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Article use in L2 English by L1 Russian and L1 German speakers

Abstract: Article misuse and omission are common errors in article use in L2 English. A particularly influential theory concerned with article misuse is that of Ionin (2003a, 2003b), whose basic assumption is that, in L2 acquisition, adult learners still have access to Universal Grammar, Central to her theory is the concept of the Article-Choice Parameter, which is set to either definiteness or specificity in article-based languages. According to Ionin's Fluctuation Hypothesis, speakers of a language without articles fluctuate between the two settings of this parameter and produce systematic errors in article choice. Speakers of an L1 with articles have been shown to transfer the parameter value from their L1 to L2 English. This paper tests the predictions made by Ionin's account, based on data from an empirical study with a group of German speakers and two groups of Russian speakers. One of the Russian groups had studied English for a longer period of time, and at university level, and also had knowledge of another L2 with articles besides English. The results from this study do not provide clear support for Ionin's account. The German group rarely misused articles, as predicted, but only one of the Russian groups showed fluctuation. The Russian group with fewer years of English study and generally no knowledge of another L2 with articles showed variable patterns of article misuse and also often omitted articles. An explanation of why the two Russian groups differed is proposed.

Keywords: adult L2 English, Article-Choice Parameter, article misuse, article omission, fluctuation, transfer

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1 Introduction

This paper examines article use in adult second language (L2) acquisition of English, by performing an empirical study involving speakers of Russian and

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German. Common errors in the L2 acquisition of English articles are article misuse and article omission. The literature on L2 acquisition of articles by speakers of different first languages (L1s) is vast, but one of the recurring questions is whether article misuse and article omission show systematic patterns. The theoretical framework adopted in this paper is Generative Grammar in association with Universal Grammar (UG). Proponents of UG assume that it plays a crucial role in language acquisition, and that a child's task during L1 acquisition consists in setting parameters made available by UG based on the language to which the child is exposed. What role UG plays in L2 acquisition is controversial (see, e.g., Meisel 2011). The present study attempts to test the predictions of a particularly influential theory concerned with article misuse, that of Ionin (2003a, 2003b), and consequently touches on the role of UG in L2 acquisition. Ionin's basic assumption is that, in L2 acquisition, learners still have access to UG. Central to her theory is the concept of the Article-Choice Parameter, which is set according to either definiteness or specificity in article-based languages. To account for article choice in L2 English, she advances the Fluctuation Hypothesis, according to which speakers of a language without articles fluctuate between the two settings of this parameter, resulting in systematic errors in article choice. Speakers of an L1 with articles (e.g., Spanish) have been shown to produce few errors in article choice, a result that suggests that these learners transfer the parameter value from their L1 to L2 English.

The present study involved two groups of Russian learners of English and one group of German learners of English, whose article choice was tested by means of the written forced-choice task developed by Ionin. Russian has no articles, while German does. Moreover, just as in English, article choice in German is governed by definiteness. One of the Russian groups consisted of students of economics and technical sciences, the other of students of English. All the students of English had knowledge of another L2 with articles and had studied English for two years more than the other group, and at university level. The German group consisted of students of English only. The availability of these three groups invites the following questions: (i) Do the German learners of English produce few errors in article choice because, in English and German, it is governed by the same parameter value? (ii) Do the Russian learners of English show fluctuation in article choice because Russian has no articles, and the learners select an article based sometimes on definiteness and sometimes on specificity? (iii) Do the Russian students of English perform better than the Russian students of economics and technical sciences because they have knowledge of another L2 with articles and have studied English more intensively? In particular, do the Russian students of English show less fluctuation in article choice? (iv) Do the Russian learners produce clear patterns of article omission? For instance, is article omission considerably higher in the contexts for which fluctuation in article choice is predicted? The findings from this empirical study do not fully support Ionin's account. The German learners rarely make article errors, as predicted, but only one of the Russian groups - the students of English – shows fluctuation. The other Russian group produces much article misuse not only in the contexts for which article choice is predicted to be problematic, but in general, Ionin's account makes predictions about overt article use, not article omission. Article omission is found in both Russian groups, but only in the Russian group of English students is it systematic, and it appears to be independent of the contexts in which fluctuation in article choice occurs.

The paper is organized as follows. Section 2 briefly discusses definiteness, which determines article choice in English and German. Section 3 introduces the Article-Choice Parameter, and the Fluctuation Hypothesis and its predictions. Some studies on adult L2 English that test these predictions are also reviewed in Section 3 to set the context for my own study, which is presented in Section 4. Section 5 contains my conclusions and suggests some questions for future research.

2 A note on definiteness

Articles can be classified according to the semantic-pragmatic features [definiteness] and [specificity]. In English article choice depends on definiteness. The same is true of German. Irrespective of whether the noun phrase is specific or not, in a definite context the definite article is used and in an indefinite context the indefinite article is used, as shown by the examples in (1) and (2) from Lyons (1999: 167) (see also Prince 1981).

- (1) Joan wants to present the prize to the winner
 - (a) ... but he doesn't want to receive it from her. [+specific]
 - (b) ... so she'll have to wait around till the race finishes. [-specific]
- (2)Peter intends to marry a merchant banker
 - (a) ... even though he doesn't get on at all with her. [+specific]
 - (b) ... though he has not met one yet. [-specific]

In languages like English and German, definiteness is grammaticalized in the article system (see Hawkins 1978 for generalizations of article usage in English). In languages without articles definiteness may be expressed by other means.

In Russian, for example, definiteness can be reflected in the word order (theme vs. rheme for subject DPs), in the morphological case (accusative vs. genitive for certain direct objects), or in the aspectual system (perfective vs. imperfective). However, there is no one-to-one mapping between definite articles in English and any of these ways of expressing definiteness in Russian. For completeness, the translation of the English examples into Russian is shown in (3) and (4). There may also be other elements, such as demonstratives, possessives, or numerals, which can co-occur with nouns, and which can express definiteness. These elements are sometimes analysed as adjectives (see, e.g., Bošković 2005; Trenkic 2009), which means that, unlike articles, they are not hosted by the functional category D(eterminer). This is in agreement with Chierchia's (1998) hypothesis that nominal phrases in languages without articles are NPs not DPs, a view embraced in this paper.

