

Perception of Articles in L2 English

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1. Introduction

It is well established in the relevant literature that the second language (L2) acquisition of articles is difficult, particularly if the L1 lacks articles (Huebner 1985; Robertson, 2000; Thomas, 1989; Ionin, Ko & Wexler, 2004; Trenkic, 2007). Typical errors include omissions in obligatory contexts; inappropriate substitution of one article for the other (typically, definite for indefinite, see Thomas 1989). There are several hypotheses that account for the errors encountered in the inter-language of L2 English learners. The Failed Functional Features Hypothesis (FFFH) (Hawkins & Chan, 1997) assumes that if the L1 lacks a particular functional category, it cannot be learned in the L2. On the Missing Surface Inflection Hypothesis (Prévost & White, 2000), functional categories are present in the inter-language, but learners have difficulty retrieving the corresponding surface morphology. More recently, Goad, White & Steele (2003) and Goad & White (2004) have attributed omission of articles and other functional elements to constraints imposed by the prosodic system of the L1. Their Prosodic Transfer Hypothesis posits that the acquisition of free clitics, such as articles, in the L2 is constrained by the rhythmic qualities of the L1. Finally, in the realm of semantics, the Fluctuation Hypothesis (Ionin et al. 2004) asserts that L2 learners have access to the semantic universals of definiteness and specificity, but have difficulty learning from the input which one of these is encoded by English articles, and therefore fluctuate between them, overusing *the* with specific indefinites and overusing *a* with non-specific definites. All of the foregoing hypotheses are based on production data, written or spoken, but relatively little experimentation has been carried out to understand what learners actually perceive in the input. Perception of individual phonemes has been relatively well studied and has provided strong evidence that the L1 phonemic inventory has a significant effect on the perception of phonemes in the L2 (Logan, Lively & Pisoni, 1991; Lively, Logan & Pisoni, 1993; Bradlow, Pisoni, Yamada, & Tohkura, 1996; McCandliss, Fiez, Protopapas, Conway & McClelland, 2002). Given that the features of individual sounds are perceived through a filter of the phonemic inventory of the L1, it is reasonable to assume that other aspects of the L1 phonology, e.g. prosodic or rhythm qualities would also influence perception of the L2.

The research reported on here was designed to address the following questions: 1. Do learners whose native languages are prosodically different from English (in this case Mandarin and Korean) perceive English articles accurately? 2. Does overall L2 English proficiency and/or grammatical knowledge of English articles correlate with accurate perception of English articles? And finally, 3. Neither Mandarin nor Korean has articles, but given that the two languages have different prosodic systems, do L1 Mandarin and L1 Korean learners of L2 English differ in their perception of English articles?

Given that neither Mandarin nor Korean has definite or indefinite articles (see Li & Thompson, 1981 for Mandarin; Kim-Renaud, 1994 for Korean), the acquisition patterns of English articles should be similar and indeed, prior work on L2 English learners' article choice in written tasks found similar error patterns among Korean speakers (Ionin et al. 2004) and Mandarin speakers (Trenkic, 2008).

¹ This paper has benefitted greatly from the comments and suggestions of two anonymous reviewers as well as audiences at SLRF and AAAL.

However, the rhythmic systems of both Mandarin and Korean differ significantly from that of English, and also differ from one another. English is classified as a stress-timed language. Stress-timed languages are marked by a pattern of reduced and acoustically prominent syllables that are roughly equally timed between stress peaks. Phonetic information *between* stress-peaks is markedly reduced. Mandarin, on the other hand, is classified as a syllable-timed language such that each syllable is of roughly equal duration (Lin & Wang, 2005). Although Mandarin is tonal, it is also considered to have stress (Shen, 1993).

Korean has rather controversial rhythmic characteristics. It does not employ tones nor does it have lexical stress or pitch accents at the level of the word. There is however stress or more accurately, prominence, at the level of the Accentual Phrase (AP), which consists of 3-5 syllables. However, there is no lengthening or reduction of vowels attributable to stress (Jun, 1998). According to Lim (2000), vowel durations behave the same for heavy and light syllables. Nonetheless, quantitative research measuring the durational changes of both vowels and consonants gives a mixed picture of Korean speech rhythm. The percent change in vowels in accented syllables classifies Korean as syllable-timed, but the change in consonant duration indicates that Korean lies between syllable-timed and stress-timed languages (Mok & Lee, 2008).

