [-def, +spec]

J'ai *un grand frigo* chez moi. Donc je peux garder beaucoup de viandes et de légumes.

I have a big fridge in my place. Thus I can keep a lot of meat and of vegetables.

## 11.) [-def, -spec]

On dit que si vous mangez une pomme par jour, vous resterez en bonne santé

One says that if you eat apple per day, you stay-FUT in good health.

(examples adapted from Leung 2005 : 51)

Therefore, it is possible that there is transfer from L3 French, but the remaining seven EFL participants are studying Japanese (and one studying Russian) as their L3 and they perform similarly to the French L3 learners on the forced choice elicitation task. Japanese is an article-less language like Russian which means that if L3 transfer plays a role we would expect to see these seven participants' performance on the task comparatively worse than the French L3 learners (see Appendix). Being that all the EFL participants perform similarly on the task we argue that L3 transfer from French does not aid the learners' article choice in L2 English.<sup>4</sup>

Another possible explanation for the EFL group performing better than expected is gender. All the EFL participants are female. Unfortunately it was not possible to control for the gender variable in China as the only participants available for testing at Shaanxi Normal University were female. As a result, having only female EFL participants is a potential confound in our study. Wen & Johnson (1997) report that language studies in China tend to attract highly successful Chinese female students. Therefore, we have managed to rule out possible L3 transfer from French as playing a role in the EFL learners' performance, but we cannot rule out gender as being a possible variable. One other factor to consider is classroom instruction. In China there is more focus on grammar rather than communicating in English. However, it has been argued by Ionin et al. (2004) that classroom instruction alone is not enough to explain differences found between their Russian and Korean L2 learners. As explicit article instruction is only covered briefly in a standard EFL textbook it is unlikely that EFL learners have an advantage over ESL learners. Though, it does seem that indeed article choice may be partly based on explicit non-UG based strategies as the EFL learners are overusing a in the [+def, +spec; -ESK] context which is unexpected given Ionin et al's (2004) explanation for

fluctuation.

### 5. Conclusion

If L2 learners have full access to UG, restructuring of their interlanguage grammars continue until the target-language input leads them to select [+definite] for English. However, they may not fully converge on the target language grammar because as Ionin et al. (2004) state, the triggers from input are particularly subtle. Further exposure to triggers from the input of the target language is supposed to lead learners to set the ACP to the English setting. Trenkic (2008) argues that learners continue to experience problems in article choice because they treat articles as adjectives. Learners assign referential meanings to articles so the definite article means identifiable and the indefinite article means non-identifiable. Article choice is influenced by whether the speaker has familiarity with the referent and explicitly states that or denies familiarity. In our study we found that EFL learners behave, as predicted, on a forced choice elicitation task. Their article choices are based on linguistic and non-linguistic cues from the contexts presented to them. Our results support a feature-based and *context of insertion* account for article choice.

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### References

- Bickerton, D. (1981). *Roots of Language*. Ann Arbor: Karoma Press.
- Chen, P. (2003). Indefinite determiner introducing definite referent: A special use of 'yi'one' + classifier' in Chinese. *Lingua*, 113, 1169-1184.
- Chen, P. (2004). Identifiability and definiteness in Chinese. *Linguistics*, 42(6): 1129-1184.
- Fodor, J & I. Sag. (1982). Referential and quantificational indefinites. *Linguistics and Philosophy* 5: 355-398.
- Gundel J. K, N. Hedberg & R. Zacharski (1993). Cognitive status and the form of referring expressions in discourse. *Language*, 69(2), 274-307.
- Hawkins, R., S. Al-Eid, I. Almahboob, P. Athanasopoulos, R. Chaengchenkit, J. Hu, M. Rezai, C. Jaensch, Y. Jeon, A. Jiang, I. Leung, K. Matsunaga, M. Ortega, G. Sarko, N. Snape & K. Velasco-Zarate. (2006). Accounting for English article interpretation by L2 speakers. In Foster-Cohen, S. H. (ed.), *EuroSla Yearbook*, 6, Amsterdam: John Benjamins. 7-25.
- Heim, I. (1991). Articles and definiteness. In Stechow, A. and D. Wunderlich (eds.), *Handbook of Semantics. An international handbook of contemporary research*, Berlin: W. de Gruyter, 487-535.
- Huebner, T. (1985). System and variability in interlanguage syntax. *Language Learning* 35: 141-163.
- Ionin, T., H. Ko. & K. Wexler (2004). Article semantics in L2-acquisition: the role of specificity. *Language Acquisition* 12(1), 3-69.