- (3) хочет представить приз победителю Джоан Joan.NOM wants present.INF prize.masc.ACC winner.masc.DAT 'Joan wants to present the prize to the winner
 - (а) ... но он не хочет получать его от нее. But he NEG wants receive.INF him from her.GEN but he doesn't want to receive it from her.'
 - (b) ... так что ей придется ждать до кониа SO that she.DAT get wait.INF till end.masc.GEN гонки. race.GEN so she'll have to wait around till the race finishes.'
- (4) намерен жениться на банкире Peter.NOM intends marry.INF PREP banker.PREP 'Peter intends to marry a banker
 - ней вообще не (a) ... хотя он с ладит. although he with her at.all NEG get.on even though he doesn't get on at all with her'.
 - (b) ... хотя он еще не встретил ни одной. although he yet NEG met NEG one though he has not met one yet.'

Learners of a language with a two-article system whose L1 lacks articles have to discover that there is (i) a functional category D which hosts articles, (ii) that in certain contexts D must be filled, and (iii) that definite and indefinite articles have different meanings. In this paper the focus is on article use in singular count noun contexts, where articles are obligatory in English.

3 Article misuse in the acquisition of articles in L2 English

There are certain similarities between L1 acquisition and L2 acquisition of articles. Two particular problems have been identified in the literature: (i) the ungrammatical omission of obligatory articles (e.g., Goad & White 2007; Lardiere 2004; Radford 1990; Trenkic 2009) and (ii) the use of an incorrect article, typically using the definite article instead of the indefinite (e.g., Huebner 1983; Master 1987; Parrish 1987; Thomas 1989; Wexler 2011; Zdorenko & Paradis 2008). The examples in (5), produced by an adult native speaker of Mandarin Chinese, exemplify these problems.

- (5) (a) And she made phone call to someone.
 - (b) *She take the bath.*

(White 2008: 253)

Ionin (2003a, 2003b) and her colleagues concentrate on overt article (mis)use and propose the Fluctuation Hypothesis, which will be discussed in Section 3.1. Some studies testing the predictions made by this hypothesis are reviewed in Sections 3.2 and 3.3. These set the context for my own study in Section 4, which also discusses data from speakers of an L1 without articles (Russian) and of an L1 with articles (German).

3.1 Universal Grammar, the Article-Choice Parameter and the Fluctuation Hypothesis

Ionin (2003a, 2003b) provides an account of article misuse in L2 English, which is assumed to be systematic not random. She proposes the existence of the Article-Choice Parameter, which governs article choice in languages with two articles. This parameter has a binary value: article choice depends either on the feature [definite] or on the feature [specific]. These features are regarded as discourse-related and are informally defined as follows:

¹ The informal definition of definiteness is based on Frege and that of specificity on Fodor & Sag (1982).

- (6) If a Determiner Phrase (DP) of the form [D NP] is ...
 - (a) [+definite], then the speaker assumes that the hearer shares the speaker's presupposition of 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.

(Ko, Ionin & Wexler 2009: 288)

In English, the Article-Choice Parameter is set according to definiteness: the definite article *the* is used in definite contexts and the indefinite article a is used in indefinite contexts, independent of whether the context is specific or non-specific, as shown in Table 1 (see also examples [1] and [2] above). In Samoan, a Polynesian language, the parameter is set according to specificity: the specific article e is chosen if the context is specific and the non-specific article e is chosen if the context is non-specific, irrespective of whether the context is definite or not, as shown in Table e.

The different combinations of the two features [definite] and [specific] are shown in the examples in (7) to (10) from Ionin, Ko & Wexler (2004). The articles with the relevant feature combination are underlined.

Table 1: Article-grouping according to definiteness (English) (from Ionin, Ko & Wexler 2004: 13).	T	abl	le 1	۱: ۱	Ar	tio	:le	-g	roi	цp	in	g	ac	CCC	ore	diı	18	to	0 (de	fii	ni	te	ne	SS	(E	ทร	χli	sł	1)	(f	ror	n	lon	in,	K	8 (V	Ve	χle	er	20)04	4: 1	13).
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Context	[+definite]	[-definite]
[+specific] [-specific]	the	a

² Work on Samoan by Tryzna (2009) revealed that the specificity distinction is made with indefinites only: le is used in definites and specific indefinites, and se is used in non-specific indefinites only. These new data led Ionin, Zubizarreta & Philippov (2009) to revise the original account: article misuse in L2 English by speakers of an L1 without articles is now predicted to arise in the [-d, +s] context only. Ionin, Zubizarreta & Philippov (2009) propose that less explicit tasks (e.g. written narrative production) may tap into linguistic competence differently from more explicit tasks (e.g. the forced-choice task). Thus, adult learners' error patterns may look different dependent on the task, and either show fluctuation with indefinites only, or with both definites and indefinites. This revised hypothesis will not be considered in this paper.

Table 2: Article-grouping according to specificity (Samoan) (from Ionin, Ko & Wexler 2004: 13).

Context	[+definite]	[-definite]				
[+specific]		le				
[-specific]	se					

(7) [+definite, +specific] ([+d, +s])

At the end of a chess tournament

Laura: Are you ready to leave?

Betsy: No. Not yet. First, I need to talk to the winner of this tourna-

ment. She is a good friend, and I want to congratulate her!

(8) [+definite, -specific]([+d, -s])

After a woman's running race

Reporter: Excuse me! Can vou please let me in?

Guard: What do you want?

Reporter: I am a reporter. I need to talk to the winner of this race; I don't

know who she is, so can you please help me.

(9) [-definite, +specific] ([-d, +s])

In a restaurant

Waiter: Are you ready to order, sir? Or are you waiting for someone?

Client: Can you please come back in about twenty minutes? You see, I

am waiting. I am planning to eat with a colleague from work.

She will be here soon.

(10) [-definite, -specific] ([-d, -s])

In a restaurant

Karen: Where's Beth? Is she coming home for dinner?

Anne: No. She is eating dinner with a colleague. She didn't tell me who

it is.

To account for article choice in L2 English, Ionin (2003a, 2003b) and Ionin, Ko & Wexler (2004) proposed the Fluctuation Hypothesis, stated in (11). At the time, Ionin, Ko & Wexler concentrated on article use in L2 English by speakers of an L1 without articles. The question of what would happen in the case of L2 learners who are speakers of L1s with articles, and in particular whether transfer would cancel out fluctuation in these learners, is addressed in later work (see Ionin, Zubizarreta & Maldonado 2008).

