The Role of L1 Typology and L2 Proficiency in Null Subject Transfer



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Abstract

This dissertation is a large-scale investigation on the omission of subject pronouns by learners of null-subject languages. A null-subject language is one where pronouns are either optional or unnecessary to make reference to a primary subject. In these languages, (which includes, Spanish, Italian, Arabic, Mandarin Chinese, Russian, Swahili, and many others) dropping a pronoun does not result in ambiguity. However, English is a non-null-subject language and a subject pronoun is always required in referring expressions. The aim of the present study is to determine if this difference in subject parameters means that learners are more prone to omit pronouns in second language (L2) English production. The first research question of the present study asks, 'do null subjects in the L1 transfer to L2 English?' This question becomes more complex when we consider that there are more than one type of null-subject language. How null subjects are licensed is in 'canonical' null-subject languages like Spanish is quite different from 'radical' null subject languages like Japanese. Typological classification, then, becomes an additional consideration and the basis of research question two. The literature has suggested, however, that regardless of L1, the effects of language transfer are still persistent at advanced levels of L2 proficiency. This means, that learners are still omitting pronouns in L2 English—beyond the B2 level—just as they would in their null-subject first language (L1). Research question three queries whether proficiency, rather than L1, is the key factor in accurate L2 grammatical production.

The majority of the research on these questions has focused on smaller-scale studies of L1 Spanish or Italian learners of English. To address this, I use data from the EFCAMDAT learner corpus to sample a large and typologically diverse set of learners. This corpus contains over a million writing samples from 174,000 learners representing 198 nationalities. For this study, writing samples from learners with L1 Arabic, L1 Chinese (Mandarin), and L1 Russian were selected and analysed for their accuracy in pronoun production and omission. The results of chi-square and logistic regression analysis indicate that null-subject transfer is limited. There was a clear effect of L1, but not typology. L1 Arabic and L1 Chinese learners had nearly identical rates of accuracy ($p < .001$) but L1 Russians performed far worse in comparison. A quadratic (U-shaped) function in performance by proficiency was observed for all L1s, however. Learners did not omit pronouns at the elementary (A1) level. By A2, there was a downward trend, indicating an increase in pronoun omission, which continued to the lower-intermediate (B1) level. By the upper-intermediate (B2) level, accuracy in pronoun

production matched that at the initial A1 level, before fully resolving at the advanced (C1/C2) level. These results are contrary to those in previous studies on null-subject transfer which found a more linear pattern in accuracy. The empirical data provides evidence that L1 influences the acquisition of certain features in L2. This has implications on the learnability of certain features in SLA. The data also suggests that language development is non-linear, and learners may struggle with transfer at the A2/B1 threshold. However, in the absence of experimental data to support these findings, the implications are tentative pending further investigation.

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Table of Contents

1. INTRODUCTION....1

1.1. RATIONALE....1
1.2. RESEARCH QUESTIONS AND HYPOTHESES....2
1.3. OUTLINE....3

2. LITERATURE REVIEW....4

2.1. INTRODUCTION....4
2.2. BACKGROUND....4
2.2.1. Universal Grammar....4
2.3. TYPOLOGY OF OVERT SUBJECT LANGUAGES....5
2.3.1. Subject Arguments....6
2.3.2. The English Subject....6
2.3.3. Pronominal Subjects....7
2.4. TYPOLOGY OF NULL-SUBJECT LANGUAGES....8
2.4.1. Canonical....8
2.4.2. Radical....10
2.4.3. Partial....12
2.5. NULL SUBJECTS IN FIRST LANGUAGE ACQUISITION....15
2.6. NULL SUBJECTS IN SECOND LANGUAGE ACQUISITION....17
2.6.1. Transfer in SLA....18
2.6.2. Directionality of Transfer....19
2.6.3. Interlanguage....20
2.7. INTERPRETABILITY HYPOTHESIS....21
2.8. EMPIRICAL STUDIES....22
2.9. CONCLUSION AND RATIONALE FOR CURRENT STUDY....25
2.9.1. Production versus GJTs....25
2.9.2. L1 Effect....26
2.9.3. Proficiency....26

3. METHODS....28

3.1. EFCAMDAT....28
3.2. THE PRESENT STUDY....29
3.2.1. Target Language....29
3.2.2. Target Groups....30
3.3. RESEARCH PROCEDURE....30
3.3.1. Data Collection....30
3.3.2. Query Language....31
3.3.3. Data Processing....35
3.3.4. Search Accuracy....37
3.3.5. Intercoder Reliability....38
3.3.6. Accurate Pronoun Production....39
3.4. DATA ANALYSIS....39
3.4.1. Scoring Method....39
3.4.2. Chi-square Testing....40
3.4.3. Logistical Regression....40

4. RESULTS....42

4.1. NULL SUBJECT TRANSFER (RQ1)....42

4.2. L1 INFLUENCE (RQ2) 43
4.3. DEVELOPMENTAL TRENDS (RQ3) 44
4.4. DEVELOPMENTAL TRENDS BY L1 46
4.4.1. L1 Arabic *46*
4.4.2. L1 Chinese *47*
4.4.3. L1 Russian *48*
4.5. LOGISTIC REGRESSION ANALYSIS 49

5. DISCUSSION 51

5.1. ANALYSIS OF FINDINGS 51
5.2. THE ROLE OF L1 53
5.3. THE ROLE OF PROFICIENCY 56
5.4. LIMITATIONS 59
5.4.1. Corpus Approach *59*
5.4.2. Methods *60*
5.4.3. Access to Learners *61*

6. CONCLUSION 62

6.1. PROJECT SUMMARY 62
6.2. IMPLICATIONS FOR RESEARCH 63
6.3. IMPLICATIONS FOR TEACHING 64

REFERENCES 65

List of Tables

Table 1. Overview of present tense inflectional paradigms in null-subject languages versus non-null languages 11
Table 2. Comparison of present tense morphological paradigms in English and Russian 14
Table 3. EF level correspondence with the CEFR 29
Table 4. Language Representation by Typology 30
Table 5. Analysis of word specifications used and their function 32
Table 6. EFCAMDAT sample showing L1 by level 34
Table 7. Distribution of learners by L1 and proficiency 36
Table 8. Precision and recall values 37
Table 9. Matrix demonstrating coder agreement 38
Table 10. SOC by L1 and proficiency 42
Table 11. Contingency table for outcomes by L1 43
Table . Contingency table for outcomes by proficiency level 45
Table 13. Observed versus expected outcomes for L1 Arabic learners (A1-B2) 47
Table 14. Observed versus expected outcomes for L1 Chinese learners (A1-B2) 48
Table 15. Observed versus expected outcomes for L1 Russian learners (A1-B2) 49
Table 16. Results of logistic regression analysis 50
Table 17. Comparison of results with previous studies 51
Table 18. Examples of essay topics at various levels. Level and unit are separated by a colon. 58

List of Figures

Figure 1. Summary of the data collection process 30
Figure 2. Query page featuring sample search results 33
Figure 3. Summary of the data processing process 35
Figure 4. Overall developmental trend from elementary (A1) to proficient (B2) 46
Figure 5. SOC Scores of L1 Arabic learners 47
Figure 6. SOC Scores of L1 Chinese Learners 48
Figure 7. SOC Scores of L1 Russian learners 49

Appendices

Appendix 1: Selected Scripts from L1 Arabic Learners in the EFCAMDAT Corpus 74
Appendix 2: Selected Scripts from L1 Chinese Learners in the EFCAMDAT Corpus 95
Appendix 3: Selected Scripts from L1 Russian Learners in the EFCAMDAT Corpus 114
Appendix 4: Results of the Logistic Regression Test for L1 Arabic Learners 134
Appendix 5: Results of the Logistic Regression Test for L1 Chinese Learners 134
Appendix 6: Results of the Logistic Regression Test for L1 Russian Learners 134

1. Introduction

1.1. Rationale

In English, a sentence must have a subject and a verb, and they must come in that order. This norm is generally taken for granted by native speakers, but most of the world's other languages allow for subjectless sentences. These languages are called null-subject (or pro-drop) languages (NSLs). Spanish and Italian are usually discussed as typical exemplars of the NSL, but the null-subject parameter is not constrained by geography or language family: NSLs appear in the Middle East (Arabic and Farsi), East Africa (Swahili and Amharic), South Africa (Zulu), East and Southeast Asia (Mandarin, Thai, Vietnamese, Japanese, and Korean), and among nearly all the indigenous peoples of the Americas (Dryer and Haspelmath, 2013). There is, of course, considerable typological variation between these languages, as will be discussed in-depth in the next chapter. Generally, however, speakers of null-subject languages are not required to use pronouns explicitly when speaking (i.e., they drop them) and instead rely on other means, such as morphology or discourse, to determine the subject. For example, rich agreement in languages like Italian means that the person, gender, and number of the subject can be inferred from the finite verb (Rizzi, 1986). In many cases, pronouns in an NSL are either redundant or only used for added emphasis (D'Alessandro, 2014).

English is *not* a null-subject language. Subject pronouns are mandatory in sentences or clauses with finite verbs, and they must be explicit. This crosslinguistic difference creates problems for second language (L2) English learners who may treat pronouns as optional, just as they are in their null-subject L1. Because of this 'optionality', L2 learners are prone to making one of two mistakes. First, they either omit the pronoun altogether, causing ambiguity as follows:

(1) Dan likes pizza. Is very good.

Second, they oversupply pronouns in contexts where they are *not* required due to there being a subject noun in place, leading to overexplicitness and redundancy:

(2) London, it is nice.

This dissertation looks at the former phenomenon of pronoun omission. Utterances without a subject are not only perceived as ungrammatical but can also impact comprehensibility and cohesion in discourse. Nevertheless, there is a growing body of research that suggests learners continue to omit pronouns, even at an advanced level (Jegerski et al., 2011; Mitkovska and Bužarovska, 2018; Quesada and Lozano, 2020; Hyams et al., 2015). To explain this phenomenon, the prevailing theories posit that the lack of a linguistic feature in the L1 can block L2 acquisition of that feature, as consequence of full transfer (Tsimpli, 1997; Schwartz and Sprouse, 1996). However, to date, null-subject transfer has largely been explored within the same populations (L1 Spanish and L1 Italian) and with relatively low sample sizes. The present dissertation probes this phenomenon in the context of adult L2 learners from a range of typologically diverse L1s using a corpus-based approach. Writing samples were collected from the Cambridge EFCAMDAT learner corpus, which affords greater access to diversity and learner numbers.

1.2. Research Questions and Hypotheses

R1. Do English second language learners (ELLs) transfer null pronominal subjects from their null-subject L1 to their overt-subject L2 (English)?
H1: Yes, they do. The Interpretability Hypothesis supports the idea that transfer will be difficult, though not impossible.

R2: Are there any significant observable differences between L1 Arabic, L1 Russian, and L1 Chinese learners?

H2: As NSLs have different discourse constraints depending on the referential status of the null subject in their L1, how they transfer this parameter should show some variation in L2 production.

R3: Are there any significant observable differences between proficiency levels?

H3: Yes. There should be a positive correlation between proficiency and native-like use of overt pronouns, but there should be some variation due to crosslinguistic influence.

1.3. Outline

In Chapter 2, I begin the literature review with a look into seminal studies in the Chomskyian (1981) Universal Grammar (UG) tradition before moving on to language typology and theories of transfer. Then, I investigate the methods employed to explore pronoun omission in null-subject transfer. The chapter concludes with a discussion of the methodological challenges of the research as well as an attempt to make the case for corpus-based methods.

In Chapter 3, I outline the methods of the study and detail the research procedures to ensure reliability and validity. Chapter 4 presents the results of the data analysis. Chapter 5 includes a discussion of the limitations of the study and implications for further research and teaching. The dissertation concludes with a brief summation of the entire study, including the limitations of using corpora in SLA research.

2. Literature Review

2.1. Introduction

In this section, I review the literature surrounding null subjects and their transfer. I begin with foundational theories based on Chomsky's Universal Grammar (UG) to establish the core concepts of the null-subject parameter (NSP). Then, I survey the typological differences in how null-subject languages present arguments without subjects. This leads to a discussion of how learners acquire the null-subject parameter in their first language, and how transfer occurs in second language acquisition of overt subjects. I investigate several empirical studies before concluding this chapter with a justification of the present study and proposed methods.

2.2. Background

2.2.1. Universal Grammar

One of the basic frameworks of UG is that all languages have a common, underlying grammar composed of principles and parameters (Chomsky, 1981). The Principles and Parameters framework (P&P; also known as government and binding theory) of UG is where the notion of the null subject originally emerged (Chomsky, 1981; Rizzi, 1982). As such, many seminal studies on null subjects operate under the PandP (Rizzi, 1986; Roeper and Rohrbacher, 2000; Haegman, 1996; Alexiadou and Anaganostopoulou, 1998). On the one hand, principles are the core grammatical elements of language. Parameters, on the other hand, represent various binary constraints on what is grammatically allowed in a given language. That is, principles are universal language properties (nouns, verbs, etc.), and parameters are how those properties manifest—or not—in a language's syntax, morphology, phonology. Language acquisition in UG's generative tradition is understood to be an exercise of testing the variation of those parameters to work out what is permitted. Chomsky (1981) refers to this testing as 'parameter setting'. Furthermore, parameters can be explored at the micro level (i.e., between similar languages or dialects of a language) or the macro level (between unrelated languages).

The P&P operates on the premise of Markedness Theory (Croft, 2003). The parameters can be said to be either marked or unmarked within a language. Unmarked parameters are the normative rules that 'would be learned on the basis of minimal exposure to that language'

(Mazurkewich, 1985, p. 16). Conversely, ‘marked’ elements can be explained as the exceptions that take on special or unconventional meaning. In this study, I am interested in the phenomenon of markedness as it relates to syntax. An example of markedness in the English would be the use of active voice versus passive voice in establishing topic:

(3) a. A tiger chased the tourist. (active voice)
b. A tourist was chased by a tiger. (passive voice)

(Ziff, 1966)

Sentence 3a represents the neutral, unmarked sentence structure English speakers would default to. 3b, however, though not ungrammatical represents a syntactically marked condition. This sentence contains the sane information but serves a special function in discourse (Davison, 1984). Markedness depends on these a priori assumptions about languages, which themselves are the result of various factors, such as frequency. Markedness can be expressed in a language’s morphology (i.e., the -ette or -ess ending to nouns in English), phonology (i.e., the rising intonation at the end of a question), or other domains such as semantics.

The null-subject parameter, the apparent absence of a subject in a sentence, is considered by many theorists to be the marked option for all children learning their first language (L1; Hyams, 1986; Rizzi, 1982). The markedness of the null subject varies between languages. However, it is possible to make certain generalisations based on their shared crosslinguistic grammatical properties.

2.3. Typology of Overt Subject Languages

Typology in linguistics is the systematic grouping of different languages based on shared properties or characteristics (Croft, 2003; Whaley, 1997). This involves crosslinguistic comparisons at the macro and micro levels to assess variance and develop theories to explain those variations. Variation, as stated above, is parametric in nature. Therefore, it is important to examine the salient language properties (or, as Chomsky would call them, ‘formal features’) at the parametric level. For the null-subject parameter, this means looking at the concepts of the argument, word order, and the markedness of subject lexicalisation.

2.3.1. Subject Arguments

The most basic parametric unit is the argument, which is the primary entity of a phrase or sentence (Chomsky, 1981). Arguments act (as subjects) or receive an action (as objects) as licensed by the predicate of the sentence, which is usually a verb or verb phrase (Kroeger, 2005). The pro-drop or null-subject parameter (NSP) allows for subject arguments to be unexpressed. Languages that allow for this parameter are called pro-drop or NSLs. While all languages have a subject argument, most languages allow for an argument omission parameter where the subject is 'null' (i.e., implicit from the discourse but not expressed; Dryer and Haspelmath, 2013). This dissertation will refer to the pro-drop parameter as the NSP.

2.3.2. The English Subject

In English syntax, predicates can only license a subject that is present. That is, subjects cannot be null. This applies to both nominal subjects as nouns or noun phrases (NP) and pronominal subjects as pronouns. Here, I focus on pronominal subjects. In the pronominal paradigm, pronouns are a formal (i.e., morphosyntactic) element of argument construction and are the central focus of the NSP. In the typical SVO sentence pattern in English, a subject occurs in a head-initial position and is then followed by a verb that licences it and any objects in the sentence (Gonen, 2010). Baker (2008) refers to this as the head-directionality macroparameter. The typological implication is that head-initial languages are more syntactically oriented, and as the head moves further away from this position, the language is more dependent on morphology to express relationships among words. This usually results in a much freerer word order (Greenburg, 1963). Null-subject languages typically fall into the latter category. A rich agreement in morphology generally means semantic information can be inferred from multiple elements of the sentence, negating the need for a fixed word order as we see in English.

As English is a non-null subject language, it requires at least one argument to be expressed (overt) in a sentence, but up to four can be licensed. For example:

(3) a. **[Thomas]** knows.
b. **[The boy]** smelled **[the flower].**

c. **[Our teacher]** gave [**the students] [an exam]**.
d. **[I]** will trade **[you] [my guns]** for **[butter]**.

As in the above examples, argument omission in either the subject or object position (in bold) would lead to ungrammaticality. The subject arguments presented here are considered nominal and are explicitly required when introducing a topic.

2.3.3. Pronominal Subjects

Pronominal subjects or pronouns come in two categories: referential and non-referential. Referential pronouns occur when nominal subjects (3) become the antecedents in subsequent sentences as topics develop. In this case, they are referred back to by pronouns (e.g., I, you, we, she, it, they) through a process known as anaphora. Their role is to reduce repetitiveness while maintaining cohesion for the interlocutor by indicating either a continuation or a shift in the topic (Crosthwaite, 2011). Topic continuation is the most common:

(4) Thomas knows. He's very smart.

The example above shows that the anaphor 'he' refers to the antecedent (and topic) 'Thomas'.

In more complex utterances, such as those involving more than one subject, the gender and number key of the pronoun (also known as a phi-feature) helps in maintaining coherence. This is an important element to facilitate topic-shifting:

(5) Lucy was on holidays with David and Eva. One morning, she decided to go to the mountains. He didn't want to, but Eva joined in. (Quesada and Lozano, 2020, p. 960)

The pronoun 'he' serves as a referring expression, helping to specify who is doing what in this sentence. In the case of English, the use of these pronouns is obligatory, as there are no other morphological inflections that could indicate person or gender in a case like (5).

Non-referential (also referred to as expletive or pleonastic) pronouns, in contrast, occupy the subject argument position but do not make reference to a pre-specified nominal subject. Therefore, they do not play a role in maintaining cohesion. For instance:

(6) It's dark outside.

The pronoun 'it' in (6) does not refer to a nominal subject. It is agentless and inherently meaningless, yet still a necessary component of the sentence. I investigate the phenomena of the subjectless sentence and pronoun omission in other languages in the next section.

2.4. Typology of Null-Subject Languages

Having a non-NSP is in a relative minority in terms of world language distribution. English, like other languages in the Germanic family, does not have the NSP. However, most other languages, such as the Romance languages (excluding French), Arabic, Mandarin, and Russian, do allow for pro-dropping. Nevertheless, as I will show, not all NSLs are the same in their treatment of dropped subjects. The type of pronoun (i.e., referential or non-referential), its position in the sentence, and other factors determine whether a pronoun can be dropped in a particular language. NSLs fall into one of three categories, canonical, radical, and partial, depending upon how they express their pronominal subjects (D'Alessandro, 2014; Holmborg, 2005).

2.4.1. Canonical

Canonical NSLs represent languages with a full pro-drop parameter and have been extensively investigated in the literature (Sorace and Filiaci, 2006; Jegerski et al., 2011; Rizzi, 1982, 1986; Fedele and Kaiser, 2014). In null-subject languages, maintaining reference is largely achieved through rich agreement, which is a complex system of inflectional verbal marking (morphology) and contextual awareness:

(7) a.	Tomasso	(lo)	sa.	(Lui)	É	molto	intelligente.	(Italian)
b.	Thomas	Ø	knows.	Ø	Is	very	intelligent.	(English)

In the case of Italian, information about the person, number, and gender can be discerned from the verb (here 'é'), which agrees with the antecedent (7a). This contrasts with English, and other languages without an NSP, where the finite verb in each sentence only indicates tense, and on their own, number and person are obscured, so that the information contained therein is thus uninterpretable. In null-subject languages, the subject argument is an empty (or

dummy) category known in UG as *pro* and is 'formally licensed and interpreted by virtue of the agreement on the finite verb or auxiliary' (Holmborg, 2005, p. 533). The information from inflectional marking is, in UG, assumed by *pro* a 'pure pronominal which lacks phonetic content, the empty counterpart of lexically realised pronouns such as she, he, it, [or] they' (Faikh, 2014). *Pro* is contrasted with 'big PRO', which is also not phonetically realised but is the subject of an infinitive (i.e., PRO is a subject in the absence of finite marking). Non-null subject languages use PRO in their infinitive constructions as well. For example, English PRO is the unexpressed 'you' in the imperative "Stop that!" Consequently, when discussing the null subject, I am referring to the null *pro* subject.

Although pronouns in Spanish or Italian can be replaced by *pro,* in certain instances, it would be perfectly grammatical to include the subject pronoun in canonical NSLs. This suggests that languages in this category have an additional subject form, hence more discoursal optionality. Following her study of Italian children, Hyams (1989) stated, 'the use of pronouns is reserved for purposes of contrast, emphasis or to introduce a change of discourse topic' (p. 228). This means that in most contexts, the pronoun can be dropped without impact on semantic meaning. Instead, *pro* assumes a discourse function:

(8)	a.	Yo	te	amo.	(Spanish)
	b.	I	you_{sing}	love.	(English)
(9)	a.	Ø	Te	amo.	(Spanish)
	b.	Ø	you_{sing}	love.	(English)

Both sentence sets (8a and 9a) are grammatically acceptable in Spanish. However, the inclusion of a subject in example (8a) is considered the marked position and carries a different connotation in discourse. Using a pronoun (yo) in this structure emphasises the speaker's commitment to the action (represented by the finite verb). This is described in Searle's (1975) Speech Act theory as having an 'assertive illocutionary force' (p. 11). Illocutionary force, in this sense, represents an L1-specific form-function mapping where discourse intersects with syntax. For example, since English would already require a subject

in the phrase ‘I love you,’ a native speaker would need to use the auxiliary ‘do’ to achieve the same illocutionary force as above (e.g., I *do* love you). Alternatively, contrastive stress (prosody) could be employed to the same effect. This becomes important in the discussion of L1 transfer in section 2.3.

2.4.2. Radical

Radical (non-canonical) NSLs are comprised of mostly East and Southeast Asian languages, including Chinese (i.e., most varieties including Mandarin and Cantonese), Korean, Vietnamese, and Thai. These languages differ from canonical NSLs in that both the subject and object can be null. They also differ in that they lack the inflectional marking of person and number that canonical NSLs have, which means that the reference of subject pronouns must be derived from discourse (context) rather than syntax (Huang, 1984; Tsao, 1977). For example, in Japanese there is no expressed pronoun in the subject position:

(10) a.	tegami	o		yon-da	(Japanese)
b.	$read_{pst}$	(it)		the letter.	(English)

(Dryer and Haspelmath, 2013)

Huang (1984) classifies radical NSLs as ‘discourse-oriented’, in that antecedents (usually the nominal noun or noun phrase) will be understood from context, rather than by explicit anaphoric reference via a pronoun in the following sentences. In this sense, the null subject operates as a discourse marker as well as a subject argument (Saito, 2007). This, Huang (1984) and Tsao (1977) argue, contrasts with the ‘sentence-oriented’ classification found in western canonical NSLs. In their Uniformity of the Paradigm hypothesis (also known as the Morphological Uniformity Principle [MUP]), Jaeggli and Safir (1989) posit that the common thread between canonical and radical NSLs is the uniformity of within-language morphological inflection in either typology set out This hypothesis asserts that the distinction between languages with a rich, verbal inflectional morphology (as in canonical NSLs like Arabic) and those without such a system (Radical NSLs like Chinese) is a meaningless one. Instead, they argue, what matters is that the system has uniform rules that govern null-subject use. Jaegilli and Safir (1989) put forth three conditions which would allow for a language to

license a null subject:

1. Agreement (between subject, verb, and tense);
2. c-command (short for constituent command, essentially details the relationship between a nominal subject antecedent (e.g. Paul,) and its anaphor (e.g., he) and;
3. Topic

At least two of these conditions must be met for a null pronoun to be considered identifiable and recoverable. Chomsky, and subsequently the Interpretability Hypothesis posit, the agreement between the phi-values of the pronoun and the verb are uninterpretable (in the sense that they do not contribute to interpretation) (Chomsky, 2001). This is because all of the semantic, interpretable information is contained within the subject which effectively renders the subject-verb relationship redundant. Essentially, for a language to be of null-subject typology, it must either have a rich inflectional system (e.g., Spanish and Italian) or none at all (e.g., Chinese and Japanese) for null subjects to be licensed.

This makes sense when we consider the comparatively non-uniform parallel system of weak and strong verb morphology in languages like English and German, which are not null-subject languages. A missing subject in these languages would mean none of the conditions laid out by Jaegilli and Safir could be satisfied. Table 1 provides a crosslinguistic comparison of verbal inflection systems between non-null subject languages and the two NSL typologies discussed so far with that of English.

Table 1. Overview of present tense inflectional paradigms in null-subject languages versus non-null languages

	Non-Null Subject	Canonical Null Subject	Non-Canon/Radical Null Subject
	English	Spanish	Chinese
1^{st}_{sing}	I speak	habl-o	shou
2^{nd}_{sing}	you speak	habl-as	shou
3^{rd}_{sing}	he/she speak-s	habl-a	shou
1^{st}_{Pl}	we speak	habl-amos	shou
2^{nd}_{pl}	you speak	habl-ais	shou
3^{rd}_{pl}	they speak	habl-an	shou

English is considered non-uniform or mixed because the [-s] inflection of the 3rd person singular coexists with uninflected forms of the other personal pronouns. This prevents the licensing of a null subject as phi-features of person, number, and gender would not be clear due to the lack of a clear or uniform morphology. By contrast, each verb in canonical NSLs has a unique inflection which expresses a specific phi-feature. Radical NSLs exhibit uniformity by virtue of having no such inflection.

2.4.3. Partial

Major languages in this typology include Finnish, Russian, and Hebrew (Biberauer et al., 2010). In the case of partial NSLs, the subject can be null in a limited number of specific cases. Essentially, the use or omission of subject pronouns is governed by syntactic constraints rather than discourse. In Finnish, first- and second-person pronoun subjects can be null, but not third-person subjects:

(11) a.	Minä	puhun	(Finnish)
	I	speak	(English)
b.			
(12) a.	(Sinä)	puhut	(Finnish)
	You	speak	(English)
b.			
(13) a.	*(Hän)	puhuu	(Finnish)
	He	speaks	(English)
b.			
(14) a.	(Me)	puhumme	(Finnish)
	We	speak	(English)
b.			
(15) a.	(Te)	puhutte	(Finnish)
	You	speak	(English)
b.			
(16) a.	*(He)	puhuvat	(Finnish)
	They	speak	(English)
b.			