If Korean is a mixed stress/syllable-timed language, then Korean speakers should have an advantage over speakers of Mandarin, a syllable-timed language, in acquiring the prosodic characteristics of English, a stress-timed language.

2. Experimental study

2.1. Participants and tasks

Participants were 16 speakers of Korean and 14 speakers of Mandarin. Both groups were enrolled in ESL classes at the Intensive English Institute at the University of Illinois. The Korean participants had a mean age of 25, and had been living in the United States for 3.86 months, on average, with a range of 2 weeks to 8 months. The average age at which they began studying English in their home country was 11. The Mandarin-speaking participants had an average age of 27, and had lived in the US for 13.28 months, on average, with a range of 1 month to 7 years. The average age at which they began studying English in their home country was 12.

All testing was completed in the context of an ESL classroom at the University of Illinois over the course of three class periods. Participants first completed an oral narration task (not discussed here) in the phonetics lab at the University of Illinois. A cloze test, designed to test overall knowledge of English vocabulary and grammar, and an Acceptability Judgment Task (AJT) targeting participants' sensitivity to missing articles, were completed in one session during the second class period. Both the cloze test and the AJT were administered online through the survey gizmo instrument. Finally, in the third class period, a transcription task was completed via computer with headphones.

2.2. Cloze test

The cloze test was in a multiple-choice format such that 40 words in a text passage were replaced by blanks, and each blank was accompanied by 3 multiple choice options. The text passage was adapted from American Kernel Lessons: Advanced Students' Book, by O'Neill, Cornelius and Washburn (1991) and was the same one used in Ionin and Montrul (in press), where it was determined to be reliable, Cronbach alpha of .817. The average cloze test score (out of 40 maximum) was 29.93 for the L1 Korean group, and 32.64 for the L1 Mandarin group. An independent samples t-test determined that the Mandarin group scored significantly higher than the Korean group ($p < .001$). The native English speakers tested by Ionin & Montrul performed at or close to ceiling.

2.3. Acceptability judgment task (AJT)

The Acceptability Judgment Task (AJT) consisted of 32 sentence pairs; for each pair, participants were asked to rate the second sentence as either acceptable or unacceptable in the context of the first,

by selecting either YES or NO; if they selected NO, they were asked to provide a correction to the sentence. There were 16 target items to test participants' sensitivity to missing articles with singular count nouns. Four of the target items had correct use of *the* on second-mention (1a), four items had correct use of *a* on first mention (1b), four items had missing *the* on second-mention (2a), and four items were missing *a* on first-mention (2b). In addition, there were 16 filler sentences which tested inflectional morphology. The 32 test sentences were a subset of a longer AJT used in Ionin and Montrul (in press). The target NPs are highlighted here, but were not highlighted in the actual test.

- (1) a. correct 'the': Hugo watched a film. He liked **the film**
 b. correct 'a': Alice saw a little boy. He was eating **an apple**.
- (2) a. missing 'the': Timothy went to see a doctor. He talked to **doctor**.
 b. missing 'a': My daughter is happy. She got **dog** for her birthday!

In scoring the AJT, we took account both of the response (YES vs. NO) and of the error correction. For the grammatically correct sentences (1a-b), a response was counted as correct if the learner either selected YES, or selected NO but corrected a part of the sentence not related to article choice (e.g., verbal morphology). For the sentences with missing articles (2a-b), a response was counted as correct only if the learner both selected NO, and inserted an article; e.g., if the learner corrected verbal morphology instead, the response was not counted as correct.

The learners' mean performance on the AJT is given in Table 1. While we did not test native English speakers in the present study, the native English speakers tested on a larger version of this AJT in Ionin and Montrul (in press) scored at ceiling, at 96% correct, on average.

As Table 1 shows, both groups correctly accepted sentences containing articles, but were relatively poor at detecting missing articles. The Korean group was significantly more accurate at detecting missing articles than the Mandarin group, even though the Mandarin group had higher overall proficiency. The Korean group was better at detecting missing *the* than missing *a*, but the Mandarin group was equally inaccurate with both error types.