Context	[+definite]	[-definite]
[+specific]	correct use of the	overuse of the
[-specific]	overuse of a	correct use of a

- (11)The Fluctuation Hypothesis
 - (a) L2 learners have full access to UG principles and parameter settings.
 - (b) L2 learners fluctuate between different parameter settings until the input leads them to set the parameter to the appropriate value.

(Ionin, Ko & Wexler 2004: 16)

Since both settings of the Article-Choice Parameter require the in the [+d, +s] context, and a in the [-d, -s] context, few errors in article choice are expected to occur in these contexts. However, dependent on which parameter value is chosen, one of a or the is required in a non-specific definite ([+d, -s]) and in a specific indefinite ([-d, +s]) context. Thus article misuse is predicted to occur in these contexts. In other words, L2 learners of English are predicted to be quite accurate in their use of the in the [+d, +s] context and in their use of a in the [-d, -s] context, but they should vacillate between using the or a in the other two contexts, i.e. [+d, -s] and [-d, +s]. These predictions are summarized in Table 3. Initially, learners are assumed not to have a preference for one setting of the parameter over the other.

3.2 Article choice in English by adult L2 learners of an L1 without articles

In Ionin's (2003a, 2003b) original work, as well as in many subsequent papers working with different colleagues, the predictions of the Fluctuation Hypothesis were tested by means of a written forced-choice elicitation task, which will also be used in my study. In this task the participants are presented with short dialogues in which they have to make a choice between the indefinite article, the definite article, and the null article. Typical examples would be like those in (7) to (10), but with a blank in place of the actual article. To ensure that word order would not influence article choice, all the test items contained transitive verbs and article choice always concerned nominals in the object position. These nominals were singular count nouns, which always require an article.

	[+definit	e] (target: <i>the</i>	e)	[–definit		
	the	а	no article	the	а	no article
[+specific]	79 %	8 %	13%	36%	54%	10 %
[-specific]	57%	33 %	10 %	7 %	84 %	9 %

Table 4: Article use in L2 English by L1 Russian learners (n = 26) (8 items per context) (based on IKW 2004: 30).

Table 5: Article use in L2 English by L1 Korean learners (n = 39) (8 items per context) (based on IKW 2004: 30).

	[+definit	e] (target: <i>the</i>)	[-definite] (target: a)				
	the	а	no article	the	а	no article		
[+specific]	88 %	4 %	8 %	22%	77 %	1 %		
[-specific]	80 %	14%	6 %	4 %	93 %	3 %		

Ionin, Ko & Wexler (2004), henceforth abbreviated IKW, tested 30 native speakers of Russian and 40 native speakers of Korean living in the United States. Based on the Michigan test of L2 proficiency, each learner was classified as "beginner", "intermediate", or "advanced". There were 15 advanced and 11 intermediate learners in the Russian group, as well as four beginners. Overall the advanced learners were more accurate in their article choice than the intermediate learners, but both groups showed significantly more article misuse in the two contexts predicted by the Fluctuation Hypothesis. As can be seen from Table 4, which summarizes the results on the main 32 test items, the indefinite article a rarely occurs in the [+d, +s] context, while it often occurs in the [+d, +s]-s] context. Similarly, the definite article the rarely occurs in the [-d, -s] context, but it often occurs in the [-d, +s] context. Comparable results were obtained from the 39 L2 intermediate and advanced learners of English with L1 Korean, another article-less language (see Table 5). There was only one beginner in the Korean group. Based on these findings, IKW conclude that L2 learners whose L1 lacks articles have access to both settings of the Article-Choice Parameter. The five beginner learners often used incorrect articles in all four contexts, even in the contexts where article choice is predicted to be accurate (cf. IKW 2004: Tables 20 and 21).

IKW also looked at the individual performance to determine whether a given individual followed the general trend. They classified article use into the following five categories (see IKW 2004: 38 and Ionin 2003a: Ch. 6 for details):

- (12) (a) The definiteness pattern
 - (b) The fluctuation pattern
 - (c) The specificity pattern
 - (d) The partial fluctuation pattern
 - (e) The miscellaneous pattern

Most learners should show either pattern (12a) or (12b). The remaining patterns are difficult to account for in terms of the Article-Choice Parameter. Learners showing the specificity pattern may have opted for the wrong setting of the parameter despite the input they have received. Those showing the partial fluctuation pattern only misuse articles in either the [+d, -s] context or the [-d, +s] context, but not in both. Learners that do not fall into any of the other categories are assigned to the "miscellaneous pattern". The details of how these patterns are defined are not relevant to this discussion. What is of relevance is that although most of the Russian and Korean learners adhere to the definiteness or the fluctuation pattern, the number of learners showing an unexpected pattern is quite large (see Figure 1).

Peters (2007) performed a study with 24 Russian speakers living in the Ukraine using IKW's test items. These learners' L2 proficiency was not assessed. Table 6 summarizes her data on the 32 items that underlie the percentages in Tables 4 and 5 above. As can be seen from Table 6, there was much article misuse in all four contexts, and even in the [+d, +s] and [-d, -s] contexts, where none is expected, it exceeds 25%. Poor performance in these two contexts is incompatible with the Fluctuation Hypothesis. In contrast, the rate of

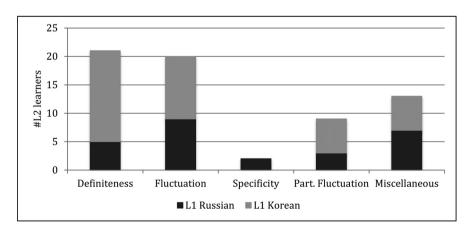


Figure 1: Patterns of article use by Russian and Korean learners of English (from IKW 2004: 39).

	[+definit	e] (target: <i>the</i>	?)	[-definite] (target: a)				
	the	a	no article	the	a	no article		
[+specific]	56%	36%	8 %	48%	44%	8%		
[-specific]	53 %	35%	12%	61%	29%	10 %		

Table 6: Article choice by adult L2 learners of English with L1 Russian (n = 24) (8 items per context) (based on Peters 2007).

article omission was similar in the two studies with Russian learners, ranging from 8 to 12% in Peters' study and from 9 to 13% in IKW's study.

Peters' Russian participants may have performed less well than IKW's Russian participants because hers had been taught English in a classroom setting, while IKW's had also received naturalistic input while living in the United States. However, the Russian adult L2 learners tested in Russia by Ionin, Zubizarreta & Philippov (2009) had also been taught English in a classroom setting, and they performed like IKW's Russian participants in the United States.