(Holmberg, 2005, p. 539)

Hebrew, like Finnish, permits null-subject use for the first and second person but only in the past and future tense. The status of Russian remains debated, however (cf. Holmborg, 2005; Dryer and Haspelmath, 2013; Gordishevsky and Schaeffer, 2002). For instance, Gordishevsky and Avrutin (2003) argue that null subjects are only permitted in Russian in response to a WH question, where the target/referent has clearly been established. However, the researchers note a difference between L1 Russian adult and child speech. In this case, adults demonstrated an optionality in the null-subject parameter—either by using a pronoun or not—whereas the children would normally omit the subject altogether:

(17) a.	Cto	ty	sdelal	So	stulom?		(Russian)
b.	What	you	did	with	the chair?		(English)

(18) a.	*e*	slmoal	*e*	(Russian)
b.	(I)	broke	(it)	(English)
	OR			
c.	Ja	slmoal	ego	(Russian)
d.	I	broke	it	(English)

(Gordishevsky and Avrutin, 2003, p. 1)

In the case of (17a) and (18c), both utterances would be acceptable. However, unlike canonical and radical NSLs, the use of a pronoun in (17a) does not carry any additional meaning, emphasis, or illocutionary force. Pronoun use, then, is not discourse-marked. This makes Russian an outlier in its class given that the use of an overt subject pronoun is unmarked, which is also true for English. Pronoun omission in Russian, however, *is* governed by a pragmatic relationship between interlocutors (Gordishevsky and Avrutin, 2003). In this sense, Russian has many similarities with overt-subject languages like English, which require an explicit subject except in non-finite clauses or in restricted registers or genres. At the same time, the rich inflectional systems of languages like Russian, Hebrew, and Finnish make them more akin to canonical NSLs, notwithstanding the markedness of the null subject (Franks 1995, Avrutin and Rohrbacher 1997, Gordishevsky and Avrutin 2003; Tsimpli and Sorace 2005).

Table 2. Comparison of present tense morphological paradigms in English and Russian

	Non-Null Subject	Partial Null Subject	
	English	Russian (1st conjugation)	Russian (2nd conjugation)
1st sing	-	-ю (-у)	-ю (-у)
2nd sing	-	-ешь	-ишь
3rd sing	- s	-ет	-ит
1st Pl	-	-ем	-им
2nd pl	-	-ете	-ите
3rd pl	-	-ют (-ут)	-ят (-ат)

As discussed earlier, morphological uniformity is essential for the licensing of null subjects. If we consider this hypothesis to be true, then Russian would not be classified as a null-subject language on the basis of its inconsistent morphology. Table 2 illustrates that present tense verb endings in Russian are dependent upon on the consonant stem of the verb. This creates a dual system of verbal inflectional that contrasts with the relatively predictable verb endings seen in NSLs like Spanish (or lack thereof in Chinese). Uniformity is understood as one system of agreement. As a result, the morphology cannot be considered consistent, and the typology of Russian cannot be considered null subject from the vantage of Jaegilli and Safir's (1989) MUP. In this respect, we can expect that L1 Russian speakers would behave in a similar fashion to L1 English, and exhibit very little pronoun omission in oral or written L2 production. However, this is an empirical question that hasn't been tested.

This typological survey demonstrates that NSLs differ widely in their treatment of personal pronouns and the parameters in which they can be dropped. Primary factors affecting the use of null subjects include the type of pronoun (expletive, referential), its position in the sentence, inflectional marking of the verb (verb affixation) in the L1 and conversational implicature (discourse)—all of which may make the subject pronoun redundant. In the next section, I explore how these parameters are acquired in the L1. The studies I will discuss frame how we view the acquisition of the above features and serve as the basis of subsequent work in second language (L2) acquisition and transfer.

2.5. Null Subjects in First Language Acquisition

Seminal studies on the acquisition of the NSP have focused on monolingual L1 children from a nativist perspective (Hyams, 1986; Rizzi, 1982). The general position is that children are innately predisposed to assume their L1 is NSP. This was based on the observation that English L1 children frequently dropped pronouns in their speech. Studies by Hyams (1983) and Hyams and Wexler (1993) concluded that the null-subject state was the default—or unmarked position—for all children regardless of their L1. For English-speaking children, this meant they would need to reset this parameter to an overt-subject one at some stage in their language development. Subsequent studies suggested this held true for children in other L1s, such as Spanish and Chinese, where parameter resetting would not be necessary (Wang et al., 1992; Montrul, 2004). For example, Wang et al. (1992) analysed the utterances of L1 Chinese children (n = 9) between the ages of 2 years to 4 years 6 months and L1 English children (n=9) aged 2 years 5 months, and 4 years, 5 months. Wang et al. found 'strong evidence' of an awareness of parameter in the children's' grammar, even at an early age (p. 247). Both groups were given a visual elicitation task, where the participants were asked to retell a story. In both tasks, pronoun omission increased as sentences got longer. However, L1 English children showed a drastic decrease in subjectless sentences, irrespective of utterance length, as they got older. Despite showing an increasing awareness of parameter in their L1, the experiment does raise the question as to why the L1 English children dropped pronouns at all.

Alternative theories argue that pronoun omission in children is due to ancillary constraints in addition to those of a UG parameter (Bloom, 1990; Freudenthal et al., 2007; Hamann and Plunkett, 1998). Most notably, Bloom (1990) counters Hyams (1986) on two key points. First, Bloom (1990) argues that the non-NSP is the default or initial state for child L1 acquisition. This assumption was based on the observation that L1 English children did, in fact, produce subjects albeit inconsistently. Bloom instead says that instances of null-subject (pro-drop) use is due to processing constraints in spoken production. He claims that performance factors, such as the length of utterance and pragmatic competence, that impact the likelihood of pronoun omission in children. His study involved analysing the speech of three children (ages 1 year, 6 months to 5 years, 1 month) and looking for evidence of the NSP resetting in their speech by isolating instances of pronoun omission in utterances involving either a past tense verb or non-imperatives (i.e., since, like infinitives, imperatives

never contain a subject in English). One-tailed t-tests showed pronouns were less likely to be omitted in shorter in shorter sentences (i.e., where the past tense verb phrase was shorter). Longer sentences were strongly associated with pronoun omission. The results were significant at $p < .05$ and $p < .005$. This suggests that sentence length increases processing load, which in turn increases the likelihood that the child will drop the pronoun. However, it is unclear why Bloom (1990) only focused on past tense verbs, and the small sample size implicated the need for a larger study along similar lines to confirm these results.

A subsequent study by Valian (1991) did just that by comparing the speech patterns of L1 English ($n = 21$) and L1 Italian ($n = 5$) children aged between 1 year 10 months and 2 years 8 months. She recorded the utterances from both groups in a naturalistic setting. Recordings were transcribed into a corpus of children's speech. Valian then analysed the mean length of utterance (MLU) and the frequency and proportion of utterances containing a verb. The study found that the L1 English children used pronouns at nearly double the rate of the L1 Italian children when the MLU was < 2.0. As the MLU increased, the likelihood of pronoun omission also increased. This held for both learner sets but L1 English was still more likely to use pronouns. Valian also determined that pronoun omission was more common in matrix clauses (i.e., a main and embedded clause) and in the head-initial position of a sentence but not after a wh- element. This seems to confirm Bloom's (1990) findings that performance production, regardless of the L2. The results also give credence to the idea that the non-null subject is the initial, unmarked state given the high propensity of pronoun use in L1 English children even by the age of two.

Since the 1990's, the scholarship has struggled to explain missing subjects in L1 children's' speech. Dominant explanatory factors have oscillated between parameter-based models and performance constraints to account for the production of subjectless sentences in L1 English. It is during this time that comprehension tasks alongside production tasks were thought to provide a definitive account of this phenomenon. Instead, comprehension tasks (those that test the acceptance of ungrammatical sentences) have raised more questions. Orfitelli and Hyams (2012), for example, found vast discrepancies between the acceptance of ungrammatical sentences and their production.

It is worth mentioning that many theorists dismiss the idea of parameter altogether. Functional (usage-based) linguists like Ellis (2002), White (2003), Elman (2005), and Zyzik (2009) have challenged the fundamental assumptions of the universal grammar perspective in explaining parameter transfer in language acquisition on the grounds that that language is, 'too abstract, subtle, and complex to be acquired in the absence of innate and specifically linguistic constraints on grammar' (White, 2003, p. 20). Functionalists counter that pronoun omission is contingent on observing patterns of input in adult speech. The studies above by Bloom (1990) and Valian (1991) are consistent with this perspective.

2.6. Null Subjects in Second Language Acquisition

Following the developments in research on the use of null and overt subjects in L1 children's speech, attention turned to exploring UG with adults in an SLA context (White, 1985; Hyams, 1989; Liceras, 1988, 1989). L2 acquisition is naturally different from the process of acquiring ones first language. UG was not originally designed to explain SLA, but it provided an early framework for crosslinguistic comparison via its PandP theory. The Full Transfer/Full Access (FT/FA) model is a widely accepted theory in explaining transfer in SLA. Schwartz and Sprouse (1996) contend that the L2 initial state (the beginnings of second language learning) is the sum of the principles and parameters of the learner's L1. Simply put, learners take their L1 as the point of departure in L2 learning. This would mean that learners with a null-subject parameter in their L1 would fully transfer that parameter when beginning to learn their L2, regardless of existence or nature of that parameter in the target language. The L2 initial state is, naturally, subject to restructuring as the learner is increasingly exposed to the L2 and speakers of that language. This theory implicates linguistic distance, similarities in language typology, and crosslinguistic influence (CLI) between L1 and L2 in transfer. FT is a fundamental, though less-than-ideal, state learners will need to overcome in the process of learning a new language. Whether learners are actually capable of fully transferring parameters such as the null-subject parameter is still under debate. To answer the question of whether parameters, such as the NSP, transfer for learners learning a non-null-subject L2, we need first to look at the nature and role of transfer in second language acquisition.

2.6.1. Transfer in SLA

Arabski (2006) posits that language transfer is the result of language contact. Such contact can occur in a structured, language learning context like a classroom or in an uncontrolled environment via exposure to target-language media or contact with L2 communities.

Odlin (1993) explains that transfer can be conceptualised as both substratum and borrowing transfer. Substratum transfer is the influence of L1 on L2 learning. An example of this could be a French speaker pronouncing an English word with a French accent. Borrowing transfer involves taking linguistic elements from an L2 and incorporating them into the L1. We typically see this kind of transfer as code-switching among bilinguals with extensive contact with an L2 environment. However, borrowing and substratum transfer are value neutral terms in that they generally describe the ex post facto state of acquisition. It would be more useful to think of the transfer as a process of acquisition that can have positive or negative implications based on the relationship of the languages involved.

Positive transfer denotes a facilitative relationship, where similar elements between languages encourage the acquisition of the L2. For example, if language x has the same or similar features as language y (i.e., word order, articles, verb marking, phonological system, etc.), it should theoretically be easy for an Lx learner to pick up that feature in Ly. Conversely, negative transfer, also known as interference, is where the L1 and L2 diverge significantly on a linguistic element to the extent that L2 acquisition is hindered. If the L1 does not, say, have articles, then it would be assumed that learners would have difficulty acquiring them in the L2. Some theorists have upended the idea of positive and negative transfer by claiming the reverse assumptions are true. Kecskes and Papp (2000) claim that the more divergent the features are between the L1 and L2, the *easier* they will be to acquire. This is thought to be because extreme, marked differences are more salient, and thus those features would be more memorable in the conceptual store of the mind. For example, where an L1 and L2 share cognates, there is a higher probability for confusing words with similar sounds or meanings by overgeneralisation than if the two languages diverged on that account. This assumption does not appear to be supported by the literature, however (cf. Jarvis and Pavlenko, 2008; Kubota, 1998; Sasaki and Hirose, 1996; Ringbom, 1978, 1987, 2001).

2.6.2. Directionality of Transfer

Insofar as the positive/negative binary has to do with what is being transferred, it suggests a static, one-way relationship between L1 and L2 transfer. Jarvis and Pavlenko (2008) advance the concept of directionality in transfer with the aim of demonstrating the symbiotic, and sometimes unequal, nature of the L1-L2 relationship. They argue that transfer can occur in one of four directions: forward transfer (from L1 to L2), reverse transfer (from L2 to L1), lateral transfer (from L2 to L3), and bidirectional transfer (simultaneously between L1 and L2; Jarvis and Pavlenko, 2008, p. 22). The direction of transfer is influenced by task, input, and crosslinguistic factors. Essentially, directionality means that the nature of the transfer is not static, and that both the L1 and L2 exchange various roles during the language learning process.

Andersen (1983) and subsequently Kellerman (1995) go on to postulate that learners internally negotiate 'differences in the way languages predispose their speakers to conceptualise experience' (Kellerman, 1995, p. 137). The perceived relationship between the L1 and the target language, termed 'Transfer to Nowhere', can be considered the animus for transfer, absent any real grammatical similarity of those languages. That is, assumptions and expectations about the target language influence learners' choices in written and oral production (Tyler, 1995). This means that transfer is not only a cognitive or psycholinguistic phenomenon but also a social one as well. This idea was borne out of Anderson's (1983) 'Principle of Transfer to Somewhere', which states that learners seek to equivocate the grammatical structure of the L2 with their L1. In both cases, perceptions of the L2 can lead to representational deficits in the learner's linguistic map-mind, which then lead to errors by (over)generalisation or omission.

In UG, markedness is assumed to dictate the direction and polarity of transfer. Theoretically, if the L1 and L2 share the same markedness of a feature, a positive, bidirectional transfer should occur, which facilitates acquisition. However, asymmetry in this regard (e.g., unmarked to marked or marked to unmarked) increases the probability of negative transfer and learner error. It would seem, then, that the markedness of the parameter influences the directionality of transfer—with marked parameters carrying more 'weight' in the equation. In the case of null subjects, this would mean there would be negative transfer in the form of

dropping pronouns in obligatory contexts. This would be expected when there is an inequality in the markedness of the subject between L1 and L2.

The notion of L1-L2 differences being the predictor of learner error and difficulty is the basis of the Contrastive Analysis Hypothesis (CAH). The CAH precludes Kecskes and Papp's (2000) assertion that marked features are more salient and therefore less likely to be a source of error, but it still does not fully account for between-language variation, nor does it detail the extent to which an L1 accounts for variance in L2 comprehension/production (Jarvis and Pavlenko, 2008'; White, 1987). The process of transfer is not a one-to-one proposition, and we expect errors due to either deficits in a learner's understanding of grammar in the L1 and/or L2, or processing constraints. Even as learners improve in their proficiency, we see he residual effects of incomplete or partial transfer, with some learners never achieving full or native-like language use (Belletti and Leonini, 2004; Hertel, 2003; Lozano, 2006; Judy and Rothman, 2010). This lends support to the case that language learning is not merely an exercise of testing the parameters of language, but that learners also play an active role in their language development.

2.6.3. Interlanguage

In the process of SLA, it is widely accepted that a mediating interlanguage emerges in a learner's production. Transfer, then, is not direct from the L1 to the L2 but intermediated by 'a [language] system of its own with its own structure' (Gass and Selinker, 2008, p. 14). The interlanguage incorporates elements from both the L1 and L2. As a result, it is a grammar that is specific to the learner, their first language, and their target language. According to the Interaction Hypothesis, the interlanguage is a system that develops through a combination of input, interaction, and feedback. The final outcome is an 'approximation' of the L2 that is full of 'idiosyncrasies' not unlike a natural language (Van Patten and Benati, 2010, p. 100). Arabski (1986) states that the development of an interlanguage involves simplification, and it is not unlike a pidgin that arises from larger-scale language contact. This simplification arises from communication and learning strategies to scaffold meaningful communication between L1 and L2. While the characteristics of an interlanguage are subject to individual variation, we can anticipate errors based on the typology of the learner's L1. What remains to be seen in the literature, however, is consensus on the extent to which certain grammatical elements

(such as the null subject) within the interlanguage transfer to the L2 (Orfitelli and Grüter, 2013). By looking at the nuanced differences between null-subject languages, we can get a better sense of which features pose developmental difficulty influence pronoun omission in L2 production. It is necessary, then, to investigate the nature of the pronoun (i.e., its phi-features and referentiality in discourse) to determine what exactly represents a constraint on L1-L2 transfer.

2.7. Interpretability Hypothesis

The Interpretability Hypothesis proffered by Tsimpli (1997, 2005) states that uninterpretable features are inaccessible by L2 learners. According to this view, interlanguage and L2 grammars will consequently always deviate from a native-like norm. This is because cognitive processing limitations prevent the complete transfer of certain features between the L1 and L2. In generative grammar (UG), interpretable features are those that have 'transparent semantic interpretation' (Quesada and Lozano, 2020, p. 984). Horsey (1998) further explains that interpretable features in language are those that relate to 'illocutionary force, finiteness and specificity' (p. 37). An example of an interpretable feature would be the gender, number, and person of a pronoun (phi-features). Uninterpretable features are elements such as case, subject-verb agreement, or noun-adjective agreement. These are considered to be uninterpretable because they are not 'required for the assembly of lexical items' and thus not conceptually available to the L2 learner (Hawkins and Hattori, 2006, p. 271; Ballester, 2013). The Interpretability Hypothesis holds that when a learner is confronted with an uninterpretable feature in L2 learning, a representational deficit occurs (Hawkins and Chan, 1997; Hawkins, 2001). Representational deficits are, ostensibly, understood to be insurmountable gaps between the known L1 and the novel, uninterpretable features in the L2. These gaps can of course be overcome. However, as Soraci and Filiace (2006) point out, learners 'may exhibit significant developmental delays', and failure to resolve any deficits leads to fossilisation in the interlanguage or final L2 state (p. 340).

For learners whose L1 licences null subjects, the *overt*-subject parameter, as it appears in English, represents an uninterpretable feature. The use of null subjects in languages that permit this parameter is governed by pragmatic rules of discourse, which themselves are interpretable. However, this distinction is irrelevant in overt-subject languages since subject pronouns are always present. For the Interpretability Hypothesis, it should hold, then, that

pronoun interpretability and resolution will be problematic for NSL learners, regardless of typology or level of L2 proficiency. Therefore, learners must rely on different strategies to overcome any representational deficits and processing limitations.

2.8. Empirical Studies

Orfitelli and Grüter (2013) queried whether full transfer of the NSP was possible at the L2 initial state. The researchers noted that while production of subjectless sentences declined with proficiency, acceptance of such sentences remained stubbornly high (30–40%) in grammar judgement (GJ) tasks, even at an advanced level (Davies, 1996; White, 1985, 1986). Based on this determination, they formed two possible hypotheses: (1) the learner's interlanguage continues to permit null subjects, but this is overridden in production because of a preference for overt pronouns; or (2) the learner's interlanguage does not actually permit null subjects at all, and the GJ task is subject to additional extragrammatical constraints. Their study consisted of two groups; participants in group one were monolingual L1 English university students (n = 10), and group two consisted of L1 adult Spanish learners of (L2) English from the local community (Los Angeles, USA; n = 17). The age of arrival (AOA) in the United States was between 15 and 34 years old (M = 25.1 years). The length of exposure to English (also in the United States) was between six months and 11 years (M = 4.3 years). Participants in group two were given the Versant English Test to assess their English proficiency (A1-B2), due to the large variation in language backgrounds in the group.

Once proficiency levels were established for the L2 group, participants in both groups were given an oral production task, a grammaticality judgement task (GJT), and a comprehension task. This order was chosen to control for testing effects (i.e., the threat to internal validity posed by participants being aware of the purpose of the experiment and subsequently biasing the results). For the oral production task, participants were given an 18-picture story and asked to provide a one to two sentence description of the pictures. Sentences were recorded and then coded manually for the presence or absence of a subject. The GJT followed one employed by White (1986), where learners were required to choose between grammatical and ungrammatical sentences. Of the 40 sentences, half violated the rules of the English overt-subject parameter. This was the same as a study carried out by White (1986). The final task was adapted from a previous study (Orfitelli and Hyams, 2012) and consisted of a truth-value judgement (TVJ) task. In this task, participants were again given a visual stimulus (i.e., four different stories involving two sets of children), but this time, they listened to sentences said

by a fictitious babysitter. The participants were charged with determining if the sentences 'matched' the stimulus in terms of mood or appropriacy. The rationale for this was to '[provide] an indirect way of assessing whether this particular structure is part of a learner's grammar' (Orfitelli and Grüter, 2013, p. 148).

The researchers found some evidence to support the notion that learners transfer null subjects from the L1 to the L2 in the GJT but not in oral production. In oral production, L2 learners produced sentences with an overt subject in 96% of obligatory occasions. This means there was essentially no difference between the monolingual native English speakers and the L2 Spanish group. The four incorrect sentences (out of 98) that did not contain subjects were produced by three individual intermediate learners. The researchers do not provide an explanation for why this might be, though it may owe to AOA or length of English exposure. They conclude that the NSP simply does not transfer at all for two possible reasons: either because *pro* could be considered a lexical item, which does not transfer anyway, or learners 'quickly realize that [the null subject] does not apply in English' (Orfitelli and Grüter, 2013, p. 152). The second possibility seems more plausible, as we would expect pronoun omission to decrease as proficiency increases. Despite this, in the GJ task, L2 learners accepted ungrammatical, subjectless sentences at a rate of 41%. This finding was in line with previous results those reported by White (1986), who found similar rates of acceptance. In explaining the discrepancy between the acceptance of null subjects and production, Orfitelli and Grüter conclude that the GJ task is effective only in assessing a learners' structural knowledge of grammar but not the interpretability of that grammar. This confirmed their initial hypothesis that GJ tasks are not a reliable instrument to assess syntactic representations in a learner's internal grammar, and that grammar-external factors (such as processing limitations) may bias the results (McDonald, 2006; Hyams et al., 2015).

Ballester (2013) further probed the effects of proficiency in null-subject transfer, but only employed a GJT. The researcher examined the effects of L1 null-subject transfer on (n = 91) Spanish learners of English, exploring the hypothesis that learners are only partially limited by UG constraints (Partial Access Hypothesis). According to this hypothesis, learners should only transfer some of their L1 features. In this study, learners were exposed to varying levels of input (by way of classroom instruction) for up to 990 hours at the advanced level. Using a Grammaticality Judgement and Correction Task (GJCT), she found that when learners had more input, they were increasingly able to reject ungrammatical sentences involving null

referential subjects, null expletives, and post-verbal subjects. The study demonstrated a clear developmental trend by proficiency level, but the advanced group was not able to meet the same level of accuracy as the control group of native English speakers. This, the author concludes, validates their initial assumptions about the partial access hypothesis and the claim of the Interpretability Hypothesis that the acquisition of uninterpretable features is not fully possible. However, given that there was a positive correlation between input and grammatical judgement, it could be argued that more input would result in potentially native-like use. Also, the study only considered what learners would accept as grammatical, rather than what they would actually produce orally or in writing. Orfitelli and Grüter (2013) provided additional evidence that GJTs are not a valid indicator of transfer. This was subsequently confirmed by Hyams et al. (2015). A similar pattern was found in the next study with Macedonian learners.

A study similar to Ballester's (2013) looked at grammatical acceptance and the production of subjectless sentences. In this case, Mitkovska and Bužarovska (2018) explored pronoun use in L1 Macedonian learners of English at various proficiency levels (N = 128). Macedonian is a canonical NSL. The authors performed error analysis using a corpus of writing samples from Macedonian learners (MLEC) and employed a GJCT to support their findings. The corpus represented the writings of 505 learners up to 15 years old, from elementary to upper-intermediate proficiency (CEFR A1-B2). The GJCT was given to a separate group of 130 learners of the same age and proficiency range. Their investigation focused on three subject pronoun types: referential, expletive, and anticipatory. The anticipatory 'it' is used as a postponed subject that shifts nominal clauses to the end of the sentence: 'it's a pity the concert was cancelled.' Corpus data revealed that while there was a clear correlation between proficiency level and accuracy with referential pronouns, the expletive *it* was problematic for all groups—particularly those at the 'intermediate' A2/B1 level on the CEFR ($p < .0001$). Mitkovska and Bužarovska hypothesised that this was due to the structural rather than discourse function expletive pronouns perform in a sentence, and they attributed this to a lack of semantic support for non-referential subjects. The GJCT results showed learners at all levels showed a similar pattern as those in the corpus data, with correlations between proficiency and grammatical acceptance, but responses showed far less accuracy overall. This means learners were more likely to accept null-subject sentences than they would produce them. Previous studies on pronoun realisation with null-subject languages using a dual-method, corpora and GJC approach (Orfitelli and Grüter, 2013; Alibabaee et al., 2012)

produced similar results, which suggests there is a significant task effect between production and recognition. Overall, Mitkovska and Bužarovska's (2018) study lends more credence to the Interpretability Hypothesis as it demonstrates the 'unattainability' of the English over-subject parameter, as learners were ultimately unable to achieve native-like results.

Based on the reviewed literature and theory, I can make several assumptions about how the different L1 typologies will perform in this study. First, I assume that learners from canonical and noncanonical NSLs will have some difficulty with pronoun omission in L2 English writing by virtue of their L1 null subject parameter. I do not expect full transfer, however. Though there is no empirical evidence, I expect L1 Russian learners to have fewer instances of pronoun omission overall. On the basis of the Morphological Uniformity Principle, learners from this L1 should perform in a similar fashion to L1 English speakers in their L2 written production since null subjects theoretically cannot not be licensed in either language. For all L1s, I would expect there to be some influence by proficiency on performance. As noted in Mitkovska and Bužarovska (2018), there seemed to be difficulty for learners at the A2/B1 cusp. It would be interesting to see if the same patterns hold for that proficiency grouping across the three languages observed here.

2.9. Conclusion and rationale for current study

By looking at the above studies, there is a clear discrepancy between what learners accept in terms of the null subject and what they actually produce. The results from GJ tasks seem to conflict with the reality that learners, for the most part, do not transfer their null-subject parameter—even if they accept null subjects in their interlanguage grammar. That being said, except for the work of Mitkovska and Bužarovska (2018), we have seen miniscule sample sizes and a focus only on canonical null-subject languages. Therefore, there is a need for a large-scale study that incorporates a broader range of L1s to better investigate the phenomenon of null-subject transfer.

2.9.1. Production versus GJTs

The above studies seem to suggest that there is not too much of a problem with null pronouns in terms of production. However, studies with GJTs suggest that learners *do* transfer null-subject pronouns, especially at lower proficiency levels. The last study of L1 Macedonian

learners demonstrates that although there are less problems in production than GJTs, learners still have problems and there is an effect of proficiency, at least for expletive pronouns.

Issues have been raised in the previous studies about the validity of GJTs and their capacity to reliably indicate parameter acquisition. Comprehension tasks such as those employed above, seem to test an abstract understanding of the syntactic and discursive systems at play with null subject transfer. This understanding or acceptance does not translate to concrete predictor for what a learner will actually produce orally or in writing. For this reason, the present study forgoes GJTs in favour of a focus on language in use.

2.9.2. L1 Effect

The present study stands out because has very large sample size for production, which was possible because of corpus methods. It also works with other null subject typologies in addition to canonical NSLs like Spanish/Italian. Very few null-subject related studies stray from these languages due to the relative accessibility of learners of these L1s and the fact that these languages were the exemplars of seminal studies in this line of inquiry. However, Spanish and Italian are but two languages from the same typology (as is Macedonian). To create a fuller explanation of how learners of null-subject languages transfer this parameter into English, it is imperative to draw on a wider diversity of language typologies. So far, no study has attempted a large-scale sampling of learners across a range of typologies. This may be because 'much of SLA research has traditionally relied on elicited experimental data while disfavouring natural language data' (Mendikoetxea and Lozano, 2018). However, developments in learner corpora allow access not only to previously inaccessible learner populations but also to a larger population sample overall. Indeed, research based on large-scale corpus data can 'lay claim to greater representativeness than previous SLA studies' (Granger, 2009). Diversity of representation will provide further evidence of null-subject transfer by allowing for the examination and comparison of how pronoun use emerges in the L2 production of underrepresented learners.

2.9.3. Proficiency

The role of proficiency in parameter transfer is an important but overlooked one. Most studies assume that there is some kind of relationship between proficiency and error frequency but do not make this an explicit focus. This is based on an a priori assumption that

learners will [automatically] become more adept. Orfitelli and Gruter (2013) found that proficiency was not a predictor of subject pronoun omission. Yet Mitkovska and Bužarovska (2018) among others note that omission remains stubbornly high at even the highest proficiency levels. This phenomenon may be the result of processing constraints with more syntactically complex sentences. What is more interesting is the stark divergence in acceptance and production of subjectless sentences in advanced L2 populations. If we consider differences in performance and comprehension in similar proficiency groups in different studies, it suggests that L2 proficiency is a worthy covariant in addition to L1 typology.