Table 1. Results of the AJT: mean % target response

	Korean	Mandarin
correct acceptance of 'the' (1a)	100%	95%
correct acceptance of 'a' (1b)	98%	98%
correct rejection of missing 'the' (2a)	72%	32%
correct rejection of missing 'a' (2b)	59%	30%

2.4. Transcription task

The transcription task consisted of 18 grammatical sentences spoken in a conversational style by a native speaker of American English. Participants were asked to write down exactly what they heard. In transcription tasks, participants are usually allowed to listen once, possibly twice to a sentence and are then forced to recall what they heard. Difficulties with these tasks can be attributable to limitations on short term memory rather than perception. Since the focus of this work was not on memory or online processing, but on what learners actually perceive, they were allowed to listen to the sentences as many times as they liked.

The task design crossed three NP types (definite singular/plural², indefinite singular, and bare

² An anonymous reviewer raised a valid point about the inclusion of definite plurals, noting that if learners fail to transcribe *the* in this context, the result would still be a grammatically acceptable NP, whereas failure to transcribe *the* before a definite singular would result in a grammatical error (an article-less singular count noun). A

plural) with three positions in the sentence (P1=subject, P2=indirect object, P3=direct object). The indirect object always preceded the direct object. In order to avoid effects of greater perceptual saliency at the beginning of a matrix clause, all three target positions were inside an embedded dependent clause. Each type of NP was presented six times in each position³, three times with an adjective and three times without an adjective (cf. Goad & White 2004, Trenkic 2007, on the effect of adjective presence on article omission in production). Thus, there was a total of 54 items, incorporated into 18 sentences, three items per sentence. Sample sentences are given in (3).

- (3) a. I heard that international students asked the professor a difficult question.
 b. I don't know if a teacher gave a new student notebooks.
 c. She said that the teachers gave students the difficult tests.

The transcription task was piloted with 10 native English speakers. Across all L1 English speakers, 8 errors (1.5%) were made, all of which were substitution errors; 4 instances of *the* being substituted for *a*; 3 instances of *a* being substitute for *the*, and 1 error in which *that* was transcribed as *the*. There were no instances where the native controls inserted or deleted an article – suggesting that they are sensitive to rhythmic cues even if the phonetic details of *the* and *a* were misperceived 1.5% of the time. The results for the Korean and Mandarin speakers are given in Tables 2 and 3, respectively. The results for NPs with vs. without adjectives in each condition are grouped together, since there was no noticeable difference in performance due to presence vs. absence of adjective. Each table presents the mean % of each form transcribed (*the* vs. *a* vs. the zero form, i.e., no article) for each target form in each position. The cells corresponding to the correct transcriptions are highlighted.

As shown in Tables 2 and 3, both the Mandarin and the Korean speakers were inaccurate in perceiving articles. In Position 1⁴, the prevalent error is transcription of *the* in place of *a* and with bare NPs; in Position 3, the prevalent error is article omission of both *the* and *a*. Both error types are present in Position 2. While the Korean group is overall more accurate than the Mandarin group, the patterns of errors are similar.

reexamination of the data indicated that definite plurals were indeed more likely to have *the* deleted in the transcriptions than definite singulars. However, the distribution of definite singular and plural forms was not balanced across positions such that the DO had 3 instances of definite plurals and 3 instances of definite singulars and the IO had 4 instances of definite plurals and 2 instances of definite singulars. The subject position had only one instance of a definite plural and five instances of definite singular. This makes it impossible to tease apart the effects of position vs. number. Furthermore, participants often deleted plural morphology in addition to deleting *the*, which makes it difficult to tell whether they were even perceiving the NP as a plural. Mandarin speakers deleted the plural '-s' 33% of the time with definite plurals and Korean speakers did so 20% of the time. Many of the errors of '-s' deletion were with the same NPs as *the* deletion. The distribution of definite plurals and singulars will be controlled in follow up experiments.

³ Due to an error in the test materials, Position 2 had five instances of NPs with *a* and seven instances of bare NPs.

⁴ It should be noted that 16 of the 18 sentences began the dependent clause with *that* which was often deleted when preceding *the* or transcribed as *the* before a bare plural. The former case is indicative of constraints on the learners' ability to perceive the rhythmic system of English; the latter may be attributed to difficulty with phonetic detail. However, this difficulty perceiving the difference between *that* and *the* does not solely account for the inflated presence of the definite article in subject position since *that a* was transcribed as *that the*. Nonetheless, this will be controlled for in future research.