3.3 Article choice in English by adult L2 learners of an L1 with articles

Ionin, Zubizaretta & Maldonado (2008) compared Russian learners of English living in the United States (n = 19), with Spanish-speaking learners of English living in Mexico (n = 20). The Mexicans were students of English and had been studying English at school since age 13 or younger. Spanish, like English, has a two-article system and the Article-Choice Parameter is set according to definiteness. Ionin, Zubizaretta & Maldonado tried to determine whether the native speakers of Spanish transfer the parameter value from Spanish to L2 English, or whether they show the fluctuation pattern just like native speakers of L1s without articles.

- (a) Possibility A: Fluctuation overrides transfer (13)All learners should fluctuate between definiteness and specificity in their L2 article choice.
 - (b) Possibility B: Transfer overrides fluctuation L2 learners whose L1 has articles transfer article semantics from their L1 to their L2. L2 learners whose L1 lacks articles exhibit fluctuation. (Ionin, Zubizaretta & Maldonado 2008: 560)

They used short dialogues with a blank in each target sentence, but in contrast to the dialogues in IKW the participants were not given an explicit choice (the, (a, -) but were instructed to fill the blank with either a single word or a dash if no word was required. Moreover, filler items were used that did not elicit articles. The Russian learners performed as expected: they misused articles in the [+d, -s] and the [-d, +s] context, but performed very accurately in the [+d, +s] and the [-d, -s] context. They did not use the null article in any of the blanks. Although the Russians had "significantly higher proficiency and more L2-exposure" (Ionin, Zubizaretta & Maldonado 2008: 569) than the Mexicans, the Mexicans performed well on article choice in all four contexts and rarely used articles incorrectly. Proficiency was based on a cloze-test of L2 proficiency. The authors ascribe the good performance on article use by the Mexicans to transfer from Spanish and conclude that transfer cancels out fluctuation in agreement with Possibility B in (13b).

Sarko (2009) examined article choice in L2 English by native speakers of French (n = 18) and Syrian Arabic (n = 57) using the forced-choice task and a story-recall task. French has a definite and an indefinite article, while Arabic has a definite article only (see Sarko 2009: fn. 6). Sarko shows that the data from these two learner groups are fully compatible with transfer.

4 The present study

The intent of my study with Russian and German learners of English is to discover whether fluctuation characterizes Russian-speaking learners, and transfer characterizes German-speaking learners. As shown in the preceding section, previous findings from Russian learners are somewhat contradictory, and although speakers of article-based languages like Spanish, French and Arabic transfer article choice from their L1 to L2 English, German-speaking learners have not been studied until now. Furthermore, the availability of two groups of learners with different L1s, one with articles and one without, allows a crosscheck of the test items to ensure their validity to probe article choice. I make the following hypotheses:

Hypothesis 1: The Russian L2 learners show fluctuation: they vacillate between the two settings of the Article-Choice Parameter; they select an article based sometimes on definiteness and sometimes on specificity.

Hypothesis 2a: Good performance on article choice by Russian L2 learners is reflected in a small degree of fluctuation, i.e. few errors in article choice in the contexts predicted to show fluctuation.

Hypothesis 2b: Poor performance on article choice by Russian L2 learners is reflected in article misuse in all contexts and not just those that are predicted to show fluctuation.

Hypothesis 3: The German L2 learners perform well on article choice, because they transfer the parameter value from German to English.

4.1 Method

4.1.1 Participants

Two groups of Russian students participated in the study, which was carried out in Russia in 2008 and 2009. One group (in 2008) consisted of first- to thirdyear students of economics and technical sciences, the other (in 2009) of fourth-year students of English. The participants were asked to provide background information on gender, mother tongue(s), knowledge of other languages, and how many years they had studied English.

There were 113 students of economics and technical sciences. Of these 11 were excluded from the analysis because they provided insufficient or no background information (eight students) or had studied English for three or fewer years (three students). Information about the remaining 102 students is summarized in Table 7. All the monolingual students grew up with Russian as an L1, except for one who grew up with Ukrainian. The bilingual students grew up with Russian and either Bashkir or Tatar. None of these languages have articles. Besides English, some students had knowledge of another L2 with articles (French, German), or an L2 without articles (Bashkir, Tatar, Turkish, Ukrainian). In the table, languages with articles are labelled "+articles" and those without as "-articles".

There were 41 students of English. Two provided no background information and were excluded from the analysis. Information about the remaining 39

Table 7: Overview of Russian students of economics and technical sciences (n = 102).

mean years of English: 9.85, ranging from 5 to 16 years, SD: 2.455									
monolingual	bilingual								
(n = 76; 31 male and 45 female)	(n = 26; 8 male and 18 female)								
L2 (+articles) $(n = 2)$	L2 (+articles) $(n = 1)$								
L2 $(+/-articles)$ $(n = 1)$	-								
L2 ($-articles$) ($n = 15$)	L2 ($-articles$) ($n = 3$)								
no other L2 $(n = 58)$	no other L2 $(n = 22)$								

Table 8: Overview of Russian students of English (n = 39).

mean years of English: 11.87, ranging from 6 to 15 years, SD: 2.261										
monolingual bilingual										
(n = 20; 5 male and 15 female)	(n = 19; 1 male and 18 female)									
L2 (+articles) $(n = 12)$	L2 (+articles) $(n = 13)$									
L2 (+/-articles) $(n = 8)$	L2 $(+/-articles)$ $(n = 6)$									

Table 9: Overview of monolingual German students of English (n = 107).

Group A (n = 57; 18 r	nale, 39 female)	Group B (n = 50; 16 male, 34 female)				
1^{st} year students $(n = 37)$	2^{nd} year students $(n = 20)$	1^{st} year students $(n = 30)$	2^{nd} year students $(n = 20)$			
L2 (+articles) (n = 27)	L2 (+articles) (n = 9)	L2 (+articles) (n = 15)	L2 (+articles) (n = 10)			
L2 (+/-articles) $(n = 7)$	L2 (+/-articles) $(n = 8)$	L2(+/-articles) (n = 7)	L2 (+/-articles) (n = 8)			
L2 (-articles) $(n = 1)$ no other L2 $(n = 2)$	L2 (-articles) $(n = 2)$ no other L2 $(n = 1)$	L2 (-articles) $(n = 4)$ no other L2 $(n = 4)$	L2 (-articles) $(n = 0)$ no other L2 $(n = 2)$			

students is given in Table 8. All the monolingual students spoke Russian as an L1. The bilingual students grew up with Russian and another language without articles (Armenian, Bashkir, Chuvash, Tatar). All students had knowledge of another L2 with articles besides English (French, German, Spanish), and some also had knowledge of an L2 without articles (Bashkir, Japanese, Latin, Tatar, Turkish).