3. Methods

Jarvis (2000) proposes a framework for investigating crosslinguistic influence using corpus-based methods, which I have applied to the study of null-subject transfer. He argues that, at a minimum, three types of evidence are needed: intragroup similarity, intergroup difference, and crosslinguistic performance similarity (Jarvis, 2000). This study incorporated these elements to determine whether relationships exist between L1, proficiency level, and the suppliance of third-person personal pronouns in the subject position. This chapter details the processes of collecting data from corpora, database creation and manipulation, and data analysis.

3.1. EFCAMDAT

To address the research questions, this study used the English First Cambridge Open Language Database (EFCAMDAT). This is a learner corpus of written language that includes 'over 83 million words from one million assignments written by 174,000 learners' (Geertzen et al., 2014). The learners are students of English First (EF) English Live, an online English language school with a global presence. Learners represent 198 nationalities, but the database does not contain information on their individual L1s or bilingual status. Nationality has therefore been used in previous research as a proxy for the dominant in-country L1 in this corpus and this has produced reliable results, which allows us to equivocate nationality and L1 with confidence (Alexopoulou et al., 2015; Murakami, 2013; Nisioi, 2015; Römer, 2019).

Learners begin their course at EF English Live by taking a placement test that assigns them a level between one to sixteen, which are aligned to the six levels of the Common European Framework of Reference for Languages (CEFR) as shown in Table 3:

Table 3. EF level correspondence with the CEFR

EF Level	CEFR	Language Ability
1–3	A1	Beginner
4–6	A2	
7–9	B1	Intermediate
10–12	B2	
13–15	C1	Advanced
16	C2	

As learners progress through their language course, they complete level-appropriate tasks of increasing difficulty. Each level consists of 128 writing tasks across a range of genres and topics (e.g., food, technology, or gender roles). Tasks can involve writing a letter or email, summarising a text, or responding to a prompt (Alexopoulou et al., 2015). Tasks were developed for pedagogical rather than research purposes so that they are an authentic representative sample of student writing (Lozano and Mendikoetxea, 2013; Perdue, 1993; Sinclair, 2005). The resulting corpus data is considered 'psuedolongitudinal' or 'quasilongitudinal' rather than cross-sectional or purely longitudinal. This is because not all learners complete their course of study, nor do they all begin at the same level (Römer, 2019; Murakami, 2013; Jarvis and Pavlenko, 2008). This data addresses questions about proficiency level and transfer (RQ3), as we can use this information to tease out any developmental trends in the data. It should also be noted that writing samples (scripts) have been manually tagged for parts of speech (POS) and errors (Hawkins and Buttery, 2010; Hawkins and Filipovic, 2012).

3.2. The Present Study

3.2.1. Target Language

In the present study, I sought to examine the effect of L1 on null-subject transfer in L2 English. To this end, I needed to identify a pattern of non-target-like structures in the student writing samples (RQ1). As English is a non-null-subject language, the target language was sentences where there is a finite verb, but no subject. In other words, I was looking for instances where the pronoun (i.e., the nominal subject or *nsubj*) is missing from the head-initial subject position and the verb is finite.

3.2.2. Target Groups

This study targeted learners at all proficiency levels from three L1 groups: Arabic, Chinese (Mandarin), and Russian. As the corpus does not allow for direct targeting of learner's L1, nationalities where the target L1s would be dominant were selected. Chinese L1 learners came from mainland China (Hong Kong and Macau excluded). The Arabic L1 learner group comprised fourteen nationalities (in order of magnitude): Saudi Arabia, United Arab Emirates, Egypt, Kuwait, Qatar, Syria, Jordan, Oman, Palestine, Iraq, Yemen, Lebanon and Bahrain. Russian L1 learners came only from Russia. The targeted L1s were typologically dissimilar to compare for L1 effects (RQ2). Each L1 in this study (table 4) represents a different typology:

Table 4. Language Representation by Typology

Typology	**Representative**
Canonical	Arabic
Radical	Chinese
Partial	Russian

3.3. Research Procedure

3.3.1. Data Collection

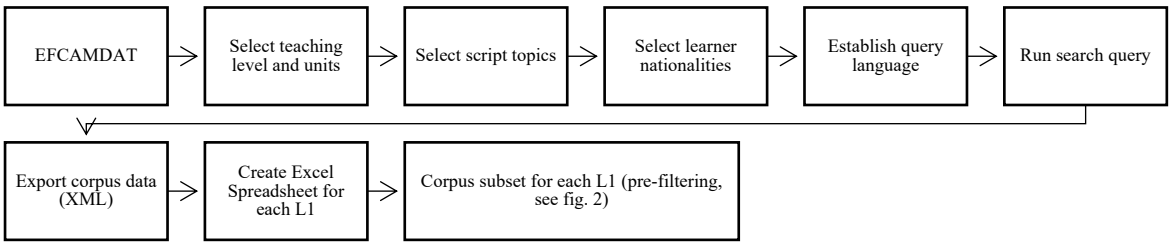

Figure 1. Summary of the data collection process

To collect the corpus data, I needed to select the criteria to be queried. This process is outlined in figure 1. The first criteria was learner level. To chart leaner development of null-subject transfer, all proficiency levels were selected to be included (RQ3). It was not possible to exclude certain topics in the corpus interface, so all topics were selected and included. Finally, I selected the learner nationalities as described in section 2.2.2. Once the relevant

criteria were selected, it was possible to search for patterns of pronoun omission by querying the target language.

3.3.2. Query Language

We can think of a corpus as a search engine such as Google. To search the corpus, there are specific language specifications used to query targeted instances of language use. The ability to retrieve specific linguistic information hinges on the precision of the search. Simply put, word specifications (n-grams) are the input, and (ideally) the target language is the output. Words in the EFCAMDAT can be categorised:

- as a word token (e.g., [word='cars']),
- as a lemma (e.g., [lemma='car']),
- as a part of speech (e.g., [pos=nsubj])
- by its head relation (e.g., [dg-rel='nsubj']),
- by the properties of the head (e.g., [dg-hword / dg-hlemma / dg-hpos]; (Huang et al., 2017).

We can use a combination of word specifications to parse dependency relations within the corpus to identify specific instances of language use. For this study, I needed to find an input pattern that would yield occurrences of the target language. In this case, it was pronoun omission. However, whereas querying language to find instances of explicit language use is a relatively straightforward process, establishing the criteria to infer missing information is less so. This computational challenge is known as the 'inverse problem' (Brattico, 2021). One of the primary obstacles in formulating the query language was overcoming the 'inverse problem' to find instances of null-subject transfer. To resolve the inverse problem, semantic and syntactic information must be inferred because it is not given. Essentially, it is easier to find what you are looking for, rather than what you are not. Null subjects present a unique challenge in this regard, as the query language must attempt to recreate conditions and constructions in which the subject pronoun is obligatory yet not forthcoming (Brattico, 2021). The following query was used to identify potential target language constructions, as demonstrated in Table 5:

(1) <s>[dg-rel="ROOT" and pos="VB[DGZN]"][word=".+"]+[lemma!="\\?"]</s>

Table 5. Analysis of word specifications used and their function

Specification	Function
<s>	marks the beginning of a sentence
[dg-rel="ROOT" and pos="VB[DGZN]"]	matches a finite verb form except for non-third-person present tense forms to avoid any mis-tagged imperatives and legitimate cases like, 'See you next week!', 'Hope you're well!', etc.
[word=".+"]+	matches as many words as there are in the sentence
[lemma!="\\?"]	matches any sentence-final token that is not a question mark to eliminate false positives containing subject-verb inversion
<s>	marks the end of the sentence

The goal here is for a search which mostly limits the results to main clauses with no overt subjects. This is achieved by using a search string that specifically searches for sentences that begins with a finite verb form except for non-3rd person present tense form. Such sentences by definition cannot have a subject pronoun preceding the verb. Note that cases where the finite verb appears in a different position, such as mid utterance, did *not* appear in the search results (e.g., 'Normally, Ø is happy'). Figure 2 shows the retrieval process interface in the EFCAMDAT. This process allowed me to retrieve the frequency of this type of error for each L1 and proficiency level. However, some filtering and post-processing was needed to get rid of fronted gerunds and other legitimate cases of pronoun omission as further described under Data Processing below.

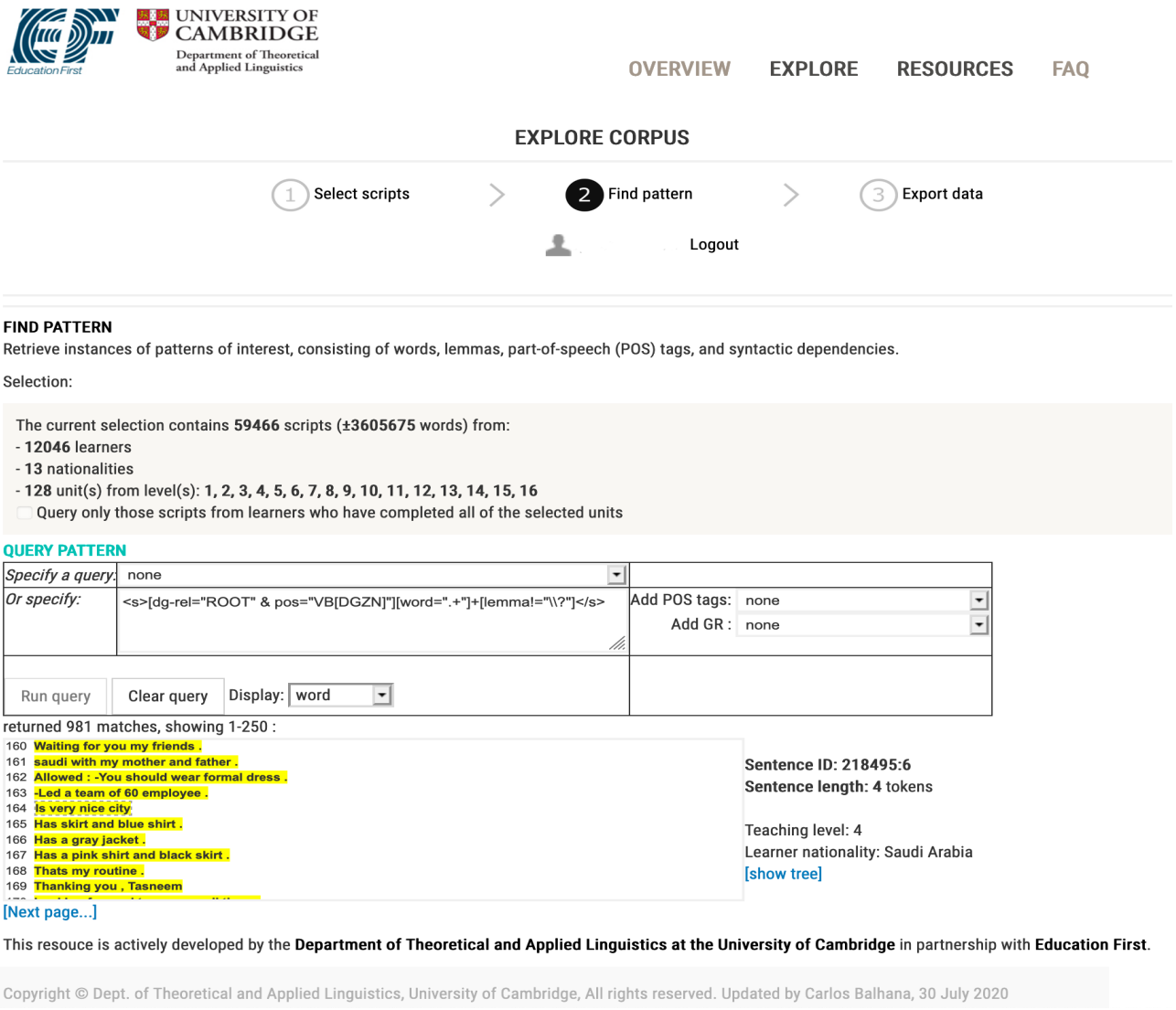

Figure 2. Query page featuring sample search results

This query yielded 294,836 scripts from 44,727 learners across three L1s (Table 6). These data were then manually exported into an Excel spreadsheet to create a database and three extensible markup language (XML) files for cross-referencing. Visual Studio Code was used to access the XML files.

Table 6. EFCAMDAT sample showing L1 by level

L1/Level	Scripts	Learners	Words	Query match	Positive cases
Arabic A1	34316	7696	1376104	307	
Arabic A2	14841	3323	1032342	340	
Arabic B1	7101	1613	717989	176	
Arabic B2	2515	655	355559	106	
Arabic C1	597	122	105907	46	
Arabic C2	96	27	17774	6	
TOTAL L1 ARABIC	**59466**	**13436**	**3605675**	**981**	**173**
Chinese A1	94494	14186	4930467	719	
Chinese A2	48564	7559	4262261	1802	
Chinese B1	17613	3145	2009830	736	
Chinese B2	3936	738	603874	220	
Chinese C1	504	94	94856	26	
Chinese C2	51	12	8581	3	
TOTAL L1 CHINESE	**165162**	**25734**	**11909869**	**3506**	**235**
Russian A1	32518	5914	1539489	213	
Russian A2	19539	3632	1580093	336	
Russian B1	12319	2623	1381271	345	
Russian B2	4637	1177	717888	239	
Russian C1	1098	235	210220	75	
Russian C2	97	27	25263	7	
TOTAL L1 RUSSIAN	**70208**	**13608**	**5454224**	**1215**	**92**
A1 Total	161328	27796	7846060	1239	
A2 Total	82944	14514	6874696	2478	
B1 Total	37033	7381	4109090	1257	
B2 Total	11088	2570	1677321	565	
C1 Total	2199	451	410983	147	
C2 Total	244	66	51618	16	
TOTAL ALL LEVELS	**294836**	**52778**	**20969768**	**5702**	**498**

Query matches represent the total number sentences flagged, prior to filtering, as having a missing subject before a finite verb. From the query matches, only the first 500 scripts from each of the three L1s were analysed making a total of 1500. Ultimately, 498 sentences out of 1500 were true positive results and selected for analysis. The decision to use a smaller sample was done due to time constraints. The filtering process cannot be automated, and it would not have been practical for the researcher to complete this manually. The total number of positive cases denotes the actual number of sentences deemed to be erroneous based on the process detailed in the next section (figure 3).

3.3.3. Data Processing

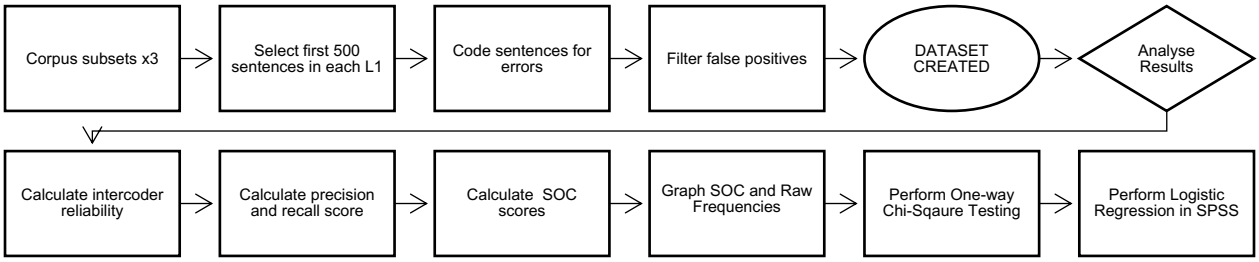

Figure 3. Summary of the data processing process

The search query employed yielded a high number of false positives, where legitimate cases were flagged as problematic, and these needed to be removed manually. Most of the false positives were the result of legitimate cases of pronoun omission. This includes fronted gerunds in obligatory use contexts, such as salutations and valedictions for the purposes of letter writing (e.g., 'Hoping to hear from you!' or 'Wishing you the best!') and subject ellipsis in CV writing (e.g., 'Managed a small team'). Phrasal verbs (e.g., 'looks like', 'turns out', or 'sounds like') were occasionally flagged as well. These are conventional or generic uses of pronoun omission (ellipsis), where subjects are not required or expected and are not regarded as production errors. Other false positives were due to learner errors that were not machine readable or mistagged as finite verbs. This included sentences starting with pronouns in the contracted form that were missing an apostrophe (e.g., 'Im a student'), proper nouns (e.g., Natasha or Riyadh), inverse questions without a question mark (e.g., 'Is she a doctor.'), and imperatives (e.g., 'Stop that!'). Finally, there was one case of sentence duplication, which was also excluded.

Data processing consisted of ensuring that sentences for the error analysis were not legitimate cases of pronoun omission. Sentences were coded (tagged) in an Excel database as either 'y' for legitimate or 'n' for incorrect. To illustrate this process, the following examples were taken from written samples in the corpus data from Chinese learners:

(19) Ø is very untidy.
(20) Ø managed a small team. (As a statement in the context of a CV)

Though both sentences omit the subject pronoun, (19) would receive a 'y', and (20) would get an 'n' based on the aforementioned criteria. (20) is a clear example of subject ellipsis, which is common in the genre of CV writing. It would therefore be inappropriate to include it or sentences like it for the purposes of this study. After establishing true cases of pronoun omission, the corresponding learner level, number of tokens, and sentence ID were noted. Learner IDs were not provided in the corpus interface, so the sentence ID was used to match sentences in the XML file to individual learners via their unique learner IDs. The process revealed that some learners had made multiple errors and were subsequently counted more than once, potentially skewing the distribution.

A pivot table was created in Excel to account for this to ensure learners were counted no more than once per level in the analysis. Ultimately, there were n = 284[1] unique learners represented in the corpus subset, each contributing one data point:

Table 7. Distribution of learners by L1 and proficiency

	L1 Arabic	*L1 Chinese*	*L1 Russian*	***Total***
A1	18	10	7	35
A2	61	79	32	172
B1	24	19	25	68
B2	1	1	6	8
C	1	0	0	1
Total	105	109	70	284

[1] Some learners were counted twice because they were represented in more than one level.

This is shown to extricate the number of learners who produced errors from the total number of errors for the purpose of confirmatory analysis. Some learners produced multiple errors which inflated the total numbers in table 7.

3.3.4. Search Accuracy

To ascertain the accuracy of the search results, I calculated the precision, recall, and F-scores of the retrieved data. Precision (*P*) represents the predictive value of the query language used. *P* is the number of correct results divided by all results. The resulting figure is an indication of how well the search algorithm produced relevant results.

$$P = \frac{true\ positives}{true\ positives + false\ positives}$$

Recall (*R*) refers to the sensitivity of the search and was calculated by dividing the number of correct results by what should have been returned.

$$R = \frac{true\ positives}{true\ positives + false\ negatives}$$

The F_1 score (f-measure) is a combination of *P* and *R* and provides the harmonic mean of total accuracy.

$$F1 = \frac{2}{1\ precision + 1\ recall} = 2 \times \frac{precision\ \times\ recall}{precision + recall}$$

These values are commonly employed in corpus-based research, and they implicate the overall search accuracy of the data elements (Brown, 2011).

Table 8. Precision and recall values

	L1 Arabic	L1 Chinese	L1 Russian	Overall
Precision	0.342	0.470	0.184	0.332
Recall	1	1	1	1
F_1 Score	0.509	0.639	0.310	0.498

Table 8 shows the overall *P* is at .328, where .0 shows no precision, and 1.0 shows perfect precision. This indicates a below average accuracy of the search. One possible explanation is the inability of the corpus user to exclude topics which would yield pronoun omission in obligatory occasions. *R* is at 1.0, and we can assume the search excluded all false negatives. The overall F_1 score was a modest 0.498. These results reflect the fact that a significant amount of post-processing was needed to filter out false positives.

3.3.5. Intercoder Reliability

As the data were coded manually, an intercoder was used to test the reliability of my tagging procedure. The intercoder was a bilingual Spanish and English speaker who had studied in the United States and the United Kingdom. They were currently managing a English language institute at a university in Ecuador. Their language background and experience in language teaching made them a suitable candidate for this task. The intercoder was given a random sample of 150 scripts that had not been tagged. They were instructed to read and identify sentences where pronoun use was obligatory but not used. The instructions outlined legitimate cases where it would be acceptable for pronouns to be dropped and included a list of examples of such cases (discussed in 3.4). Scott's π was calculated as the measure of reliability. The traditional measure of intercoder reliability is Cohen's k, but this can be problematic as there may be a higher level of inconsistency between coders (Allen, 2017). A high π value demonstrates a high level of reliability in the coding procedure. Responses from both coders were put into a matrix to find π.

Table 9. Matrix demonstrating coder agreement

		Coder 1		
		Yes	No	*Marginal Sum*
Coder 2	Yes	99	25	116
	No	9	17	34
	Marginal Sum	108	42	150

I used Scott's (1955) formula to calculate the matrix results in table 9 as follows: $\pi = Pr(a) - Pr(e)1 - Pr(e)$. The results showed $\pi = .711$ in this study. This indicates 'substantial'

intercoder agreement, where 1 is perfect agreement and < 0 is no agreement (Allen, 2017).

3.3.6. Accurate Pronoun Production

In order to observe the rate of pronoun omissions, I also need to know where learners correctly produce a pronoun, in matched contexts. The sum of the two (the total number of correct and incorrect sentences) is the number of obligatory contexts (OC) . This conveys the total number of opportunities a learner would have had to supply a pronoun. This is important to establish the proportions and thus accuracy of the learners in each L1 and proficiency group. For the purposes of finding correct sentences, a similar search to the one described in 3.3.1 was used. The difference in search language was the actual inclusion of a pronoun. As a result, the search string included language to find lemmas for the third-person singular pronouns ‘he’, ‘she’, and ‘it’:

<s>[lemma="he"][dg-rel="ROOT" and pos="VB[DGZN]"][word=".+"]+[lemma!="\\?"]</s>

This resulted in sentences where the pronouns were correctly supplied (i.e., the sum of sentences beginning with he, she, or it) so that we could compare them against sentences where they were incorrectly absent.

3.4. Data Analysis

To infer null-subject transfer and potential influence by L1 and proficiency, this study looked at measures of accuracy and frequency of learner errors in the corpus data.

3.4.1. Scoring Method

Accuracy is defined as ‘the ability to produce error-free speech’ (Housen and Kuiken 2009: 461). To define this in the present study, suppliance of third-person subjects in obligatory

occasions was analysed. Suppliance of Obligatory Occasion (SOC)[2] is a measure to assess how accurately learners are using various elements of language.

$$SOC = \frac{number\ of\ correct\ suppliances}{number\ of\ obligatory\ contexts}$$

These scores address RQ1. However, in using these scores, there is a danger of falling into what Bley-Vroman (1983) called the 'comparative fallacy', where learners are judged by an unrealistic expectation to achieve native-like precision.

3.4.2. Chi-square Testing

One-way chi-square tests (χ^2) were employed to test for crosslinguistic influence (RQ2) and differences between proficiency level (RQ3). The aim was to see whether, in OCs, the different language and proficiency groups differed in the extent to which they used or did not use subject pronouns. This is essentially a way of seeing if the SOC scores are significantly different for the different learner groups/different proficiency levels and one-way chi-square tests evaluated the individual qualitative variables against the hypothesis (Phakiti, 2015). The expectation was that pronoun omission would decrease, and correct usage would increase with proficiency level. Further, I expected there to be variation in pronoun use/omission by null-subject language typology.

3.4.3. Logistical Regression

A logistic regression was carried out in SPSS to determine any associations between L1 and proficiency (i.e. learner level) on L2 performance of correct pronoun use. Pronoun use was selected as the binomial dependent variable (each case was assigned either 1= produced pronoun, or 2 did not produce pronoun). The learner level factor, as determined by a placement test prior to beginning their course, was recoded as a linear predictor (where A1=6, =A2=5, B1=4, B2=5, etc.). Since the relationship with proficiency appears to be u-

[2] The SOC here is based on the definition outlined in Foster and Wigglesworth (2016). This is not the same SOC detailed in Pica (1983) which was used to account for the accurate suppliance of morphemes in morpheme order studies such as Brown (1973) and Dulay and Burt (1974). I use the term in the most general sense as a measure of accuracy.

shaped, an additional quadratic term was created, and both were used as predictors in the model. Language (L1) was a categorical predictor variable in the regression. This was coded in SPSS using indicator coding. This model was run twice, once with L1 Arabic as the reference and again with L1 Russian. This was done to inspect contrasts between each of the languages. Finally, three additional, logistic regressions were run with data from each L1 separately (without language as a variable) to verify the same pattern for proficiency held for each language.

4. Results

The data presented here for analysis was drawn from a subset of the EFCAMDAT learner corpus. A quantitative approach was applied to answer three research questions: (1) Do learners transfer their null subject parameter into English? (2) Does the typology of the null subject language matter in transfer? (3) What role, if any, does proficiency play in determining if a null subject transfers? Null subject transfer was operationalized as pronoun omission in obligatory occasions. The first section addresses RQ1, whether null subjects do transfer. The following section addresses RQ2 by reporting on the influence of L1 in terms of between-group differences and then within-group similarities. Section three reports on the role of proficiency in predicting transfer (RQ3).

4.1. Null Subject Transfer (RQ1)

The overarching question of this study was to ascertain if learners of null-subject languages transfer their native null-subject parameter into English. If the null-subject parameter transferred, we would expect to see a high frequency of errors across all groups, regardless of typology or proficiency level. I first calculated the SOC across the whole sample by dividing the observed frequencies of pronoun use in the sample (number of correct sentences) by the total opportunity to produce a pronoun (total of correct and incorrect sentences), this showed a result of 78%, suggesting a moderately high level of overall accuracy. Therefore, the surface data suggests that there is some parameter transfer, as this average is lower than in previous studies. Table 11 shows the same score calculated separately for each L1 /proficiency group. It is clear from inspection that while overall accuracy is quite high, there are variations based on proficiency and L1 (table10).

Table 10. SOC by L1 and proficiency

	A1	A2	B1	B2	**Mean**
Arabic	97%	81%	69%	96%	86%
Chinese	98%	81%	71%	94%	86%
Russian	91%	40%	42%	70%	61%
Mean	95%	67%	61%	87%	78%

It should be noted however, that there is no commonly recognised or accepted threshold to delineate what constitutes full, partial, or incomplete transfer. Ideally, we would want to know what the percentages are for learners of a language without null-subject parameter for comparison (i.e. an English or L1 German control group). This was not possible in this study, but previous studies have suggested that a decline in accuracy is indicative of parametric transfer. As we can see, there are noticeable differences in accuracy scores within and between groups. In the next section, I investigate these differences statistically looking at the effect of L1 influence (RQ2) and proficiency (RQ3).

4.2. L1 Influence (RQ2)

RQ2 queried whether the typology of null-subject language influenced learners use or omission of pronouns. Pronoun omission would indicate null subject transfer, and we are interested in the extent to which this differs across groups. In table 10 above we saw accuracy of productions was: Arabic 84%; Chinese 89%; Russian 75%. Table 11 shows the contingency table constructed to calculate chi-square statistics. Expected values here represent the null hypothesis. That is, where there are no differences between the language groups and pronouns are produced in accordance with the overall likelihood across groups.

Table 11. Contingency table for outcomes by L1

	Produced a pronoun		Did not produce a pronoun			**$\chi 2 = 95.72$**
	observed	expected	observed	expected	Total	**$p < .001$**
Arabic	863	840	105	128	968	**89%**
Chinese	871	850	109	130	980	**89%**
Russian	125	169	70	26	195	**64%**
Total	1859		284	284	2143	
	non null = 87%				**null = 13%**	

Note that the expected figures indicate the expected overt (produced) versus null (omitted) pronouns one would expect if each learner group omitted pronouns according to the overall proportions across the whole corpus with .87 correctly (in line with the calculation reported

above) produced, ignoring group differences[3]. Chi squared was calculated to measure the deviations between these observed and expected figures: this suggested that the typology of NSL does influence whether learners omit a pronoun in written production ($\chi 2 = 95.72$, $p < .001$). Observation of the data suggests that this difference is driven by the vastly lower number of Russian learners in the sample.