Table 2. Results for the Korean group

Transcribed form Target form	% "the"	% "a"	% zero
subject (position 1)			
'the'	91.7	0.9	7.4
'a'	49.1	31.5	19.4
zero	36.1	1.9	62.0
indirect object (position 2)			
'the'	88.0	1.9	10.2
'a'	24.4	53.3	22.2
zero	11.1	1.6	87.3
direct object (position 3)			
'the'	75.9	0.9	23.1
'a'	6.5	58.3	35.2
zero	1.9	1.9	96.3

Table 3. Results for the Mandarin group

Transcribed form Target form	% 'the'	% 'a'	% zero
subject (position 1)			
'the'	91.7	0.0	8.3
'a'	79.1	6.0	14.3
zero	64.3	1.2	34.5
indirect object (position 2)			
'the'	85.7	2.4	11.9
'a'	48.6	38.6	12.9
zero	25.5	1.0	73.5
direct object (position 3)			
'the'	65.5	9.5	25.0
'a'	9.5	66.7	23.8
zero	4.8	3.6	91.7

2.5. Summary of results

We began by asking three research questions (RQ): 1. Do Mandarin and Korean learners of English perceive English articles accurately? 2. Does overall L2 English proficiency and/or grammatical knowledge of English articles correlate with accurate perception of English articles? And finally, 3. Do L1 Mandarin and L1 Korean learners of L2 English differ in their perception of English articles? Given the results of the three tasks, it can be surmised (in response to RQ1) that learners whose L1s are prosodically different from English have difficulty accurately perceiving English articles. For RQ2, this difficulty does not appear to be directly related to either proficiency or experience with English input: the Mandarin speakers have higher English proficiency as measured by the cloze test, and a longer length of residence (LoR), compared to the Korean speakers, but are less

accurate at perceiving articles. At the same time, there may be a relationship between accuracy at article perception, and grammatical knowledge of English articles: the Korean speakers outperform the Mandarin speakers on both the AJT and the transcription task, despite the fact that Korean, like Mandarin, lacks articles. In response to RQ3, there does seem to be some advantage for the Korean speaking participants which may be attributable to the difference in prosodic systems between Korean and Mandarin, although more research is needed on this point.

3. Discussion

Neither Mandarin nor Korean has articles, the counterpart of stress-reduced vowels or pro-clitics, and indeed the learners in this study had difficulty accurately perceiving English articles. It is still an open question whether the participants entirely failed to hear the articles, or heard them but failed to transcribe them. Although the Korean speakers had an advantage over the Mandarin speakers, both groups evinced a clear difference in error patterns across positions. If the errors were due to the phonetic details that disambiguate *the* from *a* from no article, then error patterns for each article type should be similar across positions: as shown in Table 4, the physical properties (duration and intensity) of *the* were similar across all three positions, and the same was true for *a*. However, learners were not equally accurate with a given article across positions: e.g., definite articles were transcribed by the Mandarin speakers correctly 91% of the time in Position 1, but only 65% of the time in Position 3. This pattern is mimicked in the Korean speakers' data.

Table 4. Average duration and intensity of articles across positions

	P1	P2	P3
'a' – avg. duration (in ms)	5.1 ms	6.6 ms	5.5ms
'the'- avg.duration(in ms.)	7.6 ms	7.4 ms	7.2 ms
'a' avg. intensity (in db)	54.2	49.4	47.5
'the' avg intensity(in db)	53.0	46.8	45.5

One possible explanation for the pattern of errors might be the influence of information structure: old information is more likely to occur sentence-initially and be marked with *the*, and new information is likely to occur sentence-finally and be marked with *a* (see Birner & Ward 2006 for an overview of the literature on the relationship between syntax and information structure). There is suggestive evidence bearing on this from corpus data on English articles. Biber, Conrad and Reppen (1999) found the following distribution of *a* and *the* in three different written registers: in subject position, 80-85% of article use corresponded to *the*, and 15-20%, to *a*; in object position, in contrast, the distribution was 50-55% *the*, and 45-50% *a*. Thus, the distribution of articles in subject vs. object position in the input may account for the different error patterns in P1 and P3. The differences between P2 and P3 may indicate that participants are sensitive to the givenness of noun phrases in double object constructions. For example, Bresnan et al (2007) found in their English corpora that given referents were more likely to precede non-given referents, such that approximately 78% of immediately post verbal objects were given and 75.5% of non-given noun phrases occurred in the final position of a double dative construction. These patterns from Bresnan et al. are thus suggestive of the patterns observed in the participants' data⁵. However, the effect of article distribution in the input would be difficult to tease apart from transfer effects. Both Mandarin and Korean are topic-prominent languages, which place old

