Department of Language and Culture
Cross-linguistic influence in the acquisition of the English determiner and tenseaspect systems by L1 Norwegian, L1 German and L1 Russian speakers

Vladyslava Niskova
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## Table of Contents

1 Introduction .....  1
2 Theoretical background ..... 5
2.1 Second language acquisition (SLA) ..... 5
2.2 Definiteness and specificity ..... 7
2.2.1 In English ..... 9
2.2.2 In Norwegian ..... 12
2.2.3 In German ..... 14
2.2.4 Counterpart of definiteness and specificity in Russian ..... 20
2.3 Present Perfect ..... 22
2.3.1 In English ..... 23
2.3.2 In Norwegian ..... 25
2.3.3 In German ..... 27
2.3.4 Grammatical aspect in Russian ..... 28
2.4 The Article Choice Parameter \& the Fluctuation Hypothesis (Ionin, 2003) ..... 29
2.4.1 Ionin, Ko \& Wexler (2004) ..... 32
2.4.2 Schönenberger et al. (2009) \& Schönenberger (2014) ..... 34
2.5 The Full Transfer / Full Access Hypothesis (Schwarz \& Sprouse, 1994; 1996) ..... 37
2.6 The Feature Reassembly Hypothesis (Lardiere, 2008) ..... 40
2.6.1 Cho \& Slabakova (2014) ..... 42
3 Research questions and methodology ..... 46
3.1 Research questions, hypotheses and predictions ..... 46
3.2 Method ..... 51
3.2.1 The acceptability judgment task (AJT) ..... 51
3.2.2 Participants ..... 54
3.2.3 Procedure ..... 55
4 Results ..... 58
4.1 Participants - the English proficiency and age of exposure to English ..... 58
4.2 The acceptability judgment task - the general results ..... 60
4.2.1 The AJT results of the L2 groups matched by proficiency ..... 65
4.2.2 Acceptability rates of grammatical and ungrammatical trials. ..... 67
4.2.3 The AJT results of the L2 groups in sub-conditions "Article Use" and "Tense-
Aspect" ..... 69
4.3 Native control group results in the AJT ..... 70
4.4 Results of the German group in the AJT. ..... 73
4.5 Results of the Norwegian group in the AJT ..... 75
4.6 Results of the Russian group in the AJT ..... 78
4.7 Summary of the results of the AJT ..... 83
5 Analysis and Discussion. ..... 85
5.1 RQ1: Will L1 German and L1 Norwegian speakers show higher accuracy rates than
L1 Russian speakers in their article choice in English due to the influence from their L1s(facilitative influence from German and Norwegian, non-facilitative influence fromRussian)?85
5.2 RQ2: Will L1 Russian L2 English speakers fluctuate between definiteness and specificity in their article choice in English, as predicted by the FH? ..... 88
5.3 RQ3: Will L1 German L2 English speakers overuse the Present Perfectconstructions in the Past Simple contexts due to negative L1 influence (the interferencefrom their L1)? Will L1 Norwegian L2 English speakers use the Present Perfect and PastSimple constructions in English more accurately than the L1 German participants due toEnglish and Norwegian being similar in the terms of use of the PP and PS tenses?91
5.4 RQ4: Will L1 Russian L2 English participants accept the Past Simple constructions in the Present Perfect contexts (and vice versa) due to associating the perfective aspect of the verb with the event completion (the interference from their L1)? ..... 93
6 Conclusion ..... 95
References ..... 99
Appendices ..... 103
Appendix 1: The background questionnaire ..... 103
Appendix 2: The acceptability judgment task ..... 103
Appendix 3: The participants` background data ..... 112 Appendix 4: Statistics on the accuracy predicted by condition and language group ..... 115 Appendix 5: Statistics on the accuracy predicted by condition, language group, proficiency and their interaction on the L2 groups matched by proficiency ..... 116 Appendix 6: Statistics on grammatical and ungrammatical trials - accuracy predicted by the sub-conditions ("Article Use" \& "Tense-Aspect"), language group, grammaticality and their interaction ..... 118 Appendix 7: Native control group results in the AJT by conditions and trials ..... 119 Appendix 8: The German group results in the AJT by conditions and trials ..... 123 Appendix 9: The Norwegian group results in the AJT by conditions and trials ..... 128 Appendix 10: The Russian group results in the AJT by conditions and trials ..... 134 List of Tables Table 1. The 'identifiability' criteria for definiteness and specificity by Von Heusinger (2002, 249) ..... 