The German students of English who participated in the study in 2008 were first- and second-year students. About half of the students received Questionnaire A, the others Questionnaire B. The two groups are referred to as Group A and Group B. They were asked to provide background information on gender, mother tongue(s), and knowledge of other languages.³ There were 59 students in Group A and 56 in Group B. Two were excluded from Group A and six from Group B because they were not monolingual German speakers: there was one native speaker of English, two native speakers of Russian, one native speaker of Tamil, and four bilingual students: two German-English, one German-Russian, and one English-Swahili. Information about the monolingual German stu-

³ On entry to university, German students have studied English at secondary school for at least seven years.

dents is summarized in Table 9. Some had knowledge of another L2 with articles (Dutch, French, Greek, Italian, Norwegian, Spanish), or an L2 without articles (Japanese, Latin, Polish, Russian).

Eight adult monolingual speakers of English were used as a control group. All had a university education.

4.1.2 Task

To probe the L2 learners' knowledge of overt article use, the written forcedchoice task from IKW (2004) was used. The test battery for the two Russian groups was identical. It contained 39 test items. Of these, 28 items are used for the analysis (26 are from IKW). The remaining 11 items concerned article use in other singular count noun contexts and in partitives. The participants received the following instructions:

(14)In the following examples please fill in the gap () by writing THE (for the definite article), A (for the indefinite article), and 0 (if there is no article).

The questionnaire with 39 items was tested in advance with a native English speaker and three advanced German students of English. They reported no difficulties with any of the test items.

The written forced-choice task was also used with the German students. Each questionnaire (A and B) contained only 22 items selected from the 39 used with the Russian groups.

The English-speaking control group received the same 39 items as the Russian participants.

4.1.3 Procedure

Testing took place in a classroom setting for all Russian and German participants. They received printed versions of the questionnaires. There was no time constraint. The native speakers received the questionnaire via e-mail. All responses were then manually entered in a computer spreadsheet for analysis.

4.2 Results

There are four main contexts that I wish to study and for each context I selected seven relevant items. The focus of the study is article misuse, but article omission is also considered. To quantify article misuse and article omission the following definitions were used:

- (15)% article misuse = incorrect articles/(incorrect articles + correct articles) × 100
- (16)% article omission = no articles/(overt articles + no articles) \times 100

4.2.1 Russian L2 learners of English living in Russia

There was a clear difference in performance between the two groups of Russian participants in both the extent of article misuse and the extent of article omission, as reported in Sections 4.2.1.1 and 4.2.1.2. Section 4.2.1.3 examines two factors that may be in part responsible: years of studying English, and knowledge of another L2 with articles. Section 4.2.1.4 concerns article omission.

4.2.1.1 Students of economics and technical sciences

This Russian group chose the correct article about half of the time independent of the context. When they did not, they not only chose the incorrect article but often chose "0" for "no article", as shown in Table 10. Occasionally no response at all was given, i.e. neither the, a, or "0" was chosen. Because of this, the totals do not add up to 100%.

These participants more often chose a in the [+d, -s] context (38.8%) than in the [+d, +s] context (30.7%). (The proportions of article misuse are normalized to the total of a and the (see [15].) The difference between correct vs. incorrect article use in these two contexts is significant ($\chi^2 = 8.006$, p < 0.01). Similarly, they chose the significantly more often in the [-d, +s] (41.4%) than in the [-d, -s] context (31.3%) (χ^2 = 13.138, p < 0.001). Article misuse is significantly higher in the two contexts in which article use is expected to fluctuate,

Table 10: Article choice in L2 English by Russian students of economics and technical sciences (n = 102) (7 items per context).

	[+definit	e] (target: <i>the</i>	·)	[-definite] (target: a)				
	the	а	no article	the	а	no article		
[+specific]	52%	23 %	24%	50%	35%	14%		
[-specific]	47 %	30 %	22%	57 %	26%	16 %		

i.e. [+d, -s] and [-d, +s]. This is compatible with the Fluctuation Hypothesis. However, in the two contexts in which article choice is expected to be quite accurate, i.e. [+d, +s] and [-d, -s], incorrect article use is also high, over 30%. High article misuse in these two contexts is incompatible with the Fluctuation Hypothesis, so these findings do not support it. These results are comparable to those from Peters (2007).

As in IKW's study, article misuse was highest in example (17), in which 54 of the 102 participants opted for a instead of *the* (53%).⁴ If this item is excluded from the analysis, then the difference in article misuse between the [+d, -s] and the [+d, +s] context is no longer significant ($\chi^2 = 1.361$, p > 0.10).

(17) [+definite,-specific] ([+d, -s])

Rose: Let's go out to dinner with your brother Samuel tonight.

Alex: No, he is busy. He is having dinner with _____ manager of his office. I don't know who that is, but I'm sure that Samuel can't cancel that dinner.

(Answers: $28 \times the = 27.5\%$, $54 \times *a = 52.9\%$, $17 \times *no article = 16.7\%$; 3 no answer [2.9%])

The proportion of article omission ranged from 14 to 24%. Thus both article misuse and article omission were common errors.

So far, I have reported group results, but how do the individuals within the group perform? To determine performance at the individual level, I applied the criteria outlined in IKW (2004: 38) to my data. Only overt article use is considered, so cases of article omission or no response at all are excluded (see IKW 2004: fn. 29). For a learner's article use to be classified into the patterns of definiteness, specificity, or (partial) fluctuation, the learner must perform well in the two contexts for which no fluctuation is predicted. Good performance means at least 75% accuracy on *the*-use in the [+d, +s] context and less than 25% *the*-use in the [-d, -s] context. Only 19 of the 102 participants fulfilled these criteria. Article use by the remaining 83 participants, who did not fulfil these criteria, automatically falls into the "miscellaneous" pattern. The classification is summarized in Figure 2.