⁵ As noted by one anonymous reviewer, it is possible that what the learners are doing post hoc with articles is making the sentences more pragmatically natural such that a given noun phrase follows the verb and non-given noun phrases are usually sentence final.

information clause-initially. In Korean, scrambling and topicalization are related to old information (see Choi 1996; Kim 2004). In Mandarin too, topics are often definite/specific (including topics in embedded contexts); subjects are often topics (though not necessarily under embedding); and bare nouns in preverbal position are interpreted as definite (see Li & Thompson 1981; Li 1999; Kim 2004; Huang and Li 2009). Therefore, both L1s have clause-initial definiteness in the grammatical inventory so learners assume subjects are definite, regardless of whether they are marked in the L1 - and they know that *the* marks definiteness, so they add *the* after the fact. Therefore, the learners' error patterns may also be due to L1 transfer rather than to article distribution in the input – or some combination of both.

Finally, it is important to address the performance differences between the two groups. In section 2.4, it was shown that the Korean speakers are more accurate than the Mandarin speakers in transcribing articles from spoken stimuli even though the Korean speakers are less proficient (based on the cloze test) in English and have lower overall length of residence; furthermore, Korean, like Mandarin, lacks articles and pro-clitics. We hypothesize that the Korean rhythmic system, which has more elements of prominence/reduction than the Mandarin rhythmic system, facilitates the perceptual accuracy of the Korean participants. If the Korean speakers are more accurate at perceiving articles in the speech signal, they may have an overall advantage even in written tasks, such as the AJT; this however, is a tentative conclusion. Although the results from this study are suggestive, it is important to gather more data from different proficiency levels in order to understand at what point in the acquisition process, if ever, articles become perceptually salient for L2 learners. If it is indeed the case that L2 English-learners' errors with articles stem from perceptual difficulties, then perhaps it is important that L2 English instruction emphasize the prosodic properties as well as the grammatical properties of English articles.

References

- Avery, Peter & Radisic, Milica (2007). Accounting for variability in the acquisition of English articles. Paper presented at the *Proceedings of the 2nd Conference on Generative Approaches to Language Acquisition*, Somerville.
- Biber, Douglas, Conrad, Susan & Reppen, Randy (1998). Corpus linguistics: Investigating language structure and use, *Cambridge Approaches to Linguistics*. Cambridge: Cambridge University Press.
- Birner, Betty & Ward, Gregory (2006). Information structure, *The Handbook of English Linguistics*, Blackwell Publishing.
- Bradlow, Ann, Pisoni, David B., Yamada, Reiko A. & Tohkura, Yoh'ichi (1996). Training Japanese Listeners to Identify English /r/ and /l/: IV. Some Effects of Perceptual Learning on Speech Production, *Journal of the Acoustical Society of America*, 101, No.4, pp.2299-2310.
- Bresnan, Joan, Cueni, Anna, Nikitina, Tatiana, & Baayen, Harald (2007). Predicting the Dative Alternation. In *Cognitive Foundations of Interpretation*, ed. by G. Boume, I. Kraemer, and J. Zwarts. Amsterdam: Royal Netherlands Academy of Science, pp. 69--94.
- Choi, Hye-Won (1996). Optimizing structure in context: scrambling and information structure. Doctoral dissertation, Stanford University.
- Goad, Heather, White, Lydia & Steele, J. (2003). Missing inflection in L2 acquisition: Defective syntax or L1-constrained prosodic representations? *Canadian Journal of Linguistics* 48: 243-263.
- Goad, Heather & White, Lydia (2004). Ultimate attainment of L2 inflections: Effects of L1 prosodic structure. In S. Foster -Cohen et al. (eds.), *EUROSLA Yearbook*. Amsterdam: John Benjamins, 119-145.
- Hawkins, Roger & Chan, Celia Yuet-hung (1997). The partial availability of Universal Grammar in second language acquisition: The 'failed functional features hypothesis.' *Second Language Research* 13: 187-226.
- Huang, James & Li, Audrey (2009). *Syntax of Chinese*. Cambridge University Press.
- Huebner, Thorn (1985). System and variability in interlanguage syntax. *Language Learning* 35: 141-163.
- Ionin, Tania, Ko, Heejong, & Wexler, Ken (2004). Article semantics in L2-acquisition: the role of specificity. *Language Acquisition*, 12, 3-69.
- Ionin, Tania & Montrul, Silvia (In press). The role of L1-transfer in the interpretation of articles with definite plurals in L2-English. To appear in *Language Learning*, 60(4), December 2010.
- Jun, Sun-Ah (1998). The Accentual Phrase in the Korean prosodic hierarchy. *Phonology*, 15, 189-226
- Kim-Renaud, Young-Key (1994). *Theoretical Issues in Korean Linguistics*. CSLI, Stanford University, 1994
- Lee, Chungmin (1992). Definite/Specific and Case Marking in Korean. In Kim-Renaud (ed.), *Theoretical Issues in Korean Linguistics*, 325-341: Stanford: CSLI.
- Lee, Hikyoung (1998). Variable article use in Korean learners of English. Paper presented at the NWAVE(E)27, Athens, Georgia