- Ionin, T., M. L. Zubizarreta & S. B. Maldonado (2008). Sources of linguistic knowledge in the second language acquisition of English articles. *Lingua* 118: 554-76.
- Leung, Y-k. I. (2005). L2. vs. L3 initial state: a comparative study of the acquisition of French DPs by Vietnamese monolinguals and Cantonese-English bilinguals. *Bilingualism: Language and Cognition* 8: 39-61.
- Li, C. & S. Thompson (1981). *Mandarin Chinese: a functional reference grammar*. Berkeley: University of California Press.
- Lyons, C. (1999). *Definiteness*. Cambridge University Press: Cambridge, UK.
- Mosel, U. & E. Hovdhaugen (1992). *Samoan Reference Grammar*. Oslo, Norway: Scandinavian University Press.
- Murphy, S. (1997). *Knowledge and production of English articles by advanced second language learners*. PhD thesis, University of Texas, Austin.
- Parrish, B. (1987). A new look at methodologies in the study of article acquisition for learners of ESL. *Language Learning*, 361-383.
- Shikano, M. (2001). Emergence of English Articles in Naturalistic Second Language Acquisition. *Aspects of Psycholinguistics, Second Language Acquisition and Language Education*, 167-84.
- Snape, N. (2006). *The acquisition of the English determiner phrase by Japanese and Spanish learners of English*. PhD thesis, University of Essex.
- Thomas, M. (1989). The acquisition of English articles by first- and second-language learners. *Applied Psycholinguistics*, 335-355.
- Trademan, J. E. (2002). *The acquisition of the English article system by native speakers of Spanish and Japanese : a cross-linguistic comparison*. University of New Mexico, Albuquerque, US
- Trenkic, D. (2007). Variability in L2 article production: beyond the representational deficit vs. processing constraints debate. *Second Language Research*, 23(3): 289-327.
- Trenkic, D. (2008). The representation of English articles in second language grammars: determiners or adjectives? *Bilingualism : Language and Cognition*.
- University of Cambridge Local Examinations Syndicate (2001). *Quick Placement Test*. Oxford: Oxford University Press.
- Wen, Q. & K. Johnson (1997). L2 learner variables and English achievement: A study of tertiary -level English majors in China. *Applied Linguistics*, 18(1): 27-48.

## Appendix

### 1.) [+definite, +specific ; +ESK]

Conversation between two police officers

Police Officer Clark : I haven't seen you in a long time. You must be very busy.

Police Officer Smith : Yes. Did you hear about Miss Sarah Andrews, a famous lawyer who was murdered several weeks ago? We are trying to find \_\_\_\_ murderer of Miss Andrews—his name is Roger Williams, and he is a well-known criminal.

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### 2.) [+definite, -specific ; -ESK]

Conversation between a police officer and a reporter

Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?

Police officer: Yes. We are trying to find \_\_\_\_ murderer of Mr. Peterson—but we still don't know who he is.

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## 3.) [-definite, -specific; -ESK]

Sam: I'm having some difficulties with my citizenship application.

Julie: What are you going to do?

Sam: Well, I need some advice. I am trying to find \_\_\_\_ lawyer with lots of experience. I think that's the right thing to do.

a    *an*    *the*     $\emptyset$

## 4.) [+definite, +specific; -ESK]

Conversation between a police officer and a reporter

Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?

Police officer: Yes. We are trying to find \_\_\_\_ murderer of Mr. Peterson—we still don't know who he is, but when we find him I hope he goes to prison for a long time.

*a*    *an*    *the*     $\emptyset$

## 5.) [-definite, +specific; -ESK]

Meeting on a street

Gina: Hi, William! It's nice to see you again. I didn't know that you were in Boston.