⁴ IKW note that the *manager* example is the only "nonspecific definite that contained a definite description with a potentially nonunique referent: *the manager of his office* ... If L2 learners thought that the office in question had multiple managers, they would have treated this context as indefinite and overused a. Even when this context is taken out, however, L2 learners still show high overuse of a with [-specific] definites. The 14 L1 English speakers never overused a in this context" (IKW 2004: fn. 25).

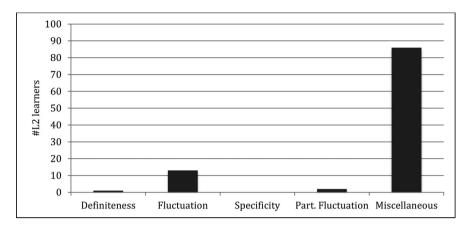


Figure 2: Patterns of article use by Russian students of economics and technical sciences.

4.2.1.2 Russian students of English

The data from the Russian students of English are summarized in Table 11. Correct article choice was quite high, ranging from 77 to 93%, and article omission was quite low, ranging from 1 to 9%. Note that the total sometimes does not add up to 100% because of skipped answers.

The students chose *a* much more often in the [+d, -s] context (14.6%) than in the [+d, +s] context (3.6%). The difference in article misuse between these two contexts is highly significant (χ^2 = 18.0, p < 0.001). They also chose *the* significantly more often in the [-d, +s] context (19.7%) than in the [-d, -s] context (4.9%) (χ^2 = 27.4, p < 0.001). Article misuse was highest in the *manager* example (see [17]), for which the answers are given in (18).

(18) Answers for *manager* example:
$$23 \times the (= 59 \%), 14 \times *a (= 36 \%), 2 \times *no article (= 5 \%)$$

Table 11: Article choice in L2 English by Russian students of English (n = 39) (7 items per context).

	[+definite] (target: the)			[-definite] (target: a)		
	the	а	no article	the	а	no article
[+specific]	88 %	3 %	8 %	79%	19%	1 %
[-specific]	78 %	13 %	9 %	93%	5 %	2 %

However, even if this item is excluded from the analysis, article misuse in the [+d, -s] context remains significantly higher than in the [+d, +s] context. As a group, these learners clearly show the fluctuation pattern in both the definite and indefinite context, as predicted by IKW's Fluctuation Hypothesis.

The proportion of article omission ranged from 1 to 9% and is similar to that by the Russian participants in IKW (2004) and in Peters (2007).

An examination of the performance at the individual level reveals that 35 of the 39 students fulfil the two criteria of 75% correct use of *the* in the [+d, +s] context and of no more than 25% *the*-use in the [-d, -s] context. The classification of article use by the individuals of this group is shown in Figure 3. The majority show a pattern that is predicted by IKW's account, i.e. definiteness or fluctuation.

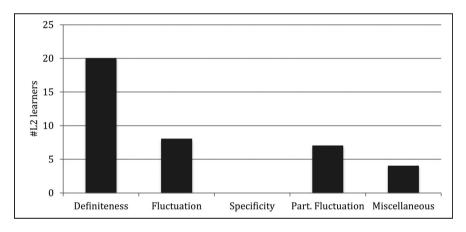


Figure 3: Patterns of article use by Russian students of English.

4.2.1.3 Two factors that may influence article choice in L2 English

The difference in performance between the two Russian groups may in part be due to individual differences in length of time of studying English or in knowledge of another L2 with articles. The Russian students of English had, on average, studied English for two years more, and all had knowledge of another L2 with articles in which article choice is also dependent on definiteness. Presumably, proficiency in English also plays a critical role, but since proficiency was not assessed, this possibility cannot be addressed with these data. I therefore concentrate on the following two hypotheses:

Hypothesis 4a: Learners with knowledge of another L2 with articles are expected to perform better than learners who have no such knowledge.

Hypothesis 4b: Competence in article choice improves with the length of time of study of English.

The two groups of Russian students are almost complementary with respect to knowledge of an L2 with articles. All the Russian students of English had knowledge of an L2 with articles, while almost all the Russian students of economics and technical sciences did not. Of the three who did, one showed the best performance (only two errors) of the entire group (102 students): she used an incorrect article once in the [+d, -s] context and once in the [-d, +s] context. This student had studied English for 16 years. The other two produced many more errors (9 and 16), but had studied English for fewer years (12 years). The data from these three students are excluded from the following discussion.

To examine whether length of time of study of English plays a role, I divided each group into learners with 11 or more years of study of English (\geq 11 YoE), and learners with fewer than 11 years of study (< 11 YoE) (see Table 12). The choice of 11 years is between the group means of 10 and 12 years respectively.

The competence in article use of the two subgroups of students of English is very similar: correct article use in the two contexts where no fluctuation is predicted to occur is well above 75 %, and fluctuation occurs with definites and indefinites. Thus both subgroups show fluctuation in agreement with IKW's Fluctuation Hypothesis. The two subgroups of students of economics and technical sciences behave differently: correct article use in the two contexts where no fluctuation is predicted to occur is below 75 % for both subgroups. The group with fewer than 11 YoE produced incorrect articles significantly more often in the [-d, +s] context than the [-d, -s] context, but there is no significant difference in incorrect article use between the two definite contexts. The group with 11 or more YoE produced article misuse significantly more often in the [-d, +s] than the [-d, -s] context, and they also produced article misuse significantly more often in the [+d, -s] than the [+d, +s] context. Since neither sub-

Table 12: Division of Russian groups into subgroups based on Years of study of English (YoE).

Students of English		Students of economics and technical sciences		
< 11 YoE	mean: 9.07, SD: 1.38, <i>n</i> = 13	mean: 8.21, SD: 1.39, <i>n</i> = 61		
≥ 11 YoE	mean: 13.26, SD: 0.87, <i>n</i> = 26	mean: 12.23, SD: 1.32, <i>n</i> = 38		

group exceeded the 75% threshold for correct *the*-use neither qualifies for the fluctuation pattern.

Article omission in both subgroups of English students was quite low, ranging from 2 to 10% for one group, and from 1 to 8% for the other. Article omission in both subgroups of students of economics and technical sciences was quite high, ranging from 14 to 23% for one, and from 16 to 23% for the other.