- Li, Audrey (1990). Form and function correspondence: structures and interpretations of nominal expressions in Mandarin Chinese, in Takubo, Yukinori ed., *Comparative syntax of Japanese, Korean, Chinese and English*, Report of the International Scientific Research Program, Ministry of Education, Science and Culture, Japan. 147-186.
- Li, Y-H Audrey (1999). Plurality in a classifier language. *Journal of East Asian Linguistics* 8: 75-99.
- Li, Charles & Thompson, Sandra (1981). The *bǎ* construction. *Mandarin Chinese: A Functional Reference Grammar*. Los Angeles: University of California Press. spp. 463-491.
- Lim, Byung jin (In Press). The role of syllable weight and position on prominence. *Korean. Japanese/Korean Linguistics* 9.
- Lin, Hua & Wang, Qian (2005). Mandarin Rhythm: An Acoustic Study. *Journal of Chinese Language and Computing*, 17(3), 127-140
- Lively, Scott. E., Logan, John S., & Pisoni, David. B. (1993). Training Japanese listeners to identify English /r/ and /l/. II: The role of phonetic environment and talker variability in learning new perceptual categories. *Journal of the Acoustical Society of America*, 94(3), 1242-1255.
- Logan, John S., Lively, Scott. E., & Pisoni, David. B. (1991). Training Japanese listeners to identify English /r/ and /l/: A first report. *Journal of the Acoustical Society of America*, 89(2), 874-886.
- McCandliss, Bruce. D., Fiez, Julie. A., Protopapas, Athanassios., Conway, Mary, & McClelland, James L. (2002). Success and failure in teaching the r-l contrast to Japanese adults: predictions of a hebbian model of plasticity and stabilization in spoken language perception. *Cognitive, Affective, and Behavioral Neuroscience*, 2(2), 89-108.
- Mok, Peggy P.K. & Dellwo, Volker (to appear). Comparing native and non-native speech rhythm using acoustic rhythmic measures: Cantonese, Beijing Mandarin and English. In *Proceedings of Speech Prosody 2008*, Campinas, Brazil.
- O'Neill, Robert, Cornelius, Edwin T. & Washburn, Gay. N. (1991). *American Kernel Lessons: Advanced Students' Book*. New York. Longman.
- Prevost, Philippe & White, Lydia (2000). Missing Surface Inflection or Impairment in second language acquisition? Evidence from tense and agreement. *Second Language Research* 16(2):103-133
- Robertson, Daniel (2000). Variability in the use of the English article system by Chinese learners of English. *Second Language Research* 16: 135-172.
- Shen, Xiaonan Susan (1993). Relative duration as a perceptual cue to stress in Mandarin. *Language and Speech* 36, 415-433
- Trenkic, Danijela (2007). Variability in L2 article production: beyond the representational deficits vs. processing constraints debate. *Second Language Research*, 23, 289-327.
- Trenkic, Danijela (2008). The representation of English articles in second language grammars: determiners or adjectives? *Bilingualism: Language and Cognition*, 11, 1-18.
- Thomas, Margaret (1989). The acquisition of English articles by first and second language learners. *Applied Psycholinguistics*, 10, 335-355.
- White, Lydia (2008). Different? Yes. Fundamentally? No. Definiteness Effects in the L2 English of Mandarin Speakers. in *Proceedings of the 9th Generative Approaches to Second Language Acquisition Conference (GASLA 2007)*, ed. Roumyana Slabakova et al., 251-261. Somerville, MA

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