8 Table 2. Four types of contexts as to article use in English ..... 11 Table 3. German definite articles ..... 15 Table 4. German indefinite articles ..... 15 Table 5. The definite article paradigm in German (from Ebert 1971b in Schwarz, 2013, 538) ..... 18 Table 6. Samoan system ..... 30 Table 7. English system ..... 30 Table 8. Predicted article choice in L2 English ..... 31 Table 9. Predicted article choice in L2 English by L1 Russian speakers (Ionin, Ko \& Wexler, 2004, 19) ..... 49 Table 10. Age distribution among the participants ..... 55 Table 11. The age range, mean age, mean proficiency, mean AoE score among the groups ..... 59 Table 12. The percentage ratio of responses in English group by context ..... 62 Table 13. The percentage ratio of responses in German group by context ..... 63 Table 14. The percentage ratio of responses in Norwegian group by context ..... 63 Table 15. The percentage ratio of responses in Russian group by context ..... 63 Table 16. The subset of the L2 participants matched by proficiency ..... 65 Table 17. The percentage ratio of responses in L2 groups (matched by proficiency) by conditions ..... 66 Table 18. The percentage ratio of acceptance of grammatical \& ungrammatical trials by condition and group ..... 69 Table 19. The percentage ratio of responses in native control group by condition ..... 71 Table 20. The percentage ratio of responses in the German group by condition ..... 74 Table 21. The percentage ratio of responses in the Norwegian group by condition ..... 76 Table 22. The percentage ratio of responses in the Russian group by condition ..... 79 Table 23. Native control group acceptability judgments at the trials level in [+pp, - ps] ..... 119 Table 24. Native control group acceptability judgments at the trials level in [+def, -spec] .. ..... 120 Table 25. Native control group acceptability judgments at the trials level in gen [-def, -spec] ..... 122 Table 26. German group acceptability judgments at the trials level in [+pp, -ps] ..... 123 Table 27. German group acceptability judgments at the trials level in [-pp, +ps ] ..... 124 Table 28. German group acceptability judgments at the trials level in [-def, +spec] ..... 125 Table 29. German group acceptability judgments at the trials level in gen [+def, + spec] ..... 126 Table 30. Norwegian group acceptability judgments at the trials level in [+pp, - ps] ..... 128 Table 31. Norwegian group acceptability judgments at the trials level in [-def, + spec] ..... 128 Table 32. Norwegian group acceptability judgments at the trials level in gen [-def, -spec].. ..... 130 Table 33. Norwegian group acceptability judgments at the trials level in [+def, -spec] ..... 131 Table 34. Norwegian group acceptability judgments at the trials level in gen [+def, +spec] ..... 133 Table 35. Russian group acceptability judgments at the trials level in [+def, -spec] ..... 134 Table 36. Russian group acceptability judgments at the trials level in [-def, +spec] ..... 136 Table 37. Russian group acceptability judgments at the trials level in [+def, +spec] ..... 137 Table 38. Russian group acceptability judgments at the trials level in [-def, -spec] ..... 139 Table 39. Russian group acceptability judgments at the trials level in [+pp, - ps] ..... 140 Table 40. Russian group acceptability judgments at the trials level in [-pp, +ps] ..... 141 Table 41. Russian group acceptability judgments at the trials level in gen [+def, + spec] ..... 142 Table 42. Russian group acceptability judgments at the trials level in gen [-def, -spec] ..... 143 List of Figures Figure 1. Article system of English (based on Von Heusinger, 2002) ..... 12 Figure 2. Article system of Norwegian (based on Anderssen, 2008) ..... 14 Figure 3. - Maximality condition (Šimík \& Demian, 2020, 331) ..... 17 Figure 4. Article system of German (based on Šimík \& Demian, 2020; Schwarz, 2013) ..... 19 Figure 5. Comparison of the proficiency levels among the language groups ..... 59 Figure 6. Mean AoE to English among the language groups ..... 60 Figure 7. General results among the language groups ..... 62 Figure 8. General results among the L2 groups matched by proficiency ..... 66 Figure 9. Acceptance of grammatical trials by L2 groups and conditions ..... 