William: I am here for a week on business. My wife is visiting \_\_\_\_ friend from college — I don't know him but his name is Sam Brown, and he lives in Cambridgenow. I think he knows you.

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Use of *the*

participant	L3	[-definite, +specific; -ESK]	[+definite, +specific; -ESK]	[-definite, -specific; -ESK]	[-definite, +specific; +ESK]	[+definite, -specific; -ESK]	[+definite, +specific; +ESK]
Ch1Int	French	33%	100%	0%	11%	88%	89%
Ch2Int	French	0%	100%	6%	0%	88%	100%
Ch3Int	French	17%	83%	6%	0%	88%	100%
Ch4Int	French	17%	100%	6%	11%	100%	89%
Ch5Int	French	0%	83%	0%	11%	88%	100%
Ch6Int	Japanese	0%	83%	6%	0%	100%	89%
Ch7Int	Japanese	17%	67%	0%	22%	75%	89%
Ch8Int	French	33%	83%	0%	11%	88%	89%
Ch9Int	Japanese	33%	100%	13%	11%	100%	89%
Ch10Int	Russian	0%	67%	13%	22%	50%	100%
Ch11Int	Japanese	17%	67%	0%	0%	88%	78%
Ch12Int	French	17%	67%	13%	22%	88%	100%
Ch13Int	French	0%	83%	0%	0%	88%	100%
Ch14Int	Japanese	0%	83%	6%	0%	88%	78%
Ch15Int	Japanese	0%	67%	13%	11%	88%	89%

Use of *a*

participant	L3	[-definite, +specific; -ESK]	[+definite, +specific; -ESK]	[-definite, -specific; -ESK]	[-definite, +specific; +ESK]	[+definite, -specific; -ESK]	[+definite, +specific; +ESK]
Ch1Int	French	67%	0%	100%	89%	13%	11%
Ch2Int	French	100%	0%	88%	100%	13%	0%
Ch3Int	French	83%	17%	88%	100%	13%	0%
Ch4Int	French	83%	0%	94%	89%	0%	11%
Ch5Int	French	100%	17%	100%	89%	13%	0%
Ch6Int	Japanese	100%	17%	88%	100%	0%	0%
Ch7Int	Japanese	83%	33%	75%	78%	25%	11%
Ch8Int	French	67%	17%	69%	78%	13%	11%
Ch9Int	Japanese	67%	0%	88%	89%	0%	11%
Ch10Int	Russian	100%	33%	88%	78%	50%	0%
Ch11Int	Japanese	83%	33%	94%	100%	13%	22%
Ch12Int	French	67%	33%	81%	78%	13%	0%
Ch13Int	French	100%	17%	100%	100%	13%	0%
Ch14Int	Japanese	100%	17%	88%	100%	0%	22%
Ch15Int	Japanese	100%	33%	88%	89%	13%	11%

**Footnotes**

- 1 Ionin, Ko & Wexler (2004) provide formal definitions of definiteness, based on a Fregean analysis by Heim (1991), and specificity is based on Fodor & Sag's (1982) definition of speaker intent to refer.
- 2 Radford (*p.c.*) states that the question is whether definiteness is a *formal* feature in the grammar at all, or just a semantic feature (e.g. like the feature ADULT in words such as *man/woman/horse* etc.). Perhaps to call it a formal feature means it has an unvalued counterpart on another. Of course, there are languages in which definiteness does seem to be a formal feature e.g. Arabic where adjectives agree in definiteness with the noun they modify (*the man the tall*). But that does not mean definiteness is a formal feature of English, any more that the existence of gender agreement on Arabic finite verbs means that finite verbs in English carry gender.
- 3 Mandarin Chinese seems to be in a process of developing a definite and indefinite article according to Li & Thompson (1981), Gundel et al. (1993) and Chen (2003, 2004), but as Mandarin does not have a grammaticalized article system like English, L1 transfer is ruled out.
- 4 Herschensohn (*p.c.*) suggests that any influence from L3 French is minimal because despite the fact that both languages encode definiteness with articles, the French article system is more complex.