Both the canonical NSL (Arabic) and non-canonical/radical NSL (Chinese) performed at similar rates of accuracy (based on observation on mean accuracy in table 10). L1 Russian learners were much less likely to have errors in pronoun omission though and this has affected the overall result. However, the chi square pattern was different than what was expected than if there was no L1 influence which means it is unlikely that the similarities are due to chance.

There was an expectation that accuracy would vary by typology due to differences in how pronominal subjects are treated in each language. The chi square analyses confirm that there is evidence for this. Further, it was expected that L1 Russian learners would be more accurate overall, by virtue of its partial null-subject status. However, the Russian group was actually the *least* accurate. In comparison, accuracy for both L1 Arabic and L1 Chinese are rather high and similar to each other. The scores for these two languages are slightly lower than what would be expected of full, null-subject languages based on the overall findings from Orfitelli and Gruter (2013) (96%) and Mitkovska and Bužarovska (2018) (89%).

4.3. Developmental Trends (RQ3)

Most learners in the corpus sample were A1 (elementary) learners (n=27976). Total numbers declined with each proficiency group: A2 (n=14514), B1 (n=7381), B2 (n=2570), C1 (n=451), C2 (n=66). The data analysed so far then is slightly skewed towards learners at lower proficiency levels. In table 11, we see that there is a U-shaped pattern of development: A1 95%, A2 67%, B1 70%, B2 82%, C1 96%, with table 12 presenting the relevant data as a contingency table used to calculate chi-square. It demonstrates that the total number of

[3] This figure is different from that reported in table 11 as the number is the average of each of the averages. However, the figures are similar.

learners who made errors in pronoun omission peaks at the elementary (A2) level with 172 or 60.5% of learners falling into this category. This decreases by 40% to 68 learners by the lower-intermediate (B1) level and is almost fully resolved by the upper-intermediate or B2 level. There was only one learner at the advanced (C1/2) level who produced a subjectless sentence.

Table 12. Contingency table for outcomes by proficiency level

	Produced a pronoun		Did not produce a pronoun			**$\chi 2 = 205.67$**
	observed	expected	observed	expected	Total	**$p < .001$**
A1	1043	973	35	105	1078	**96%**
A2	1410	1428	172	154	1582	**89%**
B1	119	169	68	18	187	**63%**
B2	57	59	8	6	65	**87%**
Total	2629		283		2912	
		non null = 90%			**null = 10%**	

The observed and expected outcomes by proficiency level were calculated the same way they were done for L1. The proportion of pronouns produced was 90%, regardless of proficiency level. The chi square analysis of the data in table 12 indicates that proficiency level also impacts pronoun omission and that the above results are statistically significant ($\chi 2 = 205.67$, $p < .001$).

To assess the impact of proficiency, I looked at the raw frequencies of errors produced versus the overall number of obligatory contexts (table 11). This data shows that there were differences between groups. Globally, there was a decline in pronoun omission in obligatory occasions and proficiency level (table 12). By the advanced level (CEFR C1-C2), pronoun omission was non-existent.

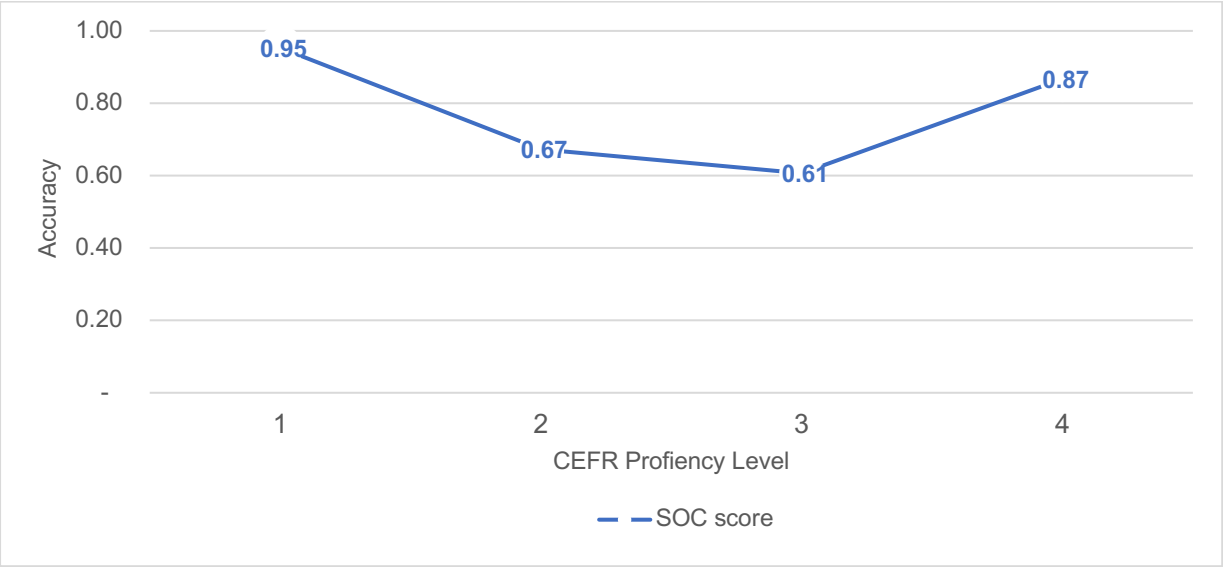

Figure 4. Overall developmental trend from elementary (A1) to proficient (B2)

As expected, errors in pronoun use generally declined with proficiency but there was an unexpected downturn at the A2 level before increasing by B2 ($p < .001$). This resulted in a U-shaped (quadratic) pattern. There were more errors at the A2 level than the A1 level. Moreover, this negative trend continued, as learners at the B1 level were least accurate in supplying pronouns.

These analyses on overall data are pooled across the three language groups, but there are more samples from the Arabic and Chinese than the Russian and that could mean that the results reflect the effects of proficiency on that group. In next section, however, I will look at each group separately.

4.4. Developmental Trends by L1

Looking at the developmental trends by L1 grants additional perspective to assess intergroup differences in pronoun production/omission. Moreover, it allows us to see if the effect of proficiency has a similar impact in each L1.

4.4.1. L1 Arabic

The proficiency of L1 Arabic learners matches the overall developmental trends seen in figure 4. Figure 5 shows that SOC was lowest in the B1 level but increased by the B2 level. Learners at the A1 and B2 levels had the same SOC scores, indicating identical performance

at those levels. There was one learner represented at the C1 level (advanced), so they were not included. A separate Chi square test was also performed to observe the effects of proficiency group for each L1 individually.

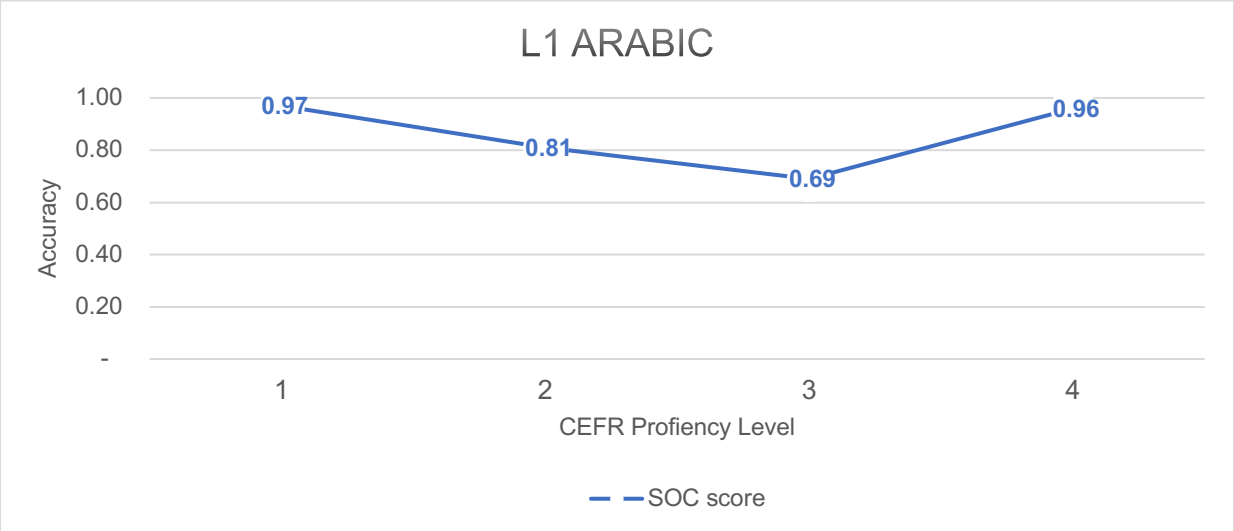

Figure 5. SOC Scores of L1 Arabic learners

Table 13. Observed versus expected outcomes for L1 Arabic learners (A1-B2)

	Produced a pronoun		Did not produce a pronoun			**$\chi 2 = 84.7$**
	observed	expected	observed	expected	Total	**$p < .001$**
A1	511	472	18	57	529	**97%**
A2	265	291	61	35	326	**81%**
B1	54	70	24	8	78	**69%**
B2	26	24	1	3	27	**96%**
Total	856		283		960	
	non null = 89%				**null = 11%**	

4.4.2. L1 Chinese

The developmental trend for L1 Chinese learners was somewhat flatter than that of the L1 Arabic learners (figure 6). However, again we see a decrease in SOC at the B1 level. The A1 and B2 groups also performed at a similar rate. There were no errors reported by any learners at the C level.

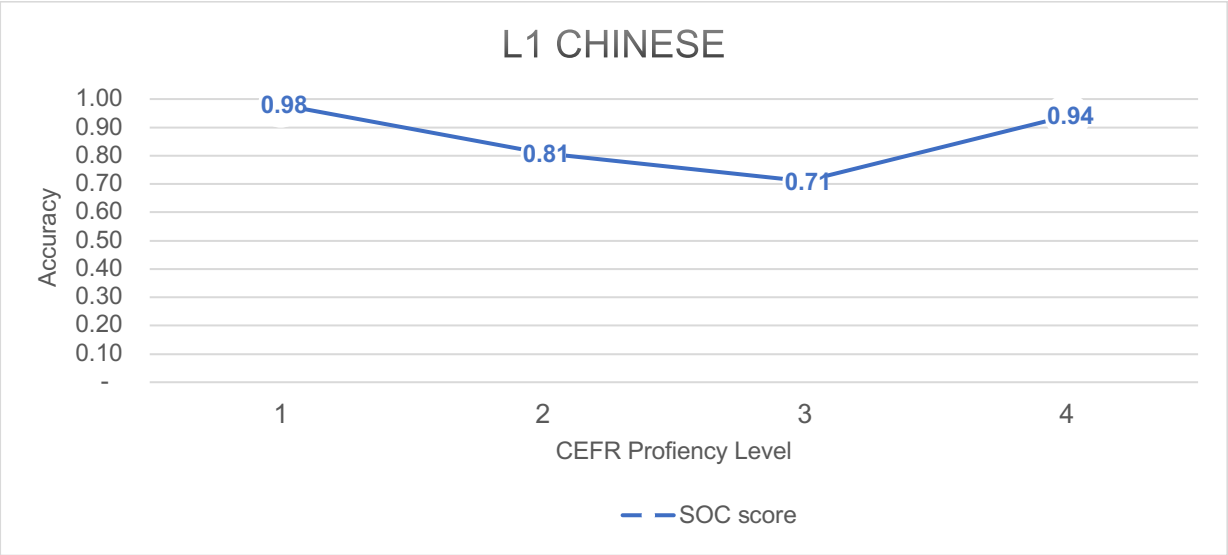

Figure 6. SOC Scores of L1 Chinese Learners

Table 14. Observed versus expected outcomes for L1 Chinese learners (A1-B2)

	Produced a pronoun		Did not produce a pronoun			**$\chi 2 = 83.95$**
	observed	expected	observed	expected	Total	**$p < .001$**
A1	461	419	10	52	471	**98%**
A2	346	378	79	47	425	**81%**
B1	47	59	19	7	66	**71%**
B2	17	16	1	2	18	**94%**
Total	856		283		194	
	non null = 89%				**null = 11%**	

4.4.3. L1 Russian

Data from the L1 Russian learners illustrate a significant departure in comparative performance. Figure 7 exhibits the expected U-shaped function of accuracy scores. Accuracy decreases from the A1 level, stalls at the A2/B1 transition, and trends upward by B2 proficiency. There was virtually no change in accuracy between learners at the A2 and B1 levels. The trend in pronoun omission fully resolves by the C level, with no errors reported by learners at that stage. Altogether, SOC scores followed a similar trend when compared with the other L1 groups but were lower overall.

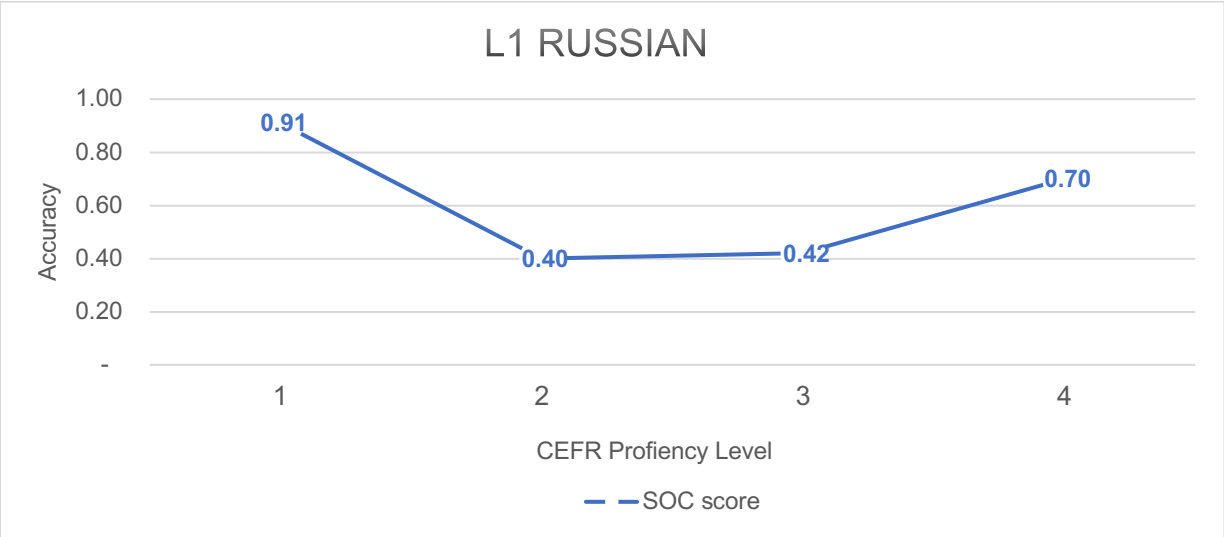

Figure 7. SOC Scores of L1 Russian learners

Table 15. Observed versus expected outcomes for L1 Russian learners (A1-B2)

	Produced a pronoun		Did not produce a pronoun			**$\chi 2 = 47.81$**
	observed	expected	observed	expected	Total	**$p < .001$**
A1	71	50	7	28	78	**91%**
A2	21	34	32	19	53	**40%**
B1	18	27	25	16	43	**42%**
B2	14	13	6	7	20	**70%**
Total	856		283		194	
	non null = 64%				**null = 36%**	

4.5. Logistic Regression Analysis

Based on an analysis of a logistic regression model, several of the above findings were further confirmed. The data in the present study indicate a significant quadratic effect was observed between L1 and proficiency ($p < .001$). This confirms that this relationship can be described by a single, U-shaped curve as seen in figures 4, 5, 6, and 7. As we can see in table 16, the overall effect of language was significant ($p < .001$). Looking at the contrasts, there was a significant difference between each of the Arabic and Chinese L1 groups and the L1 Russian group. However, the contrast between Arabic and Chinese was not significant ($p = .476$). This suggests that the overall effect of L1 language group is driven by the L1 Russian group. Overall, this further validates the findings from the Chi-square tests reported earlier in this section.

Table 16. Results of logistic regression analysis							
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	language			64.483	2	<.001	
	language (1)	1.476	.205	51.800	1	<.001	4.374
	language (2)	1.584	.206	58.967	1	<.001	4.874
	levelLinear	-7.371	.902	66.700	1	<.001	.001
	levelQuad	.867	.095	83.490	1	<.001	2.381
	Constant	15.067	2.093	51.826	1	<.001	3495359.018

5. Discussion

5.1. Analysis of Findings

The present study looked at the suppliance referential 3rd person subject pronouns in English L2 learners from different typological L1s. A principal finding was that there was an effect of L1, but this was driven by Russian learners in the study. Chinese and Arabic learners performed at equal rates in terms of error frequency and mean accuracy of subject pronoun production. Although there are typological differences between these null subject languages, there is no evidence in this data that these differences influence the use of null subjects When looking at proficiency, there was a clear U-shaped function. Learners at the early elementary (A1) level performed relatively well, but by the late elementary (A2) level, the frequency of pronoun omission increased resulting in a decrease in accuracy. This trend continued to decrease at the intermediate (B1) level, where learners across all groups were the least accurate. Errors began to resolve by the upper intermediate (B2) level, with scores mirroring those of the A1 group. By the advanced (C1 and C2) level, learners used pronouns with virtually perfect accuracy. In this chapter, I discuss possible theories to explain why L1 Chinese and L1 Arabic learners behaved so similarly. I also investigate reasons for the significantly lower accuracy scores in the Russian learners' group. Finally, I will look at the discrepancy is expected outcomes at the A2/B1 levels to diagnose the factors impacting the decline in accuracy at these proficiency levels.

Table 17. Comparison of results with previous studies

	L1	n =	Mean Accuracy
Orfitelli and Grüter (2013)	Spanish	17	96%
Mitkovska and Bužarovska (2018)	Macedonian	505	88.7%
Present Study	Arabic	960	86%
	Chinese	980	86%
	Russian	194	61%

As we can see in table 17, the results of the present study are roughly in line with those of similar studies which reported mean accuracy of subject pronoun production in different L1s. There are however, several obvious differences between this study and the ones reported above. One is that Orfitelli and Grüter (2013) and Mitkovska and Bužarovska (2018) only

investigated pronoun usage in a single L1. Crucially, the studies represent only one typology of L1: canonical null-subject languages. Compared to the present study, this limits the conclusions that could be made about subject pronoun use and omission, as not all NSLs license the pronominal paradigm in the same way. The results of the present study adds to the empirical data by serving as a point of comparison between the established, canonical NSL studies and non-canonical and partial NSL typologies.

Another important distinction is that Orfitelli and Grüter (2013) looked at pronoun omission in spoken production rather than in written production as in Mitkovska and Bužarovska (2018) and the present study. I contend that the results of written data drawn from corpora buttress the empirical data from elicited spoken production. The primary difference in medium is the spontaneity of the production in the face of an immediate interlocutor. Oral data occurs in real-time and is thus subject to additional processing demands than those involved in writing (e.g., semantic, logical, psycholinguistic attention, and memory constraints). One could assume then, that learners would be more error-prone in speaking given the additional constraints. It was noticed though that the study involving spoken production tasks actually had *higher* rates of accuracy when compared to those drawn based on writing. However, a study by Wallis (2014) compared the differences in written and spoken production of noun phrases in corpus data and found that there was no disparity in production patterns between the two modes. A number of similar studies have observed similar comparative outcomes. (Granger, Dagneaux and Meunier 2002; Granger, Hung and Petch-Tyson, 2002; Granger and Petch-Tyson 2003; Lozano, 2009). We could expect, then, that differences in written and spoken production are not only observable but comparable.

Sample sizes also varied significantly. While Arabic and Chinese speaking learners were equally represented, the same cannot be said for L1 Russian learners. Russians were far less represented in this study for a number of possible reasons to be discussed in the following section. Corpora such as the EFCAMDAT allow for large-scale sampling of L1 learner populations. This efficiency, however, comes at the cost of granularity. At the moment it is not possible to account and control for differences at the individual level. However, smaller-scale studies risk being equally unrepresentative on the basis of relatively limited access they may have to target populations. The present study is larger than Orfitelli and Gruter (2013) and Mitkovska and Bužarovska (2018) so the figures presented here are more robust.

However, that came at the cost of loss of detail in that I was not able to do the more detailed analyses of what contexts pronouns occurred in. On balance, the larger sample allows us to detect trends at a global level and can be supported by additional qualitative measures to account for individual variation.

These differences make between-study comparison difficult. Methodologically, however, all of the studies reviewed here ultimately draw their conclusions from a 'simple binary distinction of accurate and inaccurate' (Foster and Wigglesworth, 2016, p. 113).

5.2. The Role of L1

As far as the acquisition of English pronominal subjects, it was predicted that due to typological differences between the L1s, there would be some variation in the frequency and accuracy of pronoun use in the corpus data. While the results of this study indicate that L1 does impact whether a learner omits a pronoun in written production, the pattern of between-group similarities and differences is unexpected and somewhat difficult to interpret. The similarity in performance between the canonical (Arabic) and non-canonical NSLs (Chinese), as well as the relatively poor performance of the partial NSL (Russian), raises additional questions. This contrasts with the expected pattern whereby L1 Russian learners were expected to *outperform* the other typologies in the accuracy of pronoun production. The results show that the inverse is true.

Why is this pattern observed? Starting with the Arabic and Chinese – the canonical and non-canonical null subject languages- the high level of accuracy is in fact in line with similar studies which look at the production or omission of pronominal subjects (Orfitelli and Grüter, 2013; Mitkovska and Burovska, 2018).

Orfitelli and Grüter (2013) found that Spanish learners produced pronouns consistently and accurately in speaking elicitation tasks. This suggests that the null-subject parameter in Spanish does not transfer in English L2 development process. The researchers offer two theories related to L1 effect and proficiency effect to explain why transfer was obstructed. One is simply that *pro* does not transfer (Grüter and Crago, 2012). The justification for this is by shifting how *pro* itself is categorised. If we were to consider that pronominal subjects

represented by *pro* are lexical items instead of a feature of syntax, then transfer would not be expected since lexical items are not subject to transfer. This explanation implies that learners need positive evidence of pro-dropping from L2 input to assume that it is permissible in L2 production. In the absence of such evidence, learners would not assume null subjects are possible in the L2. But, the results of the present study dispute this theory as unlikely. If *pro* did not transfer we would have seen accuracy rates similar to that of an L1 English speaker as the null-subject parameter would be largely irrelevant. Since this was not observed in the data, it is necessary to look at the individual differences in each of the languages in this study (and the typologies they represent) to justify the relative lack of pronoun omission in L1 Arabic and L1 Chinese learners.

Arabic, like other languages in its typology, has a rich system of morphological agreement. Chinese, on the other hand, does not. What they do share is uniform morphological paradigms. In the literature review, it was explained that the distinction between null-subject typologies (canonical and radical) was of little consequence as long as the inflectional paradigms were rich or completely absent. The results of the present study would suggest that this variation between both languages makes little difference in determining whether a learner transfers their null subject in L2 production. Both of the aforementioned L1 groups performed with similar rates of accuracy, this was also generally true at each level of proficiency. These languages fit neatly within the Morphological Uniformity Principle (MUP) discussed in the literature review (Jaegilli and Safir, 1989). This is because overt subject pronouns, as realised in L2 English, do not need to be licensed and assume information which would have otherwise been recovered from syntax (Arabic) or discourse (Chinese). This effectively means that parameter resetting from uniform L1s to L2 English is a much more transparent process than vice versa. But as we saw in the results, the performance of L1 Russian learners diverged noticeably from their counterparts which suggests the MUP may be more vulnerable than originally thought.

It was initially expected that learners from an L1 Russian background would perform at a rate similar to L1 English speakers. As discussed in the literature review, Russian demonstrates a lack of morphological uniformity, which should make the licensing of null subject difficult. Given this assumption, a preference for overt subjects would be assumed in the results. Results indicated that this L1 was least accurate. This prompts a revisiting on the debate of

the status of Russian as a null-subject language to tease out a plausible explanation as to why they performed so poorly in comparison to other typologies in this study. It was originally stated in the MUP that Russian could not be considered a null subject language on the basis of its complex system of inflectional marking. Other theorists posited that Russian was a 'partial' NSL in that exhibits characteristics of both Arabic and Chinese. Russian has a rich and complex inflectional morphology like Arabic. But it also relies heavily on situational context in determining the appropriacy of null or overt subject.

But even if we assume that Russian is a non-null subject language (according to Birbauer's [2010] classification), one would expect the cases of pronoun omission in the present study to be closer to zero, as has been shown in the native/L1 English control groups in previous studies like Orfitelli and Gruter (2013), White (1985) and others. However, this was not the case. The L1 Russian group actually performed worse in overall accuracy than the other two language groups. This could indicate that discourse factors are imposing additional constraints on L1 Russian learners, or that there is something in the L1 interlanguage obstructing transfer. But these theories, as yet, do not fall under any unified framework in SLA. Jaeggli and Safir (1989) give only cursory treatment 'impure' NSLs (with only reference to Hebrew) in their work. And Hyams (1989) concedes that the concept of a partial NSL had not yet been formalised within the MUP framework.

From a syntax perspective, one possible explanation is that Russian learners produced fewer sentences with finite verbs. Instead, they may have been producing fully lexicalised noun phrases, which would not have been detected in the search algorithm. Another consideration raised by Müeller (2006) is that 'there is an asymmetry between 1st and 2nd person vs. 3rd person contexts, with the former ones permitting subject omission somewhat easier than the latter ones' (p. 6) We discussed similar asymmetries in other partial NSLs (Hebrew and Finnish) where the 3rd person was treated with more optionality than others. This too could also possibly explain why Russian learners were not as accurate given that the focus of this study was exclusively on the production of 3rd person pronouns. An alternate theory is that Russian learners may be *oversupplying* rather than undersupplying or omitting their pronominal subjects. This idea, however, was not tested in the present study. The literature suggests that pronoun choice is heavily dependent on context, and as such discourse and pragmatics must also play role in explaining productive choices in the L2.

The current scholarship on null subjects in Russian suggests that the null subject in this language is in a state of typological transition—from null subject language to non-null subject language (Meyer, 2011; Claudi, 2014; Luraghi and Pinelli, 2015, Madriaga, 2015). It was observed in Meyer (2011) and then later confirmed in Claudi (2014) that referential null subjects (3rd person singular in past and present tenses) have declined historically in written usage—especially in subordinate clauses. Corpus data suggests the overt subject is now the predominant, unmarked choice in Russian. Notwithstanding this, the null subject has of course not fully disappeared in Russian, and its use is governed by a complex system of licensing and discourse constraints. Essentially, the null subject in Russian has become the marked option for native speakers. This state of flux adumbrates an unstable morphology, much like that of English, but must also rely more heavily on pragmatic cues for pronoun interpretation.

The results of the present study then are largely consistent with the Interpretability Hypothesis (IH). IH posits that L1 null-subject learners, such as the ones probed in this study, rely on their L1 morphology in L2 production to produce many of their accurate utterances in the L2-initial state. Learners, however, are not expected to fully acquire English subject parameters. This reliance on L1 morphology goes a long way in explaining the accurate performance of L1s with a uniform morphology versus languages like Russian who do not. But the second clause of the hypothesis is less supported as learners had virtually no instances of pronoun omission at the advanced level.

The status of Russian, coupled with the similarity of performance in the L1 Arabic and L1 Chinese groups, may suggest that the null-subject/non-null subject dichotomy may not be a useful paradigm for the investigation of L2 transfer (Duguine, 2013; 2014). It also highlights the vulnerability of the MUP to accommodate languages that do not fit neatly into a binary parametric typology. Instead, it may be more fruitful to examine the discrete linguistic features of individual L1s in their treatment of null and overt subjects. The role of typology, then, may be less important in the consideration of L2 transfer.