Although one subgroup of English students had studied English for four years more than the other, both subgroups performed alike. The same was true of the two subgroups of students of economics and technical sciences. Indeed, four further years of English study did not visibly improve the students' performance. Moreover, the subgroup of English students with less than 11 YoE, but with knowledge of another L2 with articles, performed much better than the subgroup of students of economics and technical sciences with 11 or more YoE. This suggests that knowledge of another L2 with articles has a larger impact on article use in English than does the length of English study. There is one important caveat: although this subgroup of English students had studied English for fewer years, these students had studied English for three years at university level.

A study by Treichler et al. (2009) is directly relevant to our discussion. They collected spontaneous production data from learners of English with L1 Russian to examine article use in English. These learners were in their teens, not adults. There were three groups of learners: one in Germany which has acquired German as L2 (n = 20), and two in Russia, one with knowledge of German as an L2 (n = 19) and one without (n = 14). Treichler et al. hypothesized that knowledge of German should facilitate the acquisition of article use in English. In agreement with this hypothesis, the L3 learners performed much better than the L2 learners. Note that in these spontaneous production data the [+d, -s] context did not occur, and the [-d, -s] context was very rare. Thus only article use in the remaining two contexts could be examined. The results from the two groups in Russia are summarized here. The two groups misused articles in the [+d, +s] context to a similar extent, but in the [-d, +s] context the L2 group misused articles considerably more often (11/30 = 37 %) than the L3 group (12/ 85 = 14%). The L2 group also omitted articles in the [+d, +s] context much more often (65/136 = 48%) than the L3 group (30/156 = 19%). Similarly, in the [-d, +s] context article omission was considerably higher in the L2 group (46/ 76 = 61%) than in the L3 group (35/120 = 29%). The L3 group (ages 12;10–15;4), who had studied German at school for six to eight years, had studied English for a much shorter period of time (1-20 months) than the L2 group (ages 12;11-17;6) with three to seven years of English study at school. The better performance on article use in English by the L3 group was ascribed to their knowledge of German.

4.2.1.4 A note on article omission

Does a learner choose no article because he thinks that no article is required. or is he unsure about which article to use and opts for no article as an avoidance strategy? The Fluctuation Hypothesis makes predictions about overt article use, and makes no predictions about article omission. But if learners do adopt article omission as an avoidance strategy, one might expect them to use article omission more often in the two contexts for which article choice is predicted to be problematic -[+d, -s] and [-d, +s] - than in the two contexts for which article choice is predicted to be unproblematic -[+d, +s] and [-d, -s]. However, in both Russian groups article omission is particularly high in the two definite contexts. In fact, article omission was highest with the two items in (19) and (20), both of which involve definite contexts. IKW's Russian participants also produced much article omission with these two items (see IKW 2004: fn. 27).

(19)[+definite, +specific] ([+d, +s])

Meeting in a park

Andrew: Hi, Nora. What are you doing here in Chicago? Are you here for

work?

No, for family reasons. I am visiting _____ father of my fiancé -Nora:

he is really nice, and he is paying for our wedding!

(Students of economics and technical sciences:

Answers: $23 \times the = 22.5\%$, $33 \times a = 32.3\%$, $46 \times no article = 45.1\%$

(Students of English:

Answers: $23 \times the = 59\%$, $3 \times a = 8\%$, $11 \times a$ or article = 28%;

2 no answer [5 %])

(20)[+definite, -specific] ([+d, -s])

Phone conversation

Martha: *Hi, Sam. Is your roommate Lewis there?*

No, he went to San Francisco for the weekend. Sam:

Martha: I see. I really need to talk to him. How can I reach him in San

Francisco?

I don't know. He is staying with _____ mother of his best friend. Sam:

I'm afraid I don't know who she is, and I don't have her phone

number.

(Students of economics and technical sciences:

Answers: 31 × the [= 30.3%], 34 × *a [= 33.3%], 37 × *no article [=36.3 %])

(Students of English:

Answers: $21 \times the = 54\%$, $1 \times *a = 2\%$, $17 \times *no article = 44\%$

A possible reason why article omission is so high in these examples is that father and mother can occur on their own provided they refer to the speaker's own father or mother, in which case they function like proper names. It is possible that some of the learners left out the article because they mistakenly treated father and mother as proper names. But whether or not these two items are included, article omission is significantly higher with definites than with indefinites (χ^2 -test, p < 0.02).

There was also considerable article omission (7 of 39 = 18%) by the students of English in an item containing a definite description that was followed by a proper name (This week I am interviewing ___ governor of Massachusetts, Mitt Romney). These three cases of article omission may be explained by Trenkic's (2009) processing account. Trenkic argues that article omission in L2 learners is systematic and maintains that the more salient a referent is, the more pragmatically redundant an article becomes (Trenkic 2009: 128). Thus L2 learners of L1 languages without articles are more likely to consider articles as unnecessary for disambiguation in contexts in which nouns can be clearly perceived as definite. I suggest that this is indeed the case for the items with father, mother, and Mitt Romney. Most article omission occurred with these three items and there is little article omission in any of the other items. The Russian students of economics and technical sciences often omitted articles in many of the test items. No clear pattern of article omission is discernible. Even so, one type occurred repeatedly, namely items with nouns starting with a vowel (one item with author, three items with owner). These four were the only items containing a noun starting with a vowel and they all involved definite contexts. Although this was a written production task, it could be that some learners silently pronounced the words while reading the dialogues. If they did, they might have had difficulties in "pronouncing" the article preceding the initial vowel of the noun, which may have caused them to omit it. Goad & White (2007) propose that L2 learners are more likely to omit articles in certain prosodic patterns that are required in English but are unavailable in a learner's L1. Since the task used in the present study was a written task, this question could not be addressed. Even if these learners did "pronounce" the words they read, the prosodic representations they used are unknown.

4.2.2 German L2 learners of English living in Germany

The German-speaking students of English were divided into two groups. Of the 28 items used in the analysis of the Russian groups, Group A judged 16 items and Group B 14 items. Two of the items were the same for both groups. There were four items per context for Group A, and four items for each of the definite contexts and three items for each of the indefinite contexts for Group B. Since the two groups performed very similarly only the combined results are shown in Table 13.

In general, the German students performed well: correct article choice was above 90 % in all four contexts. However, article misuse was relatively high in the [+d, -s] context (8 %), which is significantly higher than in the [+d, +s] context (1%) (χ^2 = 20.5, p < 0.001). Most article misuse in the [+d, -s] context can be linked to the *manager* example (see [17]), which incurred 30 of 34 errors in this context. This item was used with both groups; their answers are given in (21).