5.3. The Role of Proficiency

The second hypothesis of this study was the L2 pronoun omission would decrease with proficiency. The results in figure 4 demonstrate that ultimately, learners do master pronoun use at the advanced level, but the trajectory is non-linear. Early relatively high pronoun production is consistent with Orfitelli and Grüter (2013) who found no instances of pronoun omission in their elementary group. However, the results from the logistic regression contradict their findings. Whereas Orfitelli and Grüter found proficiency was not a predictor of subject pronoun accuracy, we do. It was suggested by the researchers that learners undergo Very Early Parameter Setting (VEPS; Wexler, 1998) whereby learners quickly adapt to the overt-subject parameter very early in their L2 development. This may account for some the low rate of overall transfer. However, this theory does not explain the significant declines we see as learners advance through the proficiency levels before reaching the end-state. VEPS assumes that once the parameter is set, even at beginning levels of proficiency, instances of pronoun omission should remain virtually near zero throughout the developmental sequence. At the least, one could expect a linear increase in accuracy from A1 to C2, as seen in Mitkovska and Bužarovska (2018) who observed a negative correlation between proficiency and pronoun omission. That trend, though, was not observed in of any of the L1s in the present study where instead we saw a quadratic, U-shaped function. Looking at the patterns in the data reported in this study, it seems that proficiency plays a larger role in in predicting accurate pronoun use than L1 typology.

A study by Kizu (2013) investigated null-subject acquisition in learners of Japanese and found that there was no correlation between L1 typology and accuracy in producing null or overt subjects. This was done by comparing the written production of pronouns in obligatory occasions, both null and overt, in Japanese. Learners from both canonical (Italian and Catalan), radical (Chinese and Korean), and partial NSLs (Russian) to learners with a non-null subject L1 (English, German, Dutch, French) performed with similar accuracy. From this he surmises that ‘L2 learners’ understanding and performance concerning null subjects are more related to individuals’ proficiency levels than their L1’ (Kizu, 2013, p. 47). This was not included in the literature review because it deals with L2 Japanese where null subjects are, in fact, licensed. Nonetheless it offers additional support to the above argument, that proficiency and not L1 is a key determiner in obligatory pronoun use.

This study found that there were errors at all levels in written production except for those made by a single L1 Arabic learner at the C1 level. Learners with late elementary (A2) proficiency and early intermediate (B1) were the most likely to produce pronoun omission errors. The B1 group was particularly egregious. Interestingly, the four participants in the Orfitelli and Güter (2013) study who did produce subjectless sentences had a proficiency level equivalent to B1. This raises an interesting question as to why there was U-shaped trend rather than a linear one.

There are several possible theories as to why these two groups (A2/B1) fared poorly in the present study. One, as learners advance in proficiency, they tend to use longer, more syntactically complex sentences. Mitkovska and Bužarovska (2018) found that 'null subjects mostly occur in more complex syntactic environment[s] due to processing difficulties' (p. 480). Corpus data was drawn from learner writings produced during their EF Course. The tasks in each level become progressively more difficult as shown in the survey of topics in Table 18.

Table 18. Examples of essay topics at various levels. Level and unit are separated by a colon.

ID	Essay Topic	ID	Essay Topic
1:1	Introducing yourself by email	7:1	Giving instructions to play a game
1:3	Writing an online profile	8:2	Reviewing a song for a website
2:1	Describing your favourite day	9:7	Writing an apology email
2:6	Telling someone what you're doing	11:1	Writing a movie review
2:8	Describing your family's eating habits	12:1	Turning down and invitation
3:1	Replying to a new pen pal	13:4	Giving budget advice
3:2	Describe a friend's weekend routine	15:1	Covering a news story
6:4	Writing a resume	16:8	Researching a legendary creature

At the A1 level (levels 1-3 in the EFCAMDAT), learners will be producing simple and formulaic sentences—usually only referring to themselves and their immediate surroundings. By A2 (EF levels 4-6), they are introduced to and expected to produce more complex structures, involving varying levels of coordination and subordination between clauses and sentences. Sentence length has been linked to increased processing demands which leads to

pronoun omission—a phenomenon observed in (Orfitelli and Grüter 2013; Tsimpli and Sorace 2006; and Valian, 1991).

A second possible explanation would be the nature of the writing prompts sampled in the corpus. It was observed that particular units in the EF course were particularly problematic for learners. For example, level 3 (A1), unit 2 (table 15) asks learners to 'describe a friend's weekend routine.' This means learners would have been obligated to use a 3rd person pronoun in their descriptions. As a result, a large proportion of obligatory occasions came from this unit alone, possibly skewing the results towards learners in this level. However, this does not explain mistakes at the A2 or B1 level (EF levels 7-9).

A third possibility would be that learners may have skipped A1 and started directly in A2 due to placement test results. Following a placement test, learners begin at the first level of each stage (e.g., A2 starts at level 4, B1 starts at level 7, etc.). As the data is pseudolongitudinal, there is no way to account for prior learner knowledge, instruction, or English exposure. This means learners in this group are potentially more prone to having more gaps in their knowledge than other groups.

5.4. Limitations

There were several limitations in this study. Chiefly, they revolve around the use of corpora, methodological challenges, and practical constraints.

5.4.1. Corpus Approach

Corpora is an effective tool analysing learner language outputs, but it is not at all encompassing. Many learner corpora are still in their infancy and as a result are limited in sample size, languages covered, search capabilities, or information about learners as individuals. The EFCAMDAT is most likely the most comprehensive learner corpus on all of the considerations above, but there are some data this particular corpus and corpora in general simply cannot account for. First, one cannot assume that the data is fully representative of learners' language abilities. The writing samples aggregated in the EFCAMDAT do not assess the quantity or quality of L2 input a learner may have received prior to their contribution. Studies have indicated that performance is impacted by the length of exposure and frequency of input (Spada and Lightbrown, 2012). This was one of the reasons multiple

proficiency levels were sampled in the present study as I could partially control for this effect in the absence of any experimental data.

The second major limitation for corpora concerns the populations represented within them. Learner corpora (which contain samples of L2 English) rarely contain an equal distribution of L1s. It would have been potentially illuminating to incorporate other languages within the typologies observed in this study. For example, as far as descriptive statistics, the EFCAMDAT only collects the nationality of the learner. Information on individual differences such as educational background, gender, age, or bilingual status would have provided more variables to control for and more avenues to explore transfer issues in depth.

The pseudolongitudinal nature of the data poses another limitation in terms of validity. Ellis and Burkhuizen (2005) argue, 'the validity of pseudo-longitudinal studies is dependent on the validity of the measure used to group the learners' (p. 97). While much more practical than a true longitudinal study, pseudolongitudinal data comes at the cost of tracking developmental trends at the individual level.

5.4.2. Methods

Data Collection

A major limitation the data collection process was the inverse problem. There is no known string of word specifications which would consistently yield cases of null subjects. As a result, I was not able to perform a targeted search on subjectless sentences without using a complex search algorithm. For example, cases where the finite verb appears in a different position, such as mid utterance, did *not* appear in the search results (e.g., 'Normally, Ø is happy'). Though as the present and other studies show it can be done, learner corpora generally are not designed for this kind of research. This resulted in less-than-ideal precision, recall, F- and intercoder reliability scores in the search. Brattico's (2021) work toward solving the inverse problem with null subject arguments shows promise, but most solutions require extensive language of programming languages such as JSON, Python, and Java to effectively retrieve and parse the data. Incorporating tools such as these would lead to more refined search capabilities in further research.

Sample size

The relatively smaller sample size from the L1 Russian group skewed the overall distribution of accuracy scores. As discussed in a previous section, it was hypothesised that learners from the Russian group may not have been using finite verb constructions as widely as the other L1 groups. As a consequence, a large number of false positives were filtered out. This led to a smaller set of Russian learners which could be subject to analysis. Future searches without the condition for 3rd person finite verbs would have produced more results, increasing the potential sample pool for all groups, but especially for Russian learners. However, despite the disparity in sample size, differences in accuracy in the Russian group compared to the others were large enough to warrant additional exploration.

Discourse factors

Discourse factors remained beyond the scope of this study. Here, I strictly focused on whether or not a sentence contained a pronoun before a finite verb. The present study did not look at the specific discursive contexts or pragmatic conditions under which those pronouns did or did not occur. There is an extensive and growing body of literature which is examining the information status of the pronoun—that is, whether pronoun omission is more salient in discourse conditions such as topic continuation or topic shifting. This line of inquiry has yielded more answers on the role of discourse in L2 pronoun omission (as seen in Quesada and Lozano, 2020). In the present study, taking a closer look at different contexts could have provided an additional rationale for the performance of L1 Russian learners as discourse seems to play a major role in that groups' disposition for subject pronoun use.

5.4.3. Access to Learners

Corpus data only provides as limited picture as to what learners are truly capable of. The results of a corpus-based approach, then, should be supported by experimental data. The global pandemic (COVID-19) has meant lack of access to learners to obtain further qualitative and quantitative data. The present study could have benefited from interviews or grammaticality judgment tasks to provide a more holistic and dispositive account of null subject transfer. This means there was no experimental data in the present study and variables

for input, comprehension, or production tasks could not be manipulated. For example, if comprehension tasks such a grammaticality judgment or truth value judgement tasks had been employed, it would be expected that learners demonstrate higher sensitivity in the acceptance of subjectless sentences. This experimental data would complement data collected from the corpus writing samples and allow us to observe and compare patterns across a range of L1 typologies and proficiency levels.

6. Conclusion

6.1. Project Summary

The aim of this study was to investigate if L1 typology and L2 proficiency played a role in null-subject transfer. In the introduction, I laid out the fundamentals of Universal Grammar and the principles and parameters framework to develop a theoretical basis for how typology and transfer interact in the process of second language acquisition. This led to questions about whether the transfer of null subjects was fully possible in the absence of an equality of parameters in the language learner's first and target language. Previous scholarship had indicated that full transfer was possible. But the scope of this transfer continues to be contentious with most studies finding evidence to the contrary. However, these studies did not consider the influence of different null-subject typologies, very few considered proficiency as a factor, and even fewer turned to large-scale corpora.

Using the EFCAMDAT corpus, I looked at the rate of pronoun omission in three different types of null-subject language. The results of the present study demonstrate that L1 typology does play a role, but not in the way it was expected. Arabic and Chinese learners performed with nearly identical accuracy. Russian learners followed a similar pattern but were much less accurate overall. When proficiency is taken into account, we see a quadratic function across all L1s, where learners demonstrate a marked decrease in accuracy after the elementary A1 level and resolve after the upper-intermediate B2 level, and this also held for each language separately. This indicates an effect of both L1 and proficiency on L2 English pronoun use.

Overall, the imprimatur for null-subject licensing in the L1 seems to be the deciding between-group factor for predicting subject pronoun performance. The results from L1s in this study with uniform morphological paradigms were consistent with that of previous studies. The L1

without such uniformity, Russian, was the clear outlier. At a theoretical level however, it is questionable that only morphologically uniform L1s can license null subjects—as Russian learners clearly do this. This calls into question whether the canonical/radical distinction is a useful one for exploring null subject transfer. Instead, it may be a matter of uniformity. The data reported in this study opens up several avenues for future research on the influence of L1 on L2 acquisition, as well as other underexplored yet relevant variables.

6.2. Implications for Research

The present study has shown there is a clear desideratum to explore parametric transfer between L1 and L2 where the typologies are dissimilar. Corpus data continues to show promise in this regard by allowing large-scale comparison of crosslinguistic effects. However, the role of input and the use of null subjects in certain discourse contexts could not be accounted for. Further work in this area will incorporate experimental data to explore discourse factors and individual responses to input not covered in the present study. Experimental data would include comprehension tasks such as Truth-value judgement task (TVJ) to assess L2 learners' interpretation of null subjects in their interlanguage grammar. This would also be coupled with additional production tasks to counterbalance findings in the corpus data. Examples include contextualized preference tasks and/or picture verification tasks. Both tasks elicit authentic learner language and probe their productive choices within the pragmatic constraints of a discourse context. Understanding this allows for greater insight into investigating for typological effects of null subjects.

Looking at the quantity (frequency) and quality of input would also give a more holistic picture of transfer. It was noted in previous studies that there was a discrepancy between what learners accept and produce regarding null subjects (Orfitelli and Grüter, 2013; Mitkovska and Burovska, 2018). However, the empirical data looking at the role of input and transfer seems to be lacking. It is likely that there would be a correlation between frequency of input, proficiency, and L1 transfer. The data in the present study suggests that L1 transfer is largely halted at the advanced level of L2 proficiency. The quadratic function noticed between A1 to C2 however, suggests that this process of transfer is not straightforward. Therefore, controlling for the frequency of input would possibly explain the extent to which the effects of L1 transfer of null subjects can be mitigated. This can be instructional input in a

controlled environment or an inference from age of arrival in an English-speaking community and length of exposure.

6.3. Implications for Teaching

Without experimental data, the implications presented here are tentative. While there is no clear explanation for the performance of Russian learners, the most obvious takeaway is the decrease in performance in intermediate proficiency for all L1s. Based on this data, null subjects represent a grammatical challenge for learners, particularly at the A2/B1 threshold. This is most likely because learners are beginning to produce more complex sentence structures requiring subordination and coordination with subject pronouns at this level. As learners develop in their second language, it is important that teachers are aware of typological differences and how those differences impact language transfer. The present study makes the case that a learner's L1 does play some role in predicting the shape of their SLA trajectory. Teachers' awareness of L1 typology, then, could be harnessed to help learners develop their metacognitive capacity to notice, compare, and contrast structural differences between their L1 and L2 English. Teachers can adopt the comprehension and production tasks mentioned in 6.2, as well as translation tasks, to draw attention to how the null subject condition operates (or cannot operate) across languages.

As stated in the previous section, the frequency of input too, should factor in teachers' pedagogical decisions. Continued exposure to a target form eventually leads to perceptual salience. In the language classroom this means systematically and deliberately providing a variety of affordances to engage with subject pronouns. This could be done through extensive reading, retelling a story, or a simple gap-fill exercise (but ideally a combination of these and more) (Teixeira, 2016). All of these activities, coupled with feedback and error correction, can aid in preventing the full transfer of null subjects.

Broadly speaking, teachers should select, design, or employ more cross-linguistic resources that explicitly draw learners' attention to these typological differences, where possible. Ultimately the aim would be to help language learners not only acquire grammatical structure but acquire a better sense of how to use subject pronouns in syntax and across various modes and contexts in discourse.

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Appendix 1: Selected Scripts from L1 Arabic Learners in the EFCAMDAT Corpus

	Script	Correct
1	01 Bring ten plastic bottles and fill them with a little of water to make them heavier.line up those bottles in 4 rows to make ten bowling pins .	y
2	02 Ahmed go work evry morning make lunch every afternoon surf internet every night watch movies on sunday	y
3	03 Suggested I write to you today home remedies prepared at home from the recipes of my grandmother and the reason why I write these recipes to you today is that people these days want something reliable and user tested and non-chemical and non-costly in terms of material and ensure hygiene in the manufacture , preparation and a fast-acting and a little time and my grandmother was .	y
4	04 Suggested I start a description of the first treatment we have is : for high-fever : you should wear socks soaked in vingar ana thyme , it 's good for both adults and juniors it 's easy and Effective.the Second treatment we have is : for asore throat : aspoonful of honey and ginger , it 's good only for adult and it 's also easy and effective.the third treatment we have is : for the immune system : garlic crushed with lemon and acerola is very great for it , and it 's good for both adults and juniors .	y
5	05 set the table at 6 pm .	n
6	06 Feed dogs at night everyday .	n
7	07 Setting : 1859/ London .	y
8	08 Comparing the situation before and after the French revolution .	n
9	09 Making disaster kits .	n
10	10 Donating blood .	n
11	11 Locating temporary shelters .	n
12	12 Gathering supplies .	n
13	13 Recruiting and mobilizing volunteers .	n
14	14 hit the ball to the other team .	n
15	15 Setting : Louvre museum -LRB- Paris , France -RRB- Main characters : Robert Langdon , Jacques Saunire , Sophie Neveu Plot : The curator of the Louvre Museum in Paris is murdered among a number of mysterious clues , codes , and ciphers .	y
16	16 Searched for the purposes of precious did not find it .	n

17	17 cooking live .	n
18	18 Swimming : 1- Do n't play alone .	y
19	19 is that new job	n
20	20 Morning Glory directed by Roger Michell .	y
21	21 Waled can you buy a can of peas .	y
22	22 Said one of zoologists in the description of the monkey : an animal is ugly , handsome , quick understanding of learning the trade .	y
23	23 Concerning the Sales Figures of the 'Manbag ' in Asia and South America .	y
24	24 MethodologyInterviewed 1000 Persons from Rio de Janriro and 1000 Persons from Shanghai .	y
25	25 Covering all the demographics and questioned them as to their responses to the 'Manbag'.Findings -In	y
26	26 Assigning work schedules to team members to ensure efficient customer services by providing timely support .	y
27	27 Ascertaining application of organizational policies and procedures and monitoring performance of team members as per company standards .	y
28	28 Goodmorning sir ...	y
29	29 Playing too much .	n
30	30 Waiting to hear from you .	y
31	31 Losing you as a colleague will be such a huge loss .	y
32	32 writing reports .	y
33	33 2-Scoring for table tennis fairly simple.a point is scored if either opponent hits the ball more than once , hits ball off the table , lets the ball bounce twice on their side or is unable to make the ball over the net .	y
34	34 Standing before you is Mrs. Asia Shraim , from the Far East .	y
35	35 Having a mixture of romance , action & fantasy ; this movie proved to be interesting & entertaining .	y
36	36 Published in 29 June 1997 21 July 2007 -LRB- initial publication -RRB- .Story timeline : 13 June 1943 31 July 1992 29 May 1993.Preceded by : Harry Potter and the Philosopher 's Stone .	y
37	37 Followed by : Harry Potter and the Prisoner of Azkaban .	y
38	38 Takes the dogs for walk twice a day .	n
39	39 regarding my feedback of the meal I had today in the restaurant : The taste of meat was goodI had n't taste any of the fried potatothe quantity of food was average the cooking of meat was welldonethe service of the cast was not so rapid	y

40	40 regarding subjects I like to study , I 'm an engineer and a business man and I want to study about construcion fields , trade , contracting conditions and negotiations , travelling , booking hotels and air tickets and my hobbies are swimming , fishing , decoration and painting .	y
41	41 Besed on Tawfik El-Hakim 's novel carrying the same name , the film 'Cairo 30s ' ia a masterpiece of cinema .	y
42	42 Reading is a must .	y
43	43 Facilitating team meetings , negotiating win-win outcomes , beeing assertive and motivating to excellence .	y
44	44 Finding : Pay Package-Most of the employees are content with the pay package , retirement pacakage , vacation days , and sick days .	y
45	45 Coming to the actual facts , in 15 to 19 year-old women , 29 % purchase at least one magazine a month , whereas , 69 % prefer magazines to blogs .	y
46	46 Featured Painting used greens , grays , ochers and brown colors .	y
47	47 -being assertive , expressing yourself tactfully and clearly -asking for help whenever needed -making your house a comfortable place , with few green plants , enough natural light .	y
48	48 Considering my future and my job perspective I am sure Test of English for International Communication is best suited for me .	y
49	49 Setting : Tsunami hit area , hospital , residential area .	y
50	50 Analyzing the situation : Two negative behaviors occuring - client 's and her daughters .	y
51	51 Looking for a job I am a person with a bachelor 's degree in Business Administration I have an experience for 3 years working as assistant of director in a bank , and i 'm efficient , motivated , sociable I have a highly skilled work in banks , I have many testimonies of administration , I have more than one language ,	y
52	52 Bring ten plastic bottles and fill it some of water to became heavier .	y
53	53 Looking for full part job .	y
54	54 Followed by sharp increase in sales in 2007 .	y
55	55 According to the saying Eating fish makes you smarter	y
56	56 Im 27 on Saturday .	y
57	57 Setting : Fourth edition , 2008 .	y
58	58 Regarding to this song .	y
59	59 is so exaiting at all	n
60	60 Plays guitar every Thursday in evening .	n

61	61 Sets the table in the morning .	n
62	62 Watering the plants and washes the dishes , at 8.0am .	n
63	63 Checking water for the birds , on Tuesday and Thursday .	n
64	64 Camping : Most visitors to the music fastival sleep in tents .	y
65	65 Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 .	n
66	66 It'often used in connection with family and friends , but also with famous people .	y
67	67 Sounds like a great idea - pactice doing job interviews to help you get used to the type of questions asked - careers fairs , a good opportunity to meet potential employers - Get out into the world and learn about another culture -LRB- take a gap year -RRB- - a work placement during the university break is a great way to get experience - volunteering is a good way to'improve a CV , Peace Corps sounds interesting	y
68	68 Looking forward to hear from you .	y
69	69 Ahmed is my friend .	y
70	70 Owning the house give me a sense of stability .	y
71	71 plays basketball every afternoon .	n
72	72 Plays computer games at 6 pm .	n
73	73 Sets the table at 6 p m. You .	n
74	74 waiting for your replay .	y
75	75 Waiting you .	y
76	76 Training in meditation , breathing techniques , muscle relaxation etc , .	y
77	77 lets roll .	y
78	78 I'ed like to invite you to my birthday party .	y
79	79 Im 40 on Saturday .	y
80	80 talking a bout your work and your live .. nice to meet you Anna Moroj	y
81	81 Plays computer games at \\every sfternoon .	n
82	82 Assisting in the preparation of statutory accounts.preparing profit and loss statements and monthly closing accounting report .Managing ad-hoc administrative functions .	y
83	83 's so nice that you learnt from your experience .	y
84	84 Sounds like a great idea .	y

85	85 Working holidays accommedation - land scape garden .	y
86	86 TRANSLATOR.Displayed in 3 sizes .	y
87	87 Setting : 2007-2008 / Riyadh -LRB- Saudi Arabia -RRB- Plot : How to Development your self with anybody : : :

110	110	Interested in Math 's calculations .	n
111	111	Divid to two teams every team contains 11 players .	y
112	112	Stunning and affordable appartments for sale .	y
113	113	Plays computer games at 6 pm .	n
114	114	Computing : Word , PowerPoint , Excel .	y
115	115	Looking forward to hearing from you .	y
116	116	mu sister and I. my mother is 65 years old and my father is 70 years old .	y
117	117	Feed dog again at 5 P.M..Let dog drink water everymorning .	n
118	118	Plays computer games at 6pm .	n
119	119	Sets the table at 6pm .	n
120	120	plays computer games at 6pm .	n
121	121	watches movies on Saturday at 5pm .	n
122	122	sets the table at 6pm .	n
123	123	Setting : Spain Main characters : Hours Carmen was riding her house when a snake appeared .	y
124	124	Were inviting thirty people .	y
125	125	Were all giving gifts .	y
126	126	Wishing you all the best .	y
127	127	Makes dinner at 5pm .	n
128	128	Sets the table at 6pm .	n
129	129	Mops the floor once a week .	n
130	130	Makes the dinner at 7pm every day .	n
131	131	Sets the table at 7 : 30pm .	n
132	132	Washes the dishes again after we finished dinner .	n
133	133	Reading on sofa in the living room .	n
134	134	Went to the hospital and took some medicine , which he described his doctor Safety Mike O Byee .	n
135	135	coming an other time .	n

136	136 plays basketball every daywalkes the dog in the morningmops the floor every daydoes laundry on saturday afternoon.set the table at 6.30pm .	n
137	137 Thats my adventure in Hurgada .	y
138	138 Wishing above research results useful to you and for and further information kindly contact us .	y
139	139 Wishing to approach it and proof it before 2020.Regards ,	y
140	140 Wishing to received your approval for my government sponsorship Regards	y
141	141 Pointing your finger4 .	y
142	142 Compared to them I have one TV in the house , and the number of hours watching television between 5-15 hours in week , and I always watch the news and movies and sitcoms , categories age 19-30 but I love watching the news .	y
143	143 Looking forward to seeing you .	y
144	144 Achieved one point is scored for each pin that is knocked down .	y
145	145 Thanking you .	y
146	146 Igraduated in 2005 .	y
147	147 Studying English as a second language needs a lot of effort , progress charts and planning strategies , specially in studying vocabulary .	y
148	148 Using a Thesaurus also is extremely useful , where you can find the synonyms for the new vocabulary .	y
149	149 Waiting for your coming .	y
150	150 Washing the dishes and making the beds were my daily routine for days you did n't .	y
151	151 WOW it was so scary .	y
152	152 StuartConcerning the Sales and Figures of the 'Manbag ' in Asia and South America .	y
153	153 Plays basketball everyday in the evening Lama ,	n
154	154 Setting : 1954/ Beirut -LRB- Lebanon -RRB- .	y
155	155 Phishing , Attackers pose as one of your legitimate social networking connections and try to lure you into providing sensitive information , such as your login Data Loss Its common for people to inadvertently post confidential information .	y
156	156 Marked an area 8 meters x by 3 meters .	n
157	157 Looking forward to hearing from you the soonest .	y
158	158 Dated : 27-11-2011 My name is Ash and I 'm finding a new job .	y
159	159 Were from Saudi-Arabia , but my I live in medinah .	y

160	160	Waiting for you my friends .	y
161	161	saudi with my mother and father .	y
162	162	Allowed : -You should wear formal dress .	y
163	163	-Led a team of 60 employee .	y
164	164	Is very nice city	n
165	165	Has skirt and blue shirt .	n
166	166	Has a gray jacket .	n
167	167	Has a pink shirt and black skirt .	n
168	168	Thats my routine .	y
169	169	Thanking you , Tasneem	y
170	170	Looking forward to see you all there .	y
171	171	Looking forward to seeing you .	y
172	172	Graduated from marketing diploma in 2007 .	y
173	173	leaded a small team of 4 .	y
174	174	Waiting for your reply man , Ossama	y
175	175	Taken by : Sally	y
176	176	Bowling alley : line up ten bowling pins , in rows of 4 , 3 , 2 , and 1 .	y
177	177	Looking for a great opportunity in Manufacturing .	y
178	178	going washing and eating .	y
179	179	made the beds and in the evening I did shopping .	n
180	180	Blowing around ' .	n
181	181	Accompanying Bobbie 's vocals are Jon Ferham on guitar and Josh Goppler on drums .	y
182	182	Meeting with Head of Global IT. Wednesday June 3rd - 9am .	y
183	183	Meeting with UK marketing team .	y
184	184	Meeting with star sales people .	y
185	185	Interesting because i learn the Student , But it is very difficult too .	y
186	186	Waiting for your call on # # # # # # # #	y

187	187 Talking about your launch you may be replace buing a meal by a home made delicious sandwiches .	y
188	188 using ten plastic bottles the bottles are lined up in row of 4 then 3 then 2 then 1 shot frisbee two times on each turn for 10 turns try to knock all bottles	y
189	189 developments me , i hope to go to the college	y
190	190 building No. 5 , Floor No. 20 , apartment 207 .	y
191	191 Looks like youve found the right place to live in , with a fascinating rustic-styled house in the Pacific Heights .	y
192	192 Works party venue My budget is 10 , 000 .	y
193	193 Collecting Seashells Make sure your child has his beach bucket with him .	y
194	194 Khaled bringing juice , cola , tea and water .	y
195	195 Searching for job in IT field , network administrating , web development , project management .. I have 5 years experience in retail company and 2 years in education center .	y
196	196 Planned and conducted traning and development of team .	y
197	197 Bring some instant coffee at work and have a hot drink while preparing for your day.- Start cooking your lunches at home .	y
198	198 Waiting forward hearing your comments .	y
199	199 Taking into consideration all facts above I consider TOEIC to be more suitable for my purposes since I 'm going to be a job applicant soon .	y
200	200 's easily the most exhilarating thing you can do .enjoy it .	y
201	201 khaled do not hate anything .	y
202	202 went on holiday with my family for the first time ,	n
203	203 Wearing black sunglasses and blue shirt .	n
204	204 Is there a vacancy for your work according to my qualifications .	y
205	205 Computing : - Experienced user of Microsoft Office 2010 .	y
206	206 Setting : 2000- Jeddah -LRB- KSA -RRB- .	y
207	207 Watching TV is good for improve my knowledge and information .	y
208	208 swept the floor , mopped the floor , washed the dishes , made the beds , and did the shopping on Saturday .	n
209	209 Knocked down the pins and score one point for each pin .	n
210	210 Respecting this code is a part of your work .	y

211	211 SHOPPING ONS A WEEK IMOP	y
212	212 lets dance , sing , eat , and drink .	y
213	213 Looking forward to hear from you positive response .	y
214	214 Watching movies rise up in ages between 31-45 as well as in ages above 60 , I do n't surprised when I saw that the women have a high mount in seeing romance movie .	y
215	215 Waiting for you .	y
216	216 Waiting for you .	y
217	217 Marked as the `` bowling alley '' .	y
218	218 Kaled is macking Chicken sundwiches and bringing water and wine .	y
219	219 desigened to be easily hand held as it comes in the size of cigarette box with 20 ozs weight .	y
220	220 comes for the price of 270 $.	y
221	221 Regarding your qoustions about monkeys I want to tell you that monkeys are beautiful and friendly.also they are playful and intersting to watch .	y
222	222 Regarding to the last presentation you asked me to send an email to you about first part of the presentation which was about the history of the company .	y
223	223 Concerning the Sales Figures of the 'Mannbag ' in Asia and South America .	y
224	224 Regarding to meeting with Jed 's team .	y
225	225 Sets the table at 6pm .	n
226	226 Turns out it was a wig , the woman was a teenage boy .	y
227	227 prepares the childs school 's waring every day .	n
228	228 cleans bedroom on sunday .	n
229	229 makes coffee every morning .	n
230	230 Looking forward to hearing from you .	y
231	231 1.Making a fantasy CV !	y
232	232 Waiting for you .	y
233	233 Waiting to hearing from you soon .	y
234	234 Were inviting Thirty people .	y
235	235 Looking forward for your reply	y

236	236 Khaled bring with him for this party 30 chicken sandwiches , 40 water and 30 wine .	y
237	237 Starring Julia Roberts and Richard Gere .	y
238	238 Im 32 on Saturday .	y
239	239 shopping every night on sunday .Set the table at 6 p.m every day .Do gardening at the morning once aweek .	n
240	240 Living in the forest .	n
241	241 staying five days there .	n
242	242 Takes the dogs for a walk twice a day , but if it 's ringing the play games .	n
243	243 Takes out the trash once a week .	n
244	244 Said I should stay at home .	n
245	245 sneakers $ 79.00 9.0 T-shirt $ 30.00 M shoes $ 59.00 9.0 sweater $ 69.00 S belt $ 29.00 M pants $ 39.99 L shirt $ 30.00 M	y
246	246 Boarding pass - given to you by the flight attendant at the airport .	y
247	247 Sets the table at 8pm .	n
248	248 dears all employees ; all employees must follow the dress code at all times when they are in the company.men can wear suits and ties or jeans and shirt , but it must be are n't too short , tight , baggy or loose women can wear dress or jeans and shirt , but it must be are n't too short , tight , baggy or loose we want to see more natural fabrics and cotton and etc.thank you , , ,	y
249	249 goes shopping at 3 : 00 pmAt 8 : 00 pm he goes to the cinemaAt 10 : 00 pm he goes to bed	n
250	250 Lined up the bottles in rows of 4 , then3 , then2 , then1 .	n
251	251 Setting : 1975 , Egypt .	y
252	252 Shoes office dress code .	y
253	253 Scored one point for each pin that is knocked down .	n
254	254 Wearing socks soaked in vingear , olive oil , and eucalyptus on aches and pains .	n
255	255 is Saudi Arabia , I live in Dammam , and married I have one child , I learn English to get a job .	n
256	256 Were spending two days in Rome .	y
257	257 Khaled : he like beef and soup but he does n't likes vegetables .	y
258	258 Plays computer games at 6pm .-	n
259	259 Were in California .	y

260	260 Taken by : Lucy	y
261	261 Wished me a great success .	n
262	262 Located in Manchester .	n
263	263 finishing at 4 pm .	n
264	264 mohammed , there are 30 pens and 15 pencils in the office .	y
265	265 Goodmorning , my fellow students .	y
266	266 Lets me know , see you soon .	y
267	267 Looking forward to receving an email from you .	y
268	268 Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 .	n
269	269 regarding the company party , Sam to book a table 20th of this month , all action for. -LRB- next week meeting -RRB-	y
270	270 does her homework at 5pm .	n
271	271 plays with her dolls at 6pm .	n
272	272 feeds the turtle twice a day .	n
273	273 Sounds great , yes i can surfing , and i like scuba diving because it 's interesting , We can go togather .	y
274	274 According to the advertise we suppose to see quite view and suppose to be new ship and super comfortable .	y
275	275 Wishing you to accept my apology .	y
276	276 Im thirty years old .	y
277	277 Were from Saudi Arabia .	y
278	278 Used 10 plastic bottles as the bowling pins and they should be filled with little water to make them heavier .	n
279	279 Working as a zookeeper with some of the most spectacular animals in the world , and being in charge of preparing food for our animals and feeding them on a daily basis .	n
280	280 living in kingdom of saudi arabia in riyadh city .	n
281	281 Preparing the departments operational and five-year plan.2- Preparing quarterly operational budget follow-up reports.3-	y
282	282 Looking forward to hearing from you very soon .	y
283	283 Lined up the bottles in rows of 4 , then 3 , then 2 , then 1- just like ten-pin bowling .	n
284	284 Waiting your feedback	y
285	285 Thats the reason why Century has managed to be one of the top three watchmakers worldwide .	y

286	286 Turns out it was a wig .	y
287	287 Marreied and I have one baby .	n
288	288 Bring some fish and some tomatoes .	y
289	289 Bring some deserts .	y
290	290 waiting to hair from you	y
291	291 Plays computer games at 6pm .	n
292	292 Sets the table at 6 pm .	n
293	293 Im 32 years old on Saturday , April 2rd .	y
294	294 Concerning the sales figures of the `` Manbag '' in Asia and South America .	y
295	295 regarding `` Manbag '' sales figures in Asia and South America .	y
296	296 Setting : 2000/Paris -LRB- France -RRB- Main characters : Lila , Salem Plot : They experienced a hard time when they lived away from each other because they fell in love , but after one year they met and they got married .	y
297	297 Shoes $ 99.00 L T-shirt $ 30.00 M Belt $ 20.00 S Dress $ 70.99 L Pants $ 84.90 S Jeans $ 62.00 M Jacket $ 80.00 L Sneakers $ 98.22 M	y
298	298 Bring lots of gifts !	y
299	299 Wishing you all to have a nice day !	y
300	300 Looking forward meeting you again and learning of all your views , suggestions and concerns .	y
301	301 Stting : canada 2005.Main characters : Jene , Maria .	y
302	302 Created and taught specialized IT teaching courses in the university .	n
303	303 Spring my favorite season .	y
304	304 Does his homework at 6pm .	n
305	305 plays computer games at 7 pm every evening .	n
306	306 watches movies on sunday at 8 pm .	n
307	307 sets the tabel at 7 pm .	n
308	308 Were spending three days in Algeria .	y
309	309 Were staying in a five stars hotel .	y
310	310 Plays computer at 6pm in the , everyday .	n
311	311 Does gardening in the .	n

312	312 Sets the at 6pm every evening .	n
313	313 Were in Oslo .	y
314	314 Wearing socks soaked in vinegar and thyme for fever .	y
315	315 InSpring , It 's worm and cloudy .	y
316	316 Receiving team : try to stop the balloon hitting the ground on your side .	y
317	317 notes that 's my saving is allowed me to afford paying for the mortgage .	y
318	318 Making tea of ginger and raspberry leaf or chewing it , well help any kind of nausea like travel sickness or morning sickness .	y
319	319 Is there anything else I should be aware of ? Thank you for your clarification .	y
320	320 Waiting for your reply .	y
321	321 Lined up the bottles in rows of 4 , then 3 , then 2 , then1 , - just like ten-pin bowling .	n
322	322 brening the 30 peer and 10 cool drining and also prening cd for music rock or dance and also we need make so chooclates for gairls which her coming our party and we thank all people coming my party	n
323	323 Im thirty years old .	y
324	324 Im thirty years old .	y
325	325 Takes two more shots and added togther	n
326	326 Setting : 1993.Main characters : Khalid , Hiat .	y
327	327 Gives each player a frisbee and allows him to take two shots on each turn .	n
328	328 laughing out loud .	y
329	329 plays the basketball every day .	n
330	330 reads newspaper on friday morning .	n
331	331 watches TV every evening .	n
332	332 Im 27 on Saturday .	y
333	333 watches movies on Saturday .does gardening in the morning feed the dog at 5 pm every daywalk the dog in the afternoon set the table at 6pm .	n
334	334 Igraduated at 2002 .	y
335	335 Plays guitar every day .	n
336	336 Limiting employees share online - social engineering. - company 's and employees ' reputation .	y

337	337	Takes breakfast at 8 : 30 am .	n
338	338	Divided into two group .	n
339	339	Thanking you .	y
340	340	Hitting the bottles by frisbee .	n
341	341	is married .	n
342	342	is thirty-two years old .	n
343	343	Sets the table at 5 : 00 PM.Study English every day at 8 : 00 PM.Does the gardening in the morning .	n
344	344	Goes to shopping once a month .	n
345	345	Im 20 on Saturday .	y
346	346	Were inviting twenty people .	y
347	347	Were all giving gifts for Abeer so , from the best your to bring one for her .	y
348	348	going to option 1praice too highbe sure it 's suitableour bottom lain $ 10 , 000.food and drink not our priorities	y
349	349	Regarding to what subject I would like to study	y
350	350	needs your assistance .	n
351	351	HOOPING YOU SAFE !	y
352	352	12-during your session at work have you ever been dismissed from any social activity of your institution 12-have	y
353	353	Washes the dishes and dry .	n
354	354	Makes gardening every week .	n
355	355	Walks the dog every day .	n
356	356	Washes the dog fur on Saturday and taks him to the bed at 7o'clock evening .	n
357	357	Looking forward to hear from you soon .	y
358	358	Regarding the purchasing power it is greater for men than for women .	y
359	359	Singing by Josh Woodward .	y
360	360	made ? ? of wood , Golden Copper and Crystal .	y
361	361	Beginning of the door to the roof .	y
362	362	Developed a sofa white to rest .	n
363	363	Working as Network Enginer in the General Administration.1 .	y

364	364 developing the system in the Ministry of Difinse .	y
365	365 Working as database engineer in OS -LRB- operation system -RRB- Debartment. 1 .	y
366	366 Planning and design new exchange .	y
367	367 Attended four courses , each of three months in customers relations2 .	y
368	368 Opening new accounts.3 .	y
369	369 Willing to travel at anytime .	y
370	370 Turned out , we did n't get the time right because of the time difference .	y
371	371 Lived all thir lives happy and gave birth to children -LRB- maha and sandra -RRB- .	y
372	372 Plays computer games at 7am .	n
373	373 Dealing with animals considered to be one of the most exhilarating things you could ever do in your life .	y
374	374 is xxx @ hotmail.com thanks teatcher	n
375	375 plays computer games on the evening .	n
376	376 mops the floor every week .	n
377	377 watches TV at 8pm Me go jogging every day .	n
378	378 set the table at 5pm .	n
379	379 Greeting , This email to intrduce my self to you .	y
380	380 Bring ten plastic bottles and fill them with little water to make them heavier so you can use them as bowling pins .	y
381	381 Bulding No.8 Appartment 9 on fifth floor .	y
382	382 boots $ 79.00 g.oshirts $ 30.00 Mshoes $ 59.00 g .ot'shirt	y
383	383 Were from the Egypt .	y
384	384 Managed a team of 12 salespeple .	y
385	385 Planned and conducted .	y
386	386 Goning on busness tripPersonality : . Outgoing .	y
387	387 Describing yourself : I 'm tall and slim .	y
388	388 having breakfast at 6 : 30a.m.go to school at 7a.m. sets the table at 1 : 30p.m.having lunch at 2p.m. do my homework every day at 4 O'clock.watch movies on friday at 5p.m .	n
389	389 Requesting the loan and paying it back I wish to be considered for a loan changes .	y

390	390 working as nurse in hospital in Saudia Arabia .	y
391	391 Focused on the goal .	y
392	392 Camping Most visitors to the music festival sleep in a tent , a sleeping bag , a backpack , soap and towels , bottles of water and toilet paper .	y
393	393 3-Developing the spirit of cooperation among them .	y
394	394 plays basketball every afternoon .	n
395	395 plays computer games at 6pm .	n
396	396 sets the table at 6pm	n
397	397 Setting : Spain .	y
398	398 Ehab at xxx @ gmail.com or # # # # # # # # - # # # - # # Sincerely M.Mostafa General Manager steel link	y
399	399 Setting : Egypt , 1926 .	y
400	400 played by james stewart .	y
401	401 looking forward to hearing back from you .	y
402	402 Loving you .	y
403	403 Loving you .	y
404	404 Computing Powerpoint , Access , Outlook .	y
405	405 Mastering the English language will help me in my studies and in my future .	y
406	406 is stay here with me and sleeping 7 hours best regards atta california	n
407	407 Playing Table tennis , keep your eye on the ball .	y
408	408 hit the ball when the opponent throw it to you .	y
409	409 playing Throw ball , divided in two teams .	y
410	410 Waiting you email .	y
411	411 Waiting for the good newes .	y
412	412 Trying to get work experience by getting internship or volunteer work to make friends and be able to work in a team and to become an active and positive person .	y
413	413 Accustomed to working in fast-paced environments with the ability to think quickly and successfully handle difficult clients .	y
414	414 Completed two real estate courses during the last five years while working full-time .	y

415	415	Passing the state test for agent licensing in New Mexico and becoming a broker in Florida .	y
416	416	Working part time as a Realtor during this time .	y
417	417	Willing to relocate and travel .	y
418	418	Ignoring work duties or wasting time during working hours .	y
419	419	Using company equipment with no autherised manner .	y
420	420	Is really amazing city .	n
421	421	Enclosed my monthly bank statement and list of expenses .	y
422	422	Looking forward to hair form you .	y
423	423	Playing the guitar instrument .	n
424	424	somthing I thing glass cup boutdawn it is proken pehaind my .I am said wow .	y
425	425	regarding me I feed the dog at 8 am and 5 am every day and walk the dog in the afternoon .	y
426	426	waiting you on time at 5 Yellow st .	y
427	427	Was really cool .	n
428	428	Wishing you luck and happy .	y
429	429	Wrote by : Saleh Aldayel	y
430	430	Knowing that in Color .	y
431	431	Lined up the bottles in raw of 4 , then 3 , then 2 , then 1 .	n
432	432	Im thirty years old .	y
433	433	Im thirty years old .	y
434	434	pls techer send me the mistek i do .	y
435	435	Sounds perfect for reasonable because it 's costs or rates for per day 50 dollars .If	y
436	436	Ineed to learn English for my job .	y
437	437	washes the dishes every day .	n
438	438	Does the homework every night at 8 pm .	n
439	439	Was a strange sense	n
440	440	Stunning landscaped garden .	y
441	441	Turns out it was a wig and the young woman wasnt a young woman at all , but a teenage boy .	y

442	442 captives House Alawhitoicon only savior Butler .	y
443	443 Wishing you a happy holiday .	y
444	444 Regarding the launch that we had together last week .	y
445	445 including a child annoying and one-year old because aadni learn englich language .	y
446	446 Guys the online catalog has Amazing clothing offers .	y
447	447 Waiting for you	y
448	448 Plays computer games at 6 p.m. in the evening .	n
449	449 Sets the table always at 6 p.m. in the evening .	n
450	450 sounds spectacular , huh ? !	y
451	451 Marketing with firm working with clients in several based industries .	y
452	452 Organized in location of work .	y
453	453 Ahmed for ten years at Albilad Bank Mr. Ahmed was a shift leader on data center operation at Albilad Bank .	y
454	454 plays computar games at 7 p.m once a week .	n
455	455 watches moves every day .	n
456	456 is live jedah .	n
457	457 Sitting : 1988 / Spain , Morocco and Egypt .	y
458	458 Takes the dogs for a walk twice times every day 8 : 30 AM and 8 o'clock PM. Do n't walk when the sky rainy but play games .	n
459	459 Takes out the trash every Tuesday night .	n
460	460 Setting : 1996 Cairo , Egypt Main characters :	y
461	461 Was a beautiful country .	n
462	462 Wishing you the best of luck .	y
463	463 ameeting room , afew reast room .	y
464	464 Is there a problem if i use ``	y
465	465 Is there free wireless internet .	y
466	466 worked with her for 7 years .	n
467	467 Making the period of employee eligibility for advance package 18 months instead of 2 years 3 .	y

468	468 Providing continuous feedback over the course of the year 4 .	y
469	469 Looking forward to your reply .	y
470	470 Inspired by Picasso and Braque in Paris - Uses geometrical forms - Often shows multiple viewpoints of one figure Featured painting : Le Jour , by George Braque , 1929 - Still life done in green , grays , ochers and browns - Objects are fragmented , as if seen from multiple viewpoints - On the other hand , the composition is well-balanced - Exhibit dates -LRB- Oct 1st - Mar 31st -RRB-	y
471	471 Waiting for me .	n
472	472 Does the laundry and ironing on Sunday morning .	n
473	473 Makes dinner at 6 pm and sets the table at 7 pm .	n
474	474 Worked there for more than 18 years , and his name Title -LRB- Reid -RRB- my father loves his work so much and this his first work and was still working so far.my father works 7 hours per day	y
475	475 Gathered I and my friends at my house and we watched film	y
476	476 Graduated from college and I was 22 .	y
477	477 Looked on the job , but I did not find , you study the language of English EF .	y
478	478 Received during the week only .	n
479	479 Known as a tourist town .	n
480	480 Located in the city of Jeddah , and overlooks on Red Sea .	n
481	481 regarding to the women high educated some men afraid from marrying here except if he is also educated and open mind .	y
482	482 is that being cooperative with all members of your team .	y
483	483 Studying for getting bachelors needs 16 years of studying beginning from 6 years in elementary school , 3 years in middle school , 3 years with high school , and finally 4 years in university .	y
484	484 bruised my leg and sprined my head .	n
485	485 Playing My Saxophone I 'm really into playing my saxophone .	y
486	486 Has a lot of tall buildings .	n
487	487 Starring Arnold Schwarzenegger , Michael Biehn and Linda Hamilton .	y
488	488 Worked in agriculture and fishing .	n
489	489 Having a picnic going on hikes and swimming are very popular .	y

490	490	has fresh fish and salad good and breakfast is very good not expensive .	n
491	491	Bring 6or 8 chairs and lap top witw loud speaker .	y
492	492	Playing My Guitar I 'm really into playing my guitar .	y
493	493	Laying back on my cloud , floating and relaxing , i fall asleep with a slight smile on my face .	y
494	494	Organizing databases .	y
495	495	starring Hrithik Roshan and Aishwarya Rai in the lead roles .	y
496	496	Having a picnic , hiking , and swimming .	n
497	497	plays computer at 6p.m.in the eveningeveryday .	n
498	498	watches movies on saturday at5p.m in the after noon granny Does laundry on tuesday in the after noon .	n
499	499	According to this engineer he can fix all the problems we have easily .	y
500	500	Getting the dance music all night .	y
		Total	158

Appendix 2: Selected Scripts from L1 Chinese Learners in the EFCAMDAT Corpus

	Script	Correct?
1	01 Is very untidy .	n
2	02 Packing : Kamax brand color box .	y
3	03 Looking forward to your reply soon .	y
4	04 Dear All I am planning a party on Thursday 6th may , 1pm .	y
5	05 I'taking a tent , T-shirt and shorts .	y
6	06 Looking forward your favorite reply .	y
7	07 does his homework on Monday to Friday .	n
8	08 plays computer games in the evening on Saturday .	n
9	09 goes swimming once a week .	n
10	10 does the laundry on Wednesday .	n
11	11 has dinner at 7 : 00pm every day .	n
12	12 goes jogging once a week .	n
13	13 mops the floor on Saturday .	n
14	14 watches movies once a month .	n
15	15 walks in the afternoon every day .	n
16	16 helps it washing every day .	n
17	17 Does the gardening in the morning every day .	n
18	18 Mops the floor on Tuesday .	n
19	19 Makes dinner in the evening every day .	n
20	20 Sets the table before dinner every day .	n
21	21 Washes the dishes after dinner every day .	n
22	22 Makes the bed in the morning every day .	n
23	23 Mops the floor on Tuesday .	n
24	24 Makes dinner in the evening every day .	n
25	25 Sets the table before dinner every day .	n

26	26	Washes the dishes after dinner every day .	n
27	27	Makes the bed in the morning every day .	n
28	28	Plays dannce at 9am .	n
29	29	Looking forward to your approval .	y
30	30	Owning the house not only gives me the feeling of stablity , but also the freedom to make change when needed .	y
31	31	Waiting for you reply !	y
32	32	makes dinner at 5 : 00pm clean the house every day does shopping twice a week .	n
33	33	regards Oswald .	y
34	34	worked as a workerfor six years , as a purchase buyerfor senen years , as a sales for three yerars .	y
35	35	Manged a little team with three sales .	y
36	36	Hoping for your reply .	y
37	37	plays basketball in the afternoon .	n
38	38	plays guitar in the evening .	n
39	39	sets the table before dinner .	n
40	40	surfs the internet in evening .	n
41	41	goes jogging every day .	n
42	42	plays computer games on sunday you feed the dog every dayand walk the dog every night .	n
43	43	Lost in the way striving for self-perfection A Psychological thriller by director Darren Aronofsky : Black Swan	y
44	44	Inferencing : using available information to predic or guess the meanings of .	y
45	45	Plays basketball at 5pm everyday .	n
46	46	Plays computer games at 7pm on saturday .	n
47	47	Washing the dog at noon on saturday .	n
48	48	Has to communicate with colleagues Must be more careful with time management Must be more tidy Must be more professional Be more excellent ! We all belive that .	y
49	49	Looking forward for your reply !	y
50	50	Looking forward for your reply .	y
51	51	Looking forward to see you !	y
52	52	walks the dog every day at 10am.to dog bath ervery day at 8pm .	n

53	53 Studying it about one hour .	n
54	54 Goes to school at 7am monday to friday .	n
55	55 Comes home from school at 5 : 30pm .	n
56	56 Does shopping once a week .	n
57	57 sets the table after eating dinner .	n
58	58 Overseeing the human resources department staff and handling all issues involving employee complaints or questions that can not be answered by other staff .	y
59	59 Gets some bottled water .	n
60	60 Seeing you soon .	y
61	61 Seeing is beliving !	y
62	62 Looking forward to hearing from you soon .	y
63	63 Working as interpreter for the manager of QC Dept .	y
64	64 Willing to work under pressure with leadship quality .	y
65	65 Has the Teacher Certificate .	n
66	66 Has standard mandarin and good image .	n
67	67 Providing solution to urgent problems .	y
68	68 keeping up the quality levelLanguages and Computing Chinese and English Ms office- Word , Excel , Outlook , PowerPoint	y
69	69 Plays computer games at 6pm .	n
70	70 Sets the table at 6pm .	n
71	71 Waiting for me : >	y
72	72 Going to movies is my favorite .	y
73	73 Waiting for your information .	y
74	74 Waiting for your further information .	y
75	75 Waiting for your information .	y
76	76 does the ironning once a week on Friday .	n
77	77 does the shopping on Sunday once a week .	n
78	78 makes the dinner at 6pm in the everning every day .	n

79	79	does the gardening in the morning every day .	n
80	80	washes the dishes after the dinner .	n
81	81	mops the floor at 2pm every day .	n
82	82	walks the dog at night every day .	n
83	83	goes swimming every morning. goes to work from Monday to Friday .	n
84	84	palys computer games every evening .	n
85	85	watches TV every evening .	n
86	86	watches movies on saturdays at 3pm surfs internet on sundays at 7pm .	n
87	87	Filled with a little water in the plastic bottles .	n
88	88	looks like they are as clever as person .	y
89	89	is just i 'm looking for , i 'm ambition , hard working , responsibility , organized .so	y
90	90	Looking for Regional Marketing Manager A Regional Marketing Manager is required at John Tiles Ltd..	y
91	91	Donating blood : to give blood to those who need it .	y
92	92	Thats the reason why our team and I highly agreed to select this plan as our final advertising plan .	y
93	93	Thats the reason why we come together to decide our citys future renewable power energy , the solar energy .	y
94	94	Considering all the conditions of our city I believe solar power is the best option .	y
95	95	Looking forward to hear from you again !	y
96	96	Reading them back and then summarize the main point to end you loop Amelia	y
97	97	Moved a city next to my hometown , then I can visit my parents anytime .	n
98	98	Were confident youll get the job though !	y
99	99	Looking forward to your confirm and reply .	y
100	100	Learning cookings from my mother and cooking for my love person .	y
101	101	Has breakfast at a half past seven .	n
102	102	Plays basketball at nine .	n
103	103	LisaDoes the yoga in the morning .	y
104	104	Sets the table every evening .	n
105	105	Filled a little water to the bottles and lined them in rows of 4 , then 3 , then 2 , then 1 .	y
106	106	Chenjing Hello !	y

107	107	Plays Taiquantdao every afternoon .	n
108	108	Plays Taiquandao every afternoon . ##Duplicate entry	y
109	109	Plays chess at night .	n
110	110	Improving my Ehglish level .	y
111	111	Unstanding other culture .	y
112	112	Working hard .	y
113	113	Looking after students ' routine life , suppervising students ' daily activities .	y
114	114	Looking forward to hearing from you .	y
115	115	Gone with the Wind ' was written by Margaret Mitchell .	y
116	116	Seen you !	y
117	117	Sets the table at 5 : 00pm everyday .	n
118	118	Mops the floor on monday ? wednseday and friday .	n
119	119	Makes the bed after get up .	n
120	120	Reads the newspaper at the breadfast on Sunday .	n
121	121	Goes to shop on the afternoon every day .	n
122	122	Goes home at 6 pm in the evening .	n
123	123	Got you a gift !	n
124	124	plays computer games at 6pm on Tuesday .	n
125	125	does laundry on Monday evening .	n
126	126	sets the table at 6 : 30pm You mop the floor every day .	n
127	127	Setting : 1942/ Sahara Main characters : Le Petit Prince , the pilot , the flower , the fox Plot : the Le Petit Prince left his planet to travel to other planet , he was not conquered by the world there and finally he found his own ideal .	y
128	128	Iofften get up at 10 : 00.Than i will brush my teeth and have breakfast .	y
129	129	is at my home , It 's starts at 6 : 00.Hope you can come ! hanhan	n
130	130	Pleased to meet you .	y
131	131	Educated from this University in July 1990 and gained diploma .	y
132	132	is 4 days after deliver .	n
133	133	Plays computer games at 11 : 00 on Saturday .	n

134	134	Following is my suggestion .	y
135	135	Waiting for the surprise .	y
136	136	Gathering Supplies Trying to get some supplies from other people who will to give a hand .	y
137	137	Counseling Making suggestions and comforting people .	y
138	138	Locating Temporary Shelters Helping build up temporary shelters for the homeless .	y
139	139	Looking forward to your reply and thanks again .	y
140	140	Looking forward to hear from you .	y
141	141	Is it OK , you must tell me earlier , then I can reschedule another time .	y
142	142	Looking forward to you .	y
143	143	Looking forward to your reply .	y
144	144	Watching them jumping from the tree to tree , playing with other monkeys .	y
145	145	Taken by :	y
146	146	Plays computer games at 6pm .	n
147	147	Sets the table at 6pm .	n
148	148	Expecting the night !	y
149	149	has short stright black hair .	n
150	150	Waiting for your reply !	y
151	151	Shoes $ 59.00 Sweater $ 69.00 , Small size .	y
152	152	Plays computer games at 6pm .	n
153	153	Sets the table at 6pm .	n
154	154	She'wearing a brown sweatshirt , jeans and a black shoes .	y
155	155	set the bed every morning ; do the landry once a week ; make the dinner at 7'clock pm .	n
156	156	Sets the table at 6pm .	n
157	157	Walks the dog every morning .	n
158	158	Sets the table , makes the bed and does the gardening in the morning .	n
159	159	Makes dinner at 6 : 00pm every day .	n
160	160	Makes the bed and mops the floor every day .	n
161	161	Plays the piano every Sunday afternoon .	n

162	162 Plays computer games at 6pm in the evening , every day .	n
163	163 Sets the table at 6pm every day .	n
164	164 2.improving immune system : crush garlic with lemon and acerola to liquid , drink 15 ml or a spoonful of it every time , three times a day .	y
165	165 Following the documents you need to take :	y
166	166 Makes the dinner at 6pm everday .	n
167	167 Sets the talbe at 7pm everday .	n
168	168 Washes the dishes after the dinner .	n
169	169 Sets the table at 6pm .	n
170	170 Looking forward to your reply .	y
171	171 Knocked down the bottle is gotten one point .	n
172	172 Knocked down all of the bottles is a `` strike '' .Then the player takes two more shots and all the points are added together .	n
173	173 Plays computer games at 6pm .	n
174	174 Taken by : Lily	y
175	175 Taken by :	y
176	176 Haves lunch at 12 o'clock .	n
177	177 Mops the floor once a week .	n
178	178 Mops the floor on sunday .	n
179	179 Plays the table tennis in the afternoon on saturday .	n
180	180 Plays the erhu at 9 ; 30 on sunday .	n
181	181 Plays computer games on sunday .	n
182	182 Plays the piano at 4 : 00 p.m. on sunday .	n
183	183 plays the computer games in the afternoon on saturday .	n
184	184 Enclosed is my certificate that testify my income .	y
185	185 Looking forward to your early reply !	y
186	186 watches TV at 6pm .	n
187	187 Makes the dinner at 6pm .	n

188	188	Walks the dog every afternoon .	n
189	189	Bring a small gift when you visit someone .	y
190	190	Scored one point for each pin that knocked down .	n
191	191	Accroding the survey , 43 % people would like to change their voice if they could .	y
192	192	Waiting for you reply !	y
193	193	Looking forward to seeing you .	y
194	194	Looking forward to receiving your call to interview .	y
195	195	Waiting for your replay !	y
196	196	Wearing socks soaked in vinegar and thyme for fever .	n
197	197	Waiting for you .	y
198	198	Takes two more shots when scoers a `` strike '' that all the bottles are knocked down .	n
199	199	Looking forward to good news from you .	y
200	200	Enclosed kindly please find the budget outline for your perusal .	y
201	201	Sounds like reasonable and feasible .	y
202	202	Wishing all of you a good time tomorrow evening !	y
203	203	Finshed this you can has a break everyday .	n
204	204	Looks at my photos .	n
205	205	Washes the dishes everyday .	n
206	206	Plays computer games every night .	n
207	207	Does his homeworks every morning .	n
208	208	Looking forward to your advices .	y
209	209	Looking forward to your coming !	y
210	210	Waiting for your coming !	y
211	211	Looking forward to your coming .	y
212	212	Sets the table at 8am .	n
213	213	Lined up the bottles in rows of 4 , then 3 , then 2 , then 1.4. 2 or 3 frisdees .	n
214	214	Meeting : MargaretKendall time : TUESDAY 12 th Phone : # # # # # # # # # #	y
215	215	Searching for a job which is best suited to your personality and interests is not always simple .	y

216	216	TTGets up at 8 o'clock .	n
217	217	Plays piano at 4 PM.And surfs the internet at 7 PM for 1 hour .	n
218	218	Got the MBA qualification of Hong Kong university .	y
219	219	Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 .	n
220	220	Is very untidy .	n
221	221	Giving You should give gifts for Christmas and birthdays .	y
222	222	Eating You should start eating after the host .You should n't put your elbows on the table .	y
223	223	Knocking down each pin which scores one point .	y
224	224	Waiting for you !	y
225	225	Listening to music .	y
226	226	Sets the table at 6pm .	n
227	227	Studying online save my time , and it is very convenience .	y
228	228	-does the laundry in the morning .	n
229	229	-mops the floor in the morning .	n
230	230	-washes the dishes in the evening .	n
231	231	taking a bus to go to Guangzhou , IT Should be attived at 7pm .	y
232	232	1.Does the laundry on sunday afternoon .	n
233	233	has the bracferst at 7am usually .	n
234	234	goes for the walk in the moring .	n
235	235	goes the shopping sometimes in afternoon .	n
236	236	watches TV in the evening .	n
237	237	Arranged and directed two marketing events for Agway .	y
238	238	Put food in the microwave.3 .	y
239	239	Looking forward to getting good news from you soon !	y
240	240	Looking forward to hearing good news from you .	y
241	241	Looking forward to hearing from you soon .	y
242	242	Supporting you , xxx	y
243	243	Looking forward to receive your earlier reply !	y

244	244	Looking forward of your reply .	y
245	245	is 3 people 's in my family .	n
246	246	Xueqing Cao Wrote a very good book called , `` Dream of the red tower .	y
247	247	Held on No. # Yellow street .	y
248	248	Has breakfast at 7o'clock .	n
249	249	Plays conputer games at 8 o'clock .	n
250	250	Awaiting you come .	y
251	251	Waiting for you !	y
252	252	Waiting for your answer !	y
253	253	Goes to school before 7 : 30am and take her back home at 4pm from Monday through Friday .	n
254	254	Goes to practice dancing on Saturday afternoon and goes to cinema on Sunday afternoon .	n
255	255	Waiting for you !	y
256	256	Wolk down the Green Avenue , then turn left , go straight on the Green Avenue .	y
257	257	looks at my photos are very beautiful !	n
258	258	Looking for a factory its price and quality both are very good .	y
259	259	Looking forward for you !	y
260	260	Waiting for your good news .	y
261	261	Looking forward to your reply .	y
262	262	Taken by : Lily	y
263	263	Missing you very much !	y
264	264	Waiting for you coming !	y
265	265	Plays computer games at 6pm .	n
266	266	Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 - just like ten-pin bowling .	n
267	267	Learning English very well which I can chat with foreigners and know more about the culture of the other country .	y
268	268	Everymorning I walk the dog , so you should walk the dog as usual .	y
269	269	Hoping your coming !	y
270	270	Enclosed is my resume .	y
271	271	plays computer games every afternoon .	n

272	272 does gardening in the moring .	n
273	273 sets the table at 6 pm .	n
274	274 coltying sales listlady sweater 25.99 dollarsskirt 29.99 dollarsdress 35.99 dollarsshirt 38.99 Ms short sleeve shirt 35.99 dollarspants 30.99 dollarsshoes 40.29 dollarsbag 20.99	y
275	275 .accomplished skill of computer .be	y
276	276 hard-working ? reliable and organized .be ambitious at marketing managemet	y
277	277 Knocking one bottle score one point .	y
278	278 Following the procedure I will sign back the waiver to you .	y
279	279 Wedding pleasant !	y
280	280 Giving the food with flash on Monday , Wed , Friday afternoon .	y
281	281 Setting : 2002/ France Main characters : Michel Serrault and Claire Bouanich Poin : A litter girl who follwed her neighbor 's grandfather went to mountain looked for called `` Isabella '' papillon .	y
282	282 Asked me should n't go to outside , stayed home .	n
283	283 Waiting for your reply .	y
284	284 reads English books every afternoon .	n
285	285 goes to bed at 10pm every day .	n
286	286 does laundry on Monday evening .	n
287	287 sets the table at 7pm .	n
288	288 Goes home at 5 : 00 pm form Monday to Friday .	n
289	289 Goes home at 7 : 30 pm every day .	n
290	290 Goes to school at 8 : 30am .	n
291	291 Goes jogging at 8am on Sunday every week .	n
292	292 Planned and conducted training of team Languages and computing .	y
293	293 COME ON !	y
294	294 Looking forward to your response .	y
295	295 watching TV at night .	y
296	296 Makes dinner every night and washes the dishes after every meal .	n
297	297 Sets the table every day .	n

298	298 Mops the floor once a week .	n
299	299 Does yoga in the weekend .	n
300	300 Pays the bills once a month .	n
301	301 Experienced in Civil ? Ecnomic ? Company and Financial law ;	y
302	302 Plays the computer games at 6pm Watches the movies on satur at 5pm My Granny : Does laundry on Tuesday afternoon Does gardening in the morning sets the table at 6pm	n
303	303 Were inviting thirty people .	y
304	304 learning english very well to communicate with people all around the world	y
305	305 Waiting for you for coming !	y
306	306 Shoes seventeen dollars .	y
307	307 Waiting for your coming !	y
308	308 Having good days .	y
309	309 Plays computer games at 1pm .	n
310	310 Plays computer games at 6pm .	n
311	311 Sets the table at 6pm .	n
312	312 Managed a team of 10 salespeople .	y
313	313 2.Worked at the M-supermarket for two years .	y
314	314 3.Managed a team of 10 assistants .	y
315	315 4.Studied to three languages .	n
316	316 waiting your letter !	y
317	317 Plays comeputer games at 6pm .	n
318	318 Sets the table at 6pm .	n
319	319 enclosed is the copy of the insurance and the record .	y
320	320 took a second-hand mobilephone from his pocket and asked me whether I would like to but one .	n
321	321 Meeting you in the party .	y
322	322 needs thiry pens and fifteen pencils and twelve desks and fourteen chairs and thirteen computers and sixteen keyboards , headphones and one table .	n
323	323 Used ten plastic bottles as the bowling pins which are filled with a little water to make them heavier .	n

324	324 Lined up in rows of 4 , then 3 , the 1-just like ten-pin bowling .	n
325	325 Playing with other travellers to make house with sands and so on .	y
326	326 Looking farward to seeing you .	y
327	327 Scored if a '' strike '' -LRB- knock down all the bottles -RRB- , then the player takes two more shots and added all the points together .	y
328	328 Scored for one point for each pin that is knocked down .	y
329	329 Wishing you is happy !	y
330	330 Sets the table at 6pm .	n
331	331 Goes jogging twice a week and you decide what time to go .	n
332	332 Bring a card or a cake is okey .	y
333	333 Waiting for your notification .	y
334	334 Flooding : If there is a flooding , it will cause water damage .	y
335	335 Awaiting your early reply .	y
336	336 Waiting for your reply .	y
337	337 Wearing it for a while until you feel better .	y
338	338 plays computer games at 6pm .	n
339	339 watches movies on saturdays at 5pm .	n
340	340 does gardning in the mirning .	n
341	341 sets the table at 6pm .	n
342	342 Crushed it wih lemon and acerola .	n
343	343 Printing patten and also the piece of the genuine items .	y
344	344 Looking forward to receive you latter again .	y
345	345 Taken by : Christina	y
346	346 is that logo is old fashioned according to market research , but our company is modern to keep ahead of competition .	y
347	347 Managed a team of 10 salespeople Was responsible for monthly sales Planned and conducted training and development of team Awarded Regional Assistant Manager position in 2010 Personal Character : Outgoing and hard-working Reliable and organized Ambitious and punctual	y

	348 MemoirSetting : 1947/EthiopiaMain characters : Mary Joseph Praise , Thomas Stone , Shiva and MariPlot : Mary	
348	Joseph Praise , a devout young nun saves an English doctor , Thomas Stone .	y
349	349 plays video game in the afternoon .	n
350	350 Launched a lots of marketing campaigns for our clients .	y
351	351 Coordinated the work of the clients .	y
352	352 Completing the drawings for all concerned machines .	y
353	353 Looking forword to joining us .	y
354	354 Driving licence .	y
355	355 Bring company 's material home .	n
356	356 Inspring it 's sometimes cloudy and rainy but it 's never cold .	y
357	357 Seen to see you .	y
358	358 looking forward to hearing from you tksANGEL	y
359	359 Plays computer games at 4pm .	n
360	360 sets the table at 7 : 30pm .	n
361	361 bathes the dog at 3pm .	n
362	362 Given a total of ten turns each .	y
363	363 Scored for each pin that is knocked down .	y
	364 Touching the VoidTitle : Touching the VoidAuthor : Joe SimpsonType of story : True StorySetting : 1985/PeruMain characters : Joe Simpson , Simon YatesPlot : They conquered the unclimbed West face of a notorious 21000ft peak - '' Siula	
364	Grande '' .Joe Simpson wrote a very good book called '' Touching the Void .	y
365	365 Sets the table at 6pm .	n
366	366 Washes the dishes at 7pm .	n
367	367 Im interested in cooking .	y
368	368 Missing you !	y
369	369 Setting : Prais , Franch Main Character : Ranaran	y
370	370 Scored one point when knock down each bottles .	y
371	371 Looking forward to a prompt replay from you .	y
372	372 Btween them , forests are their real home .	y

373	373 Enclosed is my resume .	y
374	374 Managed a team of 20 salespeople .	y
375	375 Coordinated freely client relation .	y
376	376 Plays the giutar at 5pm on tuesday and sunday .	n
377	377 Looking forward to your arrival !	y
378	378 Breathing deeply and slowly , muscle relaxation or medication can be used to help you during a panic attack or any period of anxiety .	y
379	379 watches TV onSaturday .	n
380	380 makes his bed after gets up everyday .	n
381	381 plays the guita every afternoon .	n
382	382 plays soccor at 3pm on saturdy .	n
383	383 does the laundy every day .	n
384	384 does the ironing on sundy .	n
385	385 walks the dog every evening .	n
386	386 Congratulating you have some friend in Japan .	y
387	387 Appreciating your kindly reply and wish you a good day .	y
388	388 Looking forward to seeing you soon !	y
389	389 Is bedroom , in the a bed , rug , window , curtains , table , chair .	n
390	390 Taken By : Selina	y
391	391 Plays computer games at 8pm Watchs TV on saturdays and sundays morning .	n
392	392 -Mops the floor on Wednesday evening .	n
393	393 -Does the laundry on Saturday morning and does the ironing on Sunday evening .	n
394	394 Plays piano every evening .	n
395	395 I'going to be very happy at this trip .	y
396	396 Featuring excellent performances from Vin Diesel and Paul walker , and with lots of stunts and special effects , Fast Five takes you into Brazil where the racing duo are escaping from FBI agents and a corrupt businessman .	y
397	397 's too salty , so that I ca n't drink a little .	y
398	398 Has breakfast at 7am .	n

399	399 Does the exercise at 8am .	n
400	400 Goes out for a walk at 6pm .	n
401	401 Makes the bed at 6 : 05am .	n
402	402 Goes to school at 7am .	n
403	403 Does gardening in the morning every week	n
404	404 Keeping the socks on the patient 's head until the fever is down .	n
405	405 Looking forward to your reply soon .	y
406	406 Shaoxing People 's Hospital Industry : Medicine Position : Direct of Radiology Department Location : Shaoxing city , Zhenjiang Province , China Job duties : Manage medicine , education of medical imaging , design and manage medical study Minimum requirements : Degree of Medicine Doctor , 10 years experience Salary rang : $ 3000-4000/month	y
407	407 Bring a small gift when ivsiting and do n't stay too late .	y
408	408 Clears the dog body once 3 days .	n
409	409 Makes dinner at 6 : 30pm every day .	n
410	410 Sets the table and does the ironing on Sunday evening .	n
411	411 Is opposite supermarket and restaurant .	n
412	412 Is this .	n
413	413 Does the laundry and does the ironing on Monday .	n
414	414 Is there anything you want me to buy for you ? Unlucky , I had some trouble at the airport .	y
415	415 HaiPing my boyfriend , we next to sat on the long chair .	y
416	416 Plays the piano every Saturday afternoon .	n
417	417 Does the laundry and ironing on Sunday morning .	n
418	418 goes jogging at 7 o'clock .	n
419	419 has breakfast at 7 : 45am .	n
420	420 goes to work at 8 o'clock .	n
421	421 plays basketball every afternoon .	n
422	422 surfs the internet at 8pm .	n
423	423 Taken by : Leena	y
424	424 Im 27 on Sunday , July 11 .	y

425	425 'Bowling alley ' needs an area about 8 meters by 3 meters .	y
426	426 has short , black hair and small , brown eyes .	n
427	427 sing songs .	n
428	428 Looking forward to your reply .	y
429	429 Plays computer games at 6pm .	n
430	430 Sets the table at 6pm .	n
431	431 Looking forward to meet you .	y
432	432 Flooding after tsunami is very common .	y
433	433 Welcomed by most readers the international sales figures rose suddenly , while the national ones rose gradually at that time .	y
434	434 Seeing the wonderful gadget of new Transformer Translator from our company !	y
435	435 avoiding being searched by some dishonest competitors.4 .	y
436	436 running shoes 900.90 dollas t-shirts M 30.00doler shoes 59009.90 dollas belt 29.00 dollas pants L 39.99 dollas skirt M 30.00 dollas sweter S 30.00 dollas	y
437	437 Congratulated you will be our new finance manager .	y
438	438 Palm-sized ; 500 useful phrases in 50 languages .	y
439	439 Looking forward to hearing from you .	y
440	440 Lined up 10 plastic balls with a little water inside as the 'bowing pin ' in row of 4 , then 3 , then 2 , then 1 - just like ten-pin bowling .	n
441	441 Winning the game : scores the most points .	y
442	442 Waiting for your application and alignment !	y
443	443 I'mthirseven there are four people in my family : my husband , my son.my daughter and i. my husband 's forty , my son 's seven , my daughter 's nineteen .	y
444	444 Setting : 1958\ USA Main characters : Mia , Ropert Plot : They fell love each another , but her mother dos n't like him , ten years after , they finally get married .	y
445	445 Gets up at 6 : 30am in the work day .	n
446	446 Plays the games in the morning .	n
447	447 Waiting for your coming .	y

448	448	Waiting your nice sounds .	y
449	449	set formal weekly meeting for it 3 .	n
450	450	Wearing socks soaked in vinegar and thyme for fever. .	y
451	451	Writing emails and talking on the phone .	y
452	452	Looking forward to your coming .	y
453	453	Waiting for your feedback .	y
454	454	waiting for my good news !	y
455	455	's like to eats fish .	n
456	456	waters the plants three times a week .	n
457	457	Allowed each player to take two shots on each turn .	y
458	458	Realized his dream of traveling around the world with his beautiful wife , .There is a beatiful end .	y
459	459	Having a good weekend .	y
460	460	plays computer games at 6pm watches novies on saturdays at 5pm .	n
461	461	sets the table at 6pm .	n
462	462	Is there anything interesting around you .	y
463	463	Im 8 years old .	y
464	464	Plants-watering everymroning from Mon to Sat 2 .	y
465	465	Dogs-walking twice everyday from Mon to Sat .	y
466	466	Surfing , scuba diving , sailing , badminton there are all my love sports except football .	y
467	467	'guid the people lost their homes to shelters 'gether food supplies donated from other areas to allot them to the people in need Please move as fast as you can and every single disaster relief volunteer is appreciated .	y
468	468	Training SupervisorLocation :	y
469	469	Speaking fluent english that I can get a high position and pay raise ; To be rich that I can travelling around the world to enjoy different lift ; Find a true love , then marriaged with him , and I want to be a mothter , a good monther .	y
470	470	pls kindly find the detail as following .	y
471	471	Waiting for your respond !	y
472	472	Plays computer games at 6pm .	n
473	473	Sets the table at 6pm .	n

474	474	Im nice , friendly and happy .	y
475	475	Plays basketball every afternoon .	n
476	476	Plays computer games at 6pm .	n
477	477	Sets the table at 6pm .	n
478	478	Waiting for your reply .	y
479	479	Checking water for birds on the Tues and Thur .	y
480	480	Hoping i could learn a bit .	y
481	481	Morning to get up wash my face , brush my teeth and Play basketball .	y
482	482	Sounds like good idear to me .	y
483	483	Managed a team of 20 salepeople .	y
484	484	Organized a top-sale activity , gain a lot of sale experince for future job .	y
485	485	waiting for your answer .	y
486	486	Having breakfast at seven o'clock .	y
487	487	Mopping the floor every morning .	y
488	488	Doing the laundry on Tuesday .	y
489	489	Feeding the dog at eight o'clock every morning and seven in the evening .	y
490	490	Walking the dog every afternoon .	y
491	491	Buying this house not only buying a piece of Prime Real Estate , but a piece of Ithaca 's history .	y
492	492	WANGLING INVITES YOU TO HER BIRTHDAY PARTY. I 'm 24 years old on sunday , August 3rd , and I 'm having a party .	y
493	493	missing you ! hui	y
494	494	reading books.meeting friendsdoing partyeating	y
495	495	set the table at 6am .	n
496	496	Addicted to I have to smoking You should drinking water with juicy instead .	y
497	497	Excited to to meet you .	y
498	498	Looking forward to seeing you .	y
499	499	waiting for your information Yours sincerely Sally	y
500	500	Waitting for that day .	n
		Total N	**232**

Appendix 3: Selected Scripts from L1 Russian Learners in the EFCAMDAT Corpus

	Scripts	Correct
1	01 Filmed in Germany in 2000 .	y
2	02 discriminated ? What kind of discrimination do you know ? What tipes of direct discrimination	y
3	03 Looking forward , Natasha	y
4	04 looking forward your CV , With kind regards , PetrPS .	y
5	05 Diring the period I do n't study English and start to forgot	y
6	06 Arriving to higher ground immediately and stay there .	y
7	07 Wishing you good luck and looking forward to hearing from you soon !	y
8	08 According to your request to detail description of my educational goals : 1. I want to study online because my day is not always structured and I ca n't go to lesson .	y
9	09 Given total of ten turns for each player .	n
10	10 plays basketball every day in the afternoon .	n
11	11 Bring please some food and drink , because carnaval will be very long .	y
12	12 Waiting for you email .	y
13	13 jeans $ 10.99T-shirt $ 2.99shorts $ 1.99dress $ 13.99pants $ 8.99shirt $ 5.99socks $ 1.99skirt $ 9.99jacket $ 12.99shoes $ 6.99	y
14	14 Computing : MS Office - Word , Excel , Access , Outlook .	y
15	15 Hes my favorite .	y
16	16 Located in a quiet and traditional corner , but at the same time it is only a few minutes walk to the centre .	y
17	17 Payed the bills on Thursday .	n
18	18 sweeming on Sunday at 10 a/m/ Granny -study Chineese every afternoon at 6 p.m. every day -watch the mooves every evening during 30 minutes -set the table every evening -does house work on Saturday .	n
19	19 Kissing everybody .	y
20	20 Having as a background not so unique theme dealing with mainly Hollywood happy end romantic story this movie seems to amaze , entertain and sometimes even intrigue the audience .	y
21	21 Overcoming a phobia seems to be getting blood from a stone	y
22	22 Shoes $ 24.99 .	y

23	23 Turns out it was a wig .	y
24	24 Bring the guitar .	y
25	25 Warning ! If the earthquake causes a tsutami , you will hear the tsumani alarm .	y
26	26 Wearing a skirt with an oval on it reds , yellows and browns .	y
27	27 Listing in our cards only the groups that are at threat now or have already died does not show the full picture .	y
28	28 Guessing the name of the animal based on its description sounds great .	y
29	29 Playing the game you have to draw , to imagine , or even to dance .	y
30	30 Preparing materials for presenting these programs and making reports on it .	y
31	31 Well-versed in Windows , Microsoft Office , desktop publishing , and database management .	y
32	32 Was a better sales assistant .	n
33	33 Watching TV .	y
34	34 Scared , I looked around and saw a man who looked very dangerous .	y
35	35 Looking forward your answer , Olga	y
36	36 Owning a home it 's like putting money into high interest account , like having permanent savings .	y
37	37 Plays computer games at 6pm .	n
38	38 Sets the table at 6pm every evening .	n
39	39 Turns out the women was a teenage boy !	y
40	40 Working environment : all components are good , but the appraisal system is not , employees are not satisfied with unregular feedback .	y
41	41 Is a peace of paper with information about your fly .	n
42	42 Waiting you reply .	y
43	43 Making company 's name and logo cost 10 % from prise in prise list per item .	y
44	44 Starting at 8 o'clock in my house .	y
45	45 novelSetting : 19th century/ Moscow , St. PetersburgMain characters : Anna Karenina , Alex Vronsky , Alex Karenin .	y
46	46 Looks like a peace of floor cloth and smells like dirty water .	y
47	47 Is his hobby .	n
48	48 Feed dogs three times a day .	y
49	49 Working environment.4 -RRB- .	y

50	50 Smoke only in the special areas ; 5 .	y
51	51 Says - there are very beautiful beach here .	n
52	52 Marked an area of about 8 meters x by 3 meters as the `` bowling alley '' .	n
53	53 Looking forward to seeing you as our 's guest .	y
54	54 Wed like to offer you a comfortable apartment in a very nice area of Pacific Heights .	y
55	55 used ten plastic bottles filled with a little water as the bowling aleey .	n
56	56 Lined them up in row of 4 , then 1 less in each the next line futher .	n
57	57 Writing texts , manage projects , copyright reserve , Minimum requirements : Bachelor , 3 yrs experience	y
58	58 Concerning me I like watching Tv and Im seeing it about 20 hours , especially at the weekends and especially at the winters weekends .	y
59	59 According the survey the most people of my age like soap operas , and reality show are least popular in this age group .	y
60	60 Wed like to start with one employee who needs your help .	y
61	61 Working close with sales to build client base .	y
62	62 Looking forward to hearing from your soon .	y
63	63 Waiting for your advice .	y
64	64 Used to be a judo studentSocial skills and Competences : Outgoing , hard-working , reliable and organized	y
65	65 Taken by : Alexander Tsvetkov	y
66	66 Waiting for you !	y
67	67 AdventuresSetting : uninhabited island at coast of AmericaMain character : CruzoPlot : History about the man , which has lived 28 years on a uninhabited islandDefo wrote the book about the seaman from York .	y
68	68 Sounds like a great idea .	y
69	69 Trying to find out who she is and why no one except for him could see and hear her they fell in live with each other .	y
70	70 Starring : Ribert Downey Jr. , Gwinneth Paltrow , Jeff Bridges .	y
71	71 Waiting for you mail .	y
72	72 Looking forward to hearing from you soon , Alfia .	y
73	73 Taken by : Lucy	y
74	74 is make sales in territory , build distribution of the produkt in the shops , helping my people make this function with me or alone , educated my people about job process and organized this things in one good job .	n

75	75 Plays computer games at 6 pm .	n
76	76 Sets the table at 6pm .	n
77	77 Disappointed by his unsuccessful attempt he is going to come back to his small quiet town when suddenly at a crossroad he meets his fortune - a young beautiful Muscovite -LRB- Milla Jovovich -RRB- , who has occasionally knocked him down by her car .	y
78	78 Trying to help George , his wife Elizabeth -LRB- Helena Bonham Carter -RRB- find a peculiar oratory teacher -LRB- Geoffrey Rush -RRB- .	y
79	79 Looking forward to hearing from you soon .	y
80	80 Taking into account my advices you could be more professional , good at time management and more tidy .	y
81	81 Is is very functional device .	n
82	82 Behaid me is a lighthouse .	y
83	83 Feed dogs at 8 pm , every night .	y
84	84 HelloIts a big pleasure for any women to get such a message .	y
85	85 accounting -preparated of quarterly reporting -pay taxes Languages and computing German -LRB- upper-int . -RRB-	y
86	86 Waiting you soon .	y
87	87 According to the survey most of all people like Standard English -LRB- 60 % -RRB- and Scottish accent -LRB- 35 % -RRB-	y
88	88 Starring George Clooney looks quite naturally as an escaped prisoner .	y
89	89 Looking at this article I have to say that the author is quite right .	y
90	90 Poured some whisky , took a cigar and sat down in his favourite armchair in the terrace .	y
91	91 Looking for work .	y
92	92 Concerning the Sales Figures of the `` Manbag '' in Asia and South America the market research was conducted in Shanghai and Rio De Janeiro .	y
93	93 Introducing you this great wide-screen TV .	y
94	94 Looking forward your reply .	y
95	95 Scored one point for pit is knocked down .	n
96	96 Settled in some sort of imagined world the movie tell us about two confronting sides , humans and vampires , warred for centuries .	y

97	97 Concerning the Sales Figures of the 'Manbag ' in Asia and South America Mr. Samson was interested in 'Manbag ' sales figures .	y
98	98 Turns out it was a wig .	y
99	99 Gone with the Wind is a 1939 American historical epic film .	y
100	100 Setting and meeting deadlines is also his weakest skill nowadays .	y
101	101 Making your companys name and logo is free of charge .	y
102	102 Ordered 20000 CD cases SIX weeks ago .	y
103	103 Setting : England .	y
104	104 Counseling team5 .	y
105	105 Evaluating the situation from multiple perspectives - Find alternative ways to fulfill positive intention behind her and her daughter 's behaviour .	y
106	106 Concerning the Sales Figures of the 'Manbag ' in Asia and South America here are the market research results and recommendations .	y
107	107 Concerning the quality of material and colors the market reseach results are following : in Asia 85 % approve the material and colors , 15 % - not approve ; in South America only 25 % approve colors and material of discover items .	y
108	108 Greeting and wishing a warm welcome .	y
109	109 Turns out the young woman was a teenage boy .	y
110	110 brining some water and wine .	y
111	111 Bring a loaf of bread .	y
112	112 Printed it from home from your computer to prove you bought a ticket .	n
113	113 Emitting false marriage they start to fall in love each other .	y
114	114 Achieved Bachelor Degree at Marketing and Administration as the major with fundamental knowledge of Sales in the year of 2005 .	y
115	115 presentMarketing assistant* assistance to marketing manager in creation and development advertising strategy for clients* preparation material for presentations and new services releasesLanguages and computing :	y
116	116 Going shopping , always take it with exactly the amount of money that should be required for planned expenditure .	y
117	117 Turns out it was a wig .	y
118	118 Filled the bottles with a little water to make them heavier .	y

119	119 Feed dogs and birds every night .	y
120	120 Worked with managing editor on news , issues , features , and opinions .	y
121	121 Brainstormed with reporters and editors on PR assignments and story ideas .	y
122	122 Saying truth , I do n't remember the painting that you liked so much .	y
123	123 Preparing food for animals and feeding them on daily basis will be in the list of your charges .	y
124	124 Boarding pass - given to you by the flight attendant at the airport .	y
125	125 Meeting with Head of Global IT. Wednesday June 3rd - 9am .	y
126	126 Meeting with UK marketing team .	y
127	127 Meeting with star sales people .	y
128	128 Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 .	n
129	129 Setting : today .	y
130	130 Managed a team of six clerks .	y
131	131 Developed a sales system , which was introduced to many companies .	y
132	132 Following that you will have lunch with your team .	y
133	133 Marked an area of 8 meters *by 3 metres as the `` BAWLING ALLEY '' .	n
134	134 Adapting foreign brands under ' russian mentality ' he understand how and why the television destroy people .	y
135	135 Sitting in a comfortable chair in the morning you , drinkin Mohito you can see how your children are plaiing on the beach in front of your house .	y
136	136 Worked at position of Sales rep in P & G.My professional achievement you can find in CV was applied .	y
137	137 Accompanying Josh 's vocals are on guitar and on drums .	y
138	138 Waiting for you at the party !	y
139	139 Answering your questions .	y
140	140 Setting : Great Britain , 19th century .	y
141	141 Im terribly sorry for the happened !	y
142	142 Feed dogs again at 8 pm and then take them for a walk at 8 : 30 pm .	y
143	143 Marketing Spesialist Proffesional Experience :	y
144	144 Had only 3 owners in 115 years , built around 1892 .	n
145	145 Described the perpetrator , time and place of theft .	n

146	146 Waiting your answer !	y
147	147 Reported changes of the office to the head office .	n
148	148 Looking forward to see all of you !	y
149	149 Lined up them in rows of 4 , then 3 , then 2 , then 1 .	n
150	150 Willing to learn and grow with the team and can travel anytime and conduct exhibitions , attend seminars or do networking .	y
151	151 Aleks2416/08playing soccer and playing chess ; swim and cooksurfing the internetSt .	y
152	152 Writing sections of project documentation .	y
153	153 Playing with children at home .	y
154	154 Looking forward for your answer	y
155	155 Defining , elaborating and analysing information relevant for the management of the business ;	y
156	156 Confered with creative teams on brand imaging .	y
157	157 Looking foward to your decision , John Smith , a manager .	y
158	158 Looking forward to your answer , Olga .	y
159	159 Saving $ 200 on my checking account for emergency cases and $ 200 for travelling	y
160	160 According to Judith many people including successful enough sometimes can feel an axiety attack connected with dissatisfaction of their job .	y
161	161 Dealing with common topics of good guys against bad ones , the film tells a story of a lonely hero facing a challenge of overcoming a mad evil genius power .	y
162	162 Starring with a hollywood rising star Bradley Cooper and a legendary Robert De Niro .	y
163	163 Ispring it 's not hot and not cold .	y
164	164 Looking forward to hearing from you .	y
165	165 Plays tennis with friends at 11 : 30 o'clock .	n
166	166 watches TV at 10 o'clock in the evening .	n
167	167 is I 'm inviting 30 guests .	y
168	168 putting disaster kits 4 .	y
169	169 gathering supplies 5 .	y
170	170 counseling 9 .	y

171	171 Using it can help to save the nature , since scientists assert our planet is in trouble because of the negative impact on it .	y
172	172 Has to communicate with colleagues and must be more careful with time management .	y
173	173 Teaching students sports such as basketball , football .	y
174	174 Stunning and affordable apartments with 3*2 Bedrooms .	y
175	175 Describing sale trend for Best Books Company .	y
176	176 Summed up this chart seem I can say that a average measure of the sales for all period has the same value .	y
177	177 Waiting for an answer .	y
178	178 Dealt with clients and VIP clients of the company .	y
179	179 Taken by : assistant	y
180	180 uring lunch time we have to discuss some business plans .	y
181	181 Looking forward for next instructions .	y
182	182 Waiting for your answer , Yours faithfully !	y
183	183 Tways a day I feed my dog at 8 am in the morning and 5 o'cloke in the evening .	y
184	184 Looking forward to hearing from you , Andrey	y
185	185 Looking forward to hearing from you and hope for a great long time cooperation with your company .	y
186	186 Vomoting : make a herbal potion .	y
187	187 Coughing : take a big onion , peel and then grate it .	y
188	188 Listening to this song you begin to realize how the natural and original things are important , and that the changes are n't always for best .	y
189	189 Planned and conducted training and development of team .	y
190	190 Invited to my party 30 guests .	y
191	191 Lined up the botles like ten-pin bowling .	n
192	192 Waiting for another interesting stories from you .	y
193	193 Lined up bottelsin rows of 4 , then 3 , then 2 , then1- justliketen-pin bowling Give frisbee each player and allow two shots on each turn .	n
194	194 Is name is Grushin 's festival .	n
195	195 Studying online I can meet a lot of people from around the world , because the Internet has no barriers .	y

196	196 Issued trush on the Thursday .	n
197	197 Marked it .	n
198	198 Looking forward to your reply .	y
199	199 Looks for my dog and plants , please !	y
200	200 Looking forward to hearing from you .	y
201	201 Taken by : Anna .	y
202	202 Considering that we should create an ad which will represent the product as having both classic and modern style with superb quality I suggest we select the third image about golf and its slogan .	y
203	203 Plays computer at 6pm in the evening , everyday .	n
204	204 Sets the table at 6pm every evening .	n
205	205 Setting : Italy .	y
206	206 Looking forward to hearing from you .	y
207	207 Meeting new people and having the experience of different countries is also necessary for a person .	y
208	208 According to the statistics people at 18 prefer cartoons and reality shows and the least popular are documentary and sports .	y
209	209 Kicking , beating and shouting at Mrs. Nelson were common deal which was noticed by his neighbor -LRB- Mr. McClora -RRB- , but neglected by his mother .	y
210	210 Based on the last week study , the majority -LRB- 86 % -RRB- of our local population is against building a big supermarket .	y
211	211 Warning ! The earthquake can cause a tsunami and a flooting .	y
212	212 Waiting for you .	y
213	213 Speaking about my family - there are eight people in it : my mother , my wife , my son , my grandfather , my uncle .	y
214	214 Sending to you some kind of summury of it , telling us what we should do or should n't do there .	y
215	215 Keeping yourself healthy and full of joy .	y
216	216 Leaning on that knowledge we created the unique extract - `` A Wheel of Eternity '' .	y
217	217 Stunning views from every aspects and enough land for build another house right on the seafront !	y
218	218 TaleSetting : Old/	y
219	219 Idid the laundry & vacuumed .	y

220	220 Looking forward for your answer .	y
221	221 Made direct sales .	y
222	222 Computing : MS Office .	y
223	223 Made from imported herbs from the India .	y
224	224 Pllased to met you .	y
225	225 Carrying out researches , programming -LRB- C++ -RRB- , computer simulation , report writing .	y
226	226 Looking forward to your answer .	y
227	227 Looking forward to see you again .	y
228	228 plays computer games at 6pm .	n
229	229 NovelSetting : MacondoMain characters : Buendia family , MelquiadesPlot :	y
230	230 MARKETING ASSISTANT Highly ambitious marketing assistant is keen to develop their marketing , sales , customer service , client relations and management skills .	y
231	231 Accompanying Josh 's vocal are guitar and drums .	y
232	232 Left to me stays my girlfriend Eliza .	n
233	233 Worked as a sales manager in a supermarket for 2 year .	y
234	234 Lets me outline the areas in which you need to improve .	n
235	235 Spring it is good season .	y
236	236 Waiting for early reply !	y
237	237 Appealing to the city where I live , Moscow , the most beneficial energy would be , to my mind , wind power .	y
238	238 Selecting a candidate was difficult .	y
239	239 Wishing you much success in your future endeavors !	y
240	240 Using : - Remove the bread pan.- Put all ingridients in the pan.- Insert the pan into the oven.- Plug in and switch on.- Press the MENU button and choose program , size and crust color.- Press the START button.-	y
241	241 Setting : 1930/ Moscow -LRB- Russia -RRB- Plot : The Master and Margo met each other and fall in love in another life .	y
242	242 Walks his dog twice a day , morning and evening .	n
243	243 Waiting for you !	y
244	244 Playing football for all to understand .	y

245	245 Quitting smoking and more exercise .	y
246	246 Ned to negotiate penalties for non - contract terms .	y
247	247 Needed advance payment of 10 % of the order .	y
248	248 Setting : Australia , 1915-1969 Main characters : Meggy , Ralf , Paddy , Luke , Fiona , Dan , Jastina Plot : The tragedy story of Cleery 's life and about great love between Catholic priest and ordinary girl .	y
249	249 Working outdoors with animals on a daily basis .	y
250	250 Ring to me if you interested ! -LRB- advance for 90 % from case to 95 % from case -RRB-	y
251	251 laughing out loud .	y
252	252 Looking forward seeing you in our company .	y
253	253 Looking forward to your reply .	y
254	254 Looking by the situation and take a desigion after meeting .	y
255	255 Looking forward to your reply with comments .	y
256	256 GatchinaMARKETING ASSISTANT June 2008Present : Support the company in the implementation of its marketing campaigns .	y
257	257 Assisting the marketing team with day to day administration duties .	y
258	258 Warning ! There is an area where a tsunami could happen .	y
259	259 Bring to your attention apartments in a great area of Pacific Heights , which combines the good state of the environment and transport links .	y
260	260 Walking a dog twice a day .	y
261	261 Looking forward to see you on Monday .	y
262	262 Selling computer mouse .	y
263	263 Waiting an answer from you .	y
264	264 Wright back soon .	y
265	265 Waiting for your answer .	y
266	266 dreaming about my next wonderful day !	y
267	267 Setting : 1991 / Saint-Petersburg -LRB- Russia -RRB- .	y
268	268 Bring some small gifts for each .	y

269	269 Gone with the wind Author : Margareth Mitchel Type of story : love story Setting : United States of America , about 1870 Main characters : Scarlet O'Hara , Ret Battler Plot : love story about difficult relations of main chracters .	y
270	270 Looking forward to hearing from you soon .	y
271	271 Plays the computer games at 6pm .	n
272	272 Sets the table at 6pm .	n
273	273 Setting : Spain , 1880.Main charakters : Lusy and Martin .	y
274	274 Worked in Notary registering program .	y
275	275 Computing : Word , Excel , Access .	y
276	276 Looking forward to your reply , Your assistent at jobhunts.com	y
277	277 Scored one point for each pin that is knocked down .	n
278	278 Mixed a spoonful of honey and ginger and place it on your neck .	y
279	279 Looking forward Love	y
280	280 Lets me show you stylish and modern keyboard .	y
281	281 Waiting your response and all the best , Dmitry	y
282	282 Dive into the world of dreams within dreams .	y
283	283 Turns out it was a wig .	y
284	284 Looking forward to hear from you	y
285	285 According to the last appraisal performance we have identified number of Petes soft skills that should be trained .	y
286	286 Visiting the AI conference Robotics in the 21st century .	y
287	287 Concerning the Sales Figures of the `` Mandag '' in Asia and South America .	y
288	288 Preparing food for their animals and feeding them on a daily basis .	y
289	289 Concerning the Sales Figures of the 'Manbag ' in Asia and South America we have folowing dates .	y
290	290 Looking forward for your kind reply , Sincerely Yours , Olga	y
291	291 Straight after that the sales suddenly collapsed and in 2008 the graph shows a stabilizing , slightly decreasing trend .	y
292	292 Having Chiara as a colleague is inspiring .	y
293	293 Bring plenty of gifts and good cheer .	y
294	294 resling Sambo , mountan sky Lives in : Moscow , Russia .	y
295	295 Washed the floor , vacuum the carpet , went to the store for shopping , twisted all defective light bulbs .	y

296	296 Riding on a board on the beach Guincho.Drank Portuguese green wine .	y
297	297 Departing from the office of the lights and say as long as the security guard .	y
298	298 Making a conclusion and expressing my personal opinion I believe that the best group for our new magazine is the first group , the demographic group of 15- to 19-year-old women .	y
299	299 Coming No.5 Yellow Steet .	y
300	300 Sailing for example .	y
301	301 Lucked out I do n't need to make a repair by myself , because my neighbors are going to do this .	y
302	302 Looking after the dogs and take them for a walk two times a day , in the morning and in the night .	y
303	303 Setting : 1928 , Germany .	y
304	304 Knocked down .	n
305	305 Greeting from California ! I 'll rest in Santa Monica .	y
306	306 Preparing food for animals and feeding them on a daily basis - I think it will be very interesting for you .	y
307	307 Dealing with problems .	y
308	308 Setting : 1898 , England .	y
309	309 Im 40 on Sunday .	y
310	310 Traveling around the World and visiting most beautiful and exciting places.5 .	y
311	311 Learning of professional photography.6 .	y
312	312 Looking forward to get this job .	y
313	313 Waiting your answer , Leo Green	y
314	314 Waiting for you !	y
315	315 had dinner at your restaurant last week .	n
316	316 Kissing , your daughter Yana !	y
317	317 Preparing food for animals and feeding them on a daily basis .	y
318	318 Learned English at school and institute , and i still do n't know this language .	n
319	319 Is there any interesting news ? I 'm in Santa Monica now .	y
320	320 Taking into consideration all these points , I 'm going to write a letter of complain to the manager of this restaurant and hope that our next meeting will take place in a better place .	y
321	321 Lined up in rows of 4 , then 3 , 2 , then 1 .	n

322	322 Concerning the Sales Figures of the 'Manbag ' in Asia and South America	y
323	323 Keeps the same strategy and I 'll succeed .	n
324	324 Speaking English fluently is obligatory .	y
325	325 Turns out it was a wig , and the young woman was not a woman , but a teenage boy .	y
326	326 Looks at my photos .	n
327	327 Concerning the Sales Figures of the `` Manbag '' in Asia and South America we have market research results and recommendations .	y
328	328 Waiting for your call .	y
329	329 Witing for a reply from you .	y
330	330 Lets me tell you what I did .	y
331	331 Expanding my knowledge will let me advance in my professional carrier .	y
332	332 watches TV at 10 pm in the night .	n
333	333 Setting : USA , 1980 .	y
334	334 Awaiting your promt reply , Tom	y
335	335 Gives food before ramble .	n
336	336 Used for a sore throat , for relieving cold and flu symptoms .	y
337	337 Wearing socks soaked in vinegar and thyme .	y
338	338 Looking forward to hearing from you !	y
339	339 Meeting at my house !	y
340	340 According to your reports participants in my age group like watching sitcoms , soap operas and reality TV .	y
341	341 Updating the database is also the part of your job duties .	y
342	342 According to his explain my contract clearly states that i should be conpensated for weekend work .	y
343	343 Looking forward to hearing you soon .	y
344	344 Looking forward to hearing from you soon .	y
345	345 novelSetting : 1864 , the Duncan , Great BritainMain characters : Lord and Lady Glenarvan , Mary and Robert , PaganelPlot : The book tells the story of the quest for Captain Grant of the Britannia .	y
346	346 Plays computer games at 6pm .	n
347	347 Sets the table at 6pm .	n

348	348	Lets me say about my family .	n
349	349	Waiting for your reply ...	y
350	350	Waiting for your response ...	y
351	351	Receiving team : try to stop the balloon hitting the ground on your side .	y
352	352	Considering , it was so salty .	y
353	353	Smoke only in smoking place .	y
354	354	Put battles in the end of the alley in rows : at first 4 battles , then 3 and follow to 1 bottles at the bigginers of the line .	y
355	355	Degree qualified with either ACA qualification you will have excellent communication skills and business acumen .	y
356	356	Was steal : laptop - 1000 $	y
357	357	Were confident youll get the job though !	y
358	358	Starting bid : US $ 149.99	y
359	359	Goes to the dancing Thuesday evening .	n
360	360	sleeping bag .	y
361	361	Opposed the sofa is a big black TV on the wall .	y
362	362	Waiting for you in our city !	y
363	363	waiting for all at 12 august in 11 am .	y
364	364	solving - formalising the process and provide regually feedback about the performance .	y
365	365	Planning the plan .	y
366	366	Lined up the bottles in rows of 4 , then 3 , then 2 , then 1 .	n
367	367	Introducing a new blockbuster from Paramount Pictures - `` Real Steel '' .	y
368	368	Featuring Hugh Jackman -LRB- star of the `` X-Men '' -RRB- and Evangeline Lilly -LRB- TV series `` Lost '' -RRB- .	y
369	369	Introducing our new amazing product - the Transformer Translator !	y
370	370	Setting : Our time/Russia .	y
371	371	Managed a team of 10 people .	y
372	372	Shopping ! Your friend	y
373	373	Waiting for answer .	y
374	374	Stunning and affordable apartments .	y
375	375	Has size of a cigarette box , operates with 100 phrases , 60 languages .	n

376	376 Designed following extensive market research .	y
377	377 Feeding wild dangerous animals such as crocs is extremely exhilarating so you can really get an adrenaline rush and push yourself to the limit .	y
378	378 Regarding your K	y
379	379 Looking forward hearing you soon , Angie	y
380	380 Having a good experience as a group trainer I could easily work as a personal trainer .	y
381	381 Surfing it 's great !	y
382	382 Endeavouring more you will get one more prise .	y
383	383 Looking forward to hearing from you .	y
384	384 Looking forward to meeting you soon .	y
385	385 Looking forward to hearing from you soon .	y
386	386 Throws the ' trash in thursday .	n
387	387 having a party .	n
388	388 Has stunning view on the Lefki sunsets .	n
389	389 Has only one bedroom , what is not enough.2.Hamilton House .	n
390	390 Placed on the seafront .	n
391	391 Has enough of free bedrooms for children .	n
392	392 Has rich history .	n
393	393 Has picturesque view .	n
394	394 Has enough land to build another house right on the seafront.3.New apartments .	n
395	395 Placed in beautyful corner of the town .	n
396	396 Marked an area of about 8 meters x by 3 meters .	n
397	397 Hasten to in our shop !	y
398	398 was in heaven when he did it , and I saw it .	n
399	399 Watching a tsunami from the beach or cliffs could put you in grave danger .	y
400	400 Setting : St.-Petersburg .	y
401	401 Sets the table at 6 p.m .	n
402	402 Left on the photo my wife is Elena .	y

403	403 Everithing else , but not news .	y
404	404 Invited to the first 30 people .	y
405	405 Played by two .	y
406	406 Leading out of the room .	y
407	407 Looking forward to the home news from you , bye !	y
408	408 Is 's a state-of-the-art gadget which would be good for everyone who keeps himself in all the modern streams .	n
409	409 needs : Im losing my self-confidence , because Im currently jobless .	y
410	410 Located in quite coner of Vathy with bay .	n
411	411 Skilled in project , technical and user documentation preparation and communication in English .	y
412	412 Concerning the Sales Figures of the 'Manbag ' in Asia and South America , even those of 1000 surveyed in each regional market , who 'would buy ' -LRB- 40 % in Shanghai and 20 % in Rio -RRB- , would do it without great enthusiasm .	y
413	413 Receiving teams : try to stop the ballon hitting the ground on your side .	y
414	414 Helps with back pain , neck pain , and many others .	n
415	415 Doing yoga or reading books are not for me .	y
416	416 Spring in Moscow .	y
417	417 Allowed to take two shots on each turn .	n
418	418 Preparing food for animals and feeding them on a daily basis .	y
419	419 Made of steel , this camera is very durable and reliable .	y
420	420 Organized a trip to the mountains for company employees in 2011 .	y
421	421 Setting : New York , 2005 .	y
422	422 Looking forward to seeing you .	y
423	423 Has everything that you need , located in a quiet place of the town , with bay and mountain scapes , few minutes walk to beaches .	n
424	424 Plays basketball every afternoon .	n
425	425 Sets the table at 6pm .	n
426	426 Did you now that our company was founded in 1918 and we were the first in the world who invented LCD watch technology .	y
427	427 set the table at 6pm .	n

428	428 helps your immone system ; when you have an infection you sould drink Echinacea tea and eat garlic .	n
429	429 Bring a small gift when visiting .	y
430	430 Waiting for an answer !	y
431	431 Had a great meal with fantastic view over the harbour .	n
432	432 Waiting for your resolution .	y
433	433 doing yoga , surfing the internet , chatting online Lives in :	y
434	434 Setting : 1915-1969/ New Zealand , Australia .	y
435	435 Eating delicious food today less boring than go to the beach when it 's snow .	y
436	436 Provided Europe 's standart of doing business .	n
437	437 Provided US 's standarts of doing business .	n
438	438 Re-writing harry 's passage .	y
439	439 Born and lives in Moscow , Russia .	n
440	440 Looking on the first picture it is me on the seaside .	y
441	441 -doing a volonteer work for a good organization .	y
442	442 washed the dishes and made the beds .	n
443	443 Kissing your my granny .	y
444	444 Im 43 years old .	y
445	445 emplemening there projects and so on , - to make your dormitories better , get new furniture , rebuild it in some places and may be paint it together according to your ideas and wishes .	y
446	446 Looking forward to receiving your decision .	y
447	447 Looking forward for your decision .	y
448	448 Hoping for an erly start learning .	y
449	449 Has a wonderful view .	n
450	450 Looking forward to hear from you soon !	y
451	451 Looking forward for your answer .	y
452	452 Looking forward for your proposals .	y
453	453 Looking forward to your advice .	y
454	454 Setting : New York , London .	y

455	455 Knowing English language give me a chance to get a new job .	y
456	456 Im 34 on Saturday .	y
457	457 Bring a small gift when are you going on a visit .	y
458	458 Plays computer games at 6pm in the evening every day .	n
459	459 Does the gardening in the morning every day .	n
460	460 Sets the table at 6pm in the afternoon .	n
461	461 Opposed the market is a park .	y
462	462 Bring with you smiles and laughs !	y
463	463 Setting : in fairytale .	y
464	464 Thats wonderful and realy mustic place .	y
465	465 Updates the database every day the most impotant thing for you now .	n
466	466 Taken by : Elena	y
467	467 Setting : America , Washington D.C. , modern time .	y
468	468 Bring into use limitations for buying things that are out of your everyday needs .	y
469	469 started ? What do you know about this document ? What is the direct discrimination ? What do you think about the rise to claim direct discrimination ? What the examples do you have ? What	y
470	470 Built around 1892 .	y
471	471 Amaizing biography story , beatiful actors .	y
472	472 Looking forward to see you !	y
473	473 Meeting with business partner .	y
474	474 Swimbad next to the station .	y
475	475 Winning the first prize among the class 's pupils is no child 's play .	y
476	476 WARNING ! If a tsunami occurs , move to higher ground right away .	y
477	477 Surprising she heard a telephone call .	y
478	478 Waiting for your answer .	y
479	479 Setting : Cuba , Caribbean sea .	y
480	480 Feed dogs and birds every day .	y
481	481 Starring Daniel Craig , Runi Mara .	y

482	482 Based on a novel by Stig Larsson .	y
483	483 Improving the company 's website and online store : a new design , a more usable customer online service , a fresh advertising.2 .	y
484	484 Concentrating on our main customer group : young progressive women and men , especially , in Europa and Asia.3 .	y
485	485 Broaching an idea of launching an accessories line .	y
486	486 Clarifying grounds of his behavior and problems straight from the horse 's mouth.3 .	y
487	487 Watching TV and swiming Lives in : Moscow Season : summer Color : green Animal : cat Time :	y
488	488 Plays basketball every afternoon .	n
489	489 Sets the table at 6pm .	n
490	490 Having experience and knowledge of the English language I can send the resume to a career servise , which would find a job in a big international company .	y
491	491 Mixed garlic , lemon and acerola once a day !	y
492	492 Using a frisbee each player takes two shots on each turn , ten turns total .	y
493	493 Disappointing I find another list and click again , the error again .	y
494	494 Webbing Same as clustering , or diagramming .	y
495	495 Bring some dance music if you have .	y
496	496 GlobalGathering is an annual dance music festival .	y
497	497 GlobalGathering 2012 takes place over two nights on Friday 27th and Saturday 28th July 2012 and will offer camping facilities for all weekend guests .	y
498	498 Bring a small gift when you go to visit someone.2 .	y
499	499 Plays basketball every afternoon .	n
500	500 Plays computer games at 6 pm .	n
	Totals	**91**

Appendix 4: Results of the Logistic Regression Test for L1 Arabic Learners

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	levelLinear	-5.809	1.286	20.404	1	<.001	.003
	levelQuad	.700	.135	27.011	1	<.001	2.013
	Constant	13.004	3.043	18.264	1	<.001	444174.120

a. Variable(s) entered on step 1: levelLinear, levelQuad.

Appendix 5: Results of the Logistic Regression Test for L1 Chinese Learners

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	levelLinear	-8.304	1.781	21.742	1	<.001	.000
	levelQuad	.974	.185	27.668	1	<.001	2.649
	Constant	18.623	4.278	18.951	1	<.001	122425009

a. Variable(s) entered on step 1: levelLinear, levelQuad.

Appendix 6: Results of the Logistic Regression Test for L1 Russian Learners

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	levelLinear	-8.757	1.733	25.523	1	<.001	.000
	levelQuad	1.014	.187	29.287	1	<.001	2.758
	Constant	18.209	3.902	21.782	1	<.001	80935209.5

a. Variable(s) entered on step 1: levelLinear, levelQuad.