(21) Answers to manager example: $77 \times the (= 72\%)$, $30 \times *a (= 28\%)$

The *manager* example may have been problematic because an office can in principle have more than one manager, as also pointed out by IKW, but then the preposition *from* rather than *of* would be used. *A manager from his office* implies that the office provides office space for more than one manager, while *a manager of his office* means that he/she manages this particular office. Perhaps some learners interpreted *office* as meaning 'company', and a company often has more than one manager. But even in this case, it would be more natural to use *from* (*a manager from his company*). A misinterpretation of the preposition *of* may therefore underlie the poor performance with this item.

Article misuse in the [-d, +s] context was also significantly higher than in the [-d, -s] context ($\chi^2 = 9.176$, p < 0.01). However, 9 of the 18 errors in the [-d, +s]

Table 13: Article choice in L2 English by German students of English $(n = 107)$ (combined)	d re-
sults for 7 items per context).	

	[+definite] (target: the)			[-definite] (target: a)		
	the	а	no article	the	а	no article
[+specific]	99%	1 %	0 %	95%	5 %	0 %
[-specific]	92 %	8 %	0 %	99%	1 %	0 %

+s] context occurred with the item shown in (22), which was used with only one of the groups.⁵

(22) [-definite, +specific] ([-d, +s]) (item from Ionin 2003b: 352)

Reporter 1: Hi! I haven't seen you in weeks. Do you have time for lunch?

Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today,

I am interviewing _____ doctor from Bright Star Children's

Hospital. He is a very famous paediatrician, and he doesn't
have much time for interviews. So I should run.

(Answers: 48 × a [= 84 %], 9 × the [= 16 %])

If these two items are included in the analysis then the German learners of English show fluctuation: they produce significantly more errors in the two contexts for which fluctuation is predicted ([+d, -s] and [-d, +s]) than in the other two contexts. If the *manager* example is excluded, the difference between [+d, +s] and [+d, -s] is no longer significant ($\chi^2 = 0.033$, p > 0.05). Similarly, if the *doctor* example is excluded, the difference between [-d, -s] and [-d, +s] is no longer significant ($\chi^2 = 2.897$, p > 0.05). This fluctuation in learners whose L1 has the same parameter value as that in the L2 is unexpected. Presumably the inclusion of potentially problematic items in a small test battery is responsible for this. The study of fairly advanced L2 learners of English with an L1 with articles may reveal whether an item is problematic because the context can be misconstrued. Note that the English-speaking control group did not have any difficulty with any of the items.

4.3 Summary and discussion

In order to study article use in L2 English, I used the written forced-choice task from IKW (2004) with two groups of Russian students and a group of German students. This task was designed to investigate overt article use, not article omission. The Russian students of English all had knowledge of another L2 with articles besides English, while almost all the Russian students of economics and technical sciences did not. The students of English had, on average, studied English for 12 years – three at university level – while the other students had studied English for 10 years. The two groups performed differently.

⁵ For the Russian students of English article misuse with this item was comparable to that with other items with the [-d, +s] context, while for the Russian students of economics and technical sciences article misuse in the [-d, +s] context was highest with this item.

While the data from the Russian students of English clearly support the Fluctuation Hypothesis, both at the group and at the individual level, the data from the Russian students of economics and technical sciences do not. The latter group often chose the incorrect article, and even in the two contexts that are assumed to be unproblematic incorrect article choice exceeded 30 %. However, article misuse was significantly higher in the two contexts that are predicted to show fluctuation than in the two contexts that are predicted not to. I briefly addressed the question of whether knowledge of another L2 with articles or the length of time of study of English plays the more important role in a learner's article use. Since the group of English students had studied English for a longer period of time and had knowledge of another L2 with articles, these two factors are difficult to untangle. This study, as well as a study by Treichler et al. (2009) with Russian teenagers learning English, suggests that knowledge of another L2 with articles plays the more important role. Proficiency in English was not assessed independently, so the question of how important a role it plays in a learner's article choice could not be addressed.

As well as sometimes using the wrong article both groups sometimes used no article. The Russian students of economics and technical sciences did this much more often than the Russian students of English. Just like article misuse, article omission in this group was quite systematic and is consistent with Trenkic's (2009) processing account, according to which L2 learners from L1s without articles are more likely to omit articles in contexts where nouns are perceived as clearly definite. In the group of Russian students of economics and technical sciences, article omission, like article misuse, appears to be random and may simply reflect transfer from L1 Russian, which does not have articles. Despite these differences, both groups shared a tendency to omit articles more often with definites than with indefinites.

The German students of English generally performed well. However, they had some difficulties with two of the items, the manager example (see [17]) and the hospital example (see [22]). The two groups of Russian students, just like the Russian participants in IKW's study, produced considerable article misuse in the *manager* example. A misinterpretation of the preposition of in manager of his office may lie behind article misuse with this item. The hospital example generated much article misuse in only one of the Russian groups. Neither of these examples was problematic for the English-speaking control group. If these examples are included, the German students show fluctuation, which I consider an artefact resulting from a small test battery containing two problematic examples. If they are excluded, the German students perform at ceiling, which suggests that they have set the Article-Choice Parameter to definiteness in English. Since article choice was in general correct for all of these Germanspeaking learners of English, transfer from German, in which the Article-Choice Parameter is also set to definiteness, may have been involved.

5 Concluding remarks

The German learners of English show transfer, as expected. Only one of the Russian groups shows fluctuation, while the other shows non-systematic patterns of article misuse and this is not expected according to the Fluctuation Hypothesis. In particular, they produce considerable article misuse in the two contexts for which correct article use is predicted. Taken together these findings do not support the assumption that adult L2 learners have access to unset parameters made available by UG, which is the case for child L1 learners. This overall conclusion suggests several further questions.

The relatively good performance of the Russian students of English may be a consequence of their knowledge of another L2 with articles, as well as English. Do learners of English who show fluctuation in English also show fluctuation in other L2s with articles?

The Russian students of economics and technical sciences performed much less well. It is possible that some of these students had comprehension difficulties with the dialogues, despite having studied English for many years (mean: 10 years). Would a simpler task reveal fluctuation for these learners as well?

Both groups of Russian students showed considerably more article omission with definites than indefinites. Are learners of an L1 without articles in general more likely to omit articles with definites?

To determine whether input in English or transfer from L1 German controls accurate article use in L2 English, article use by German-speaking beginner learners should also be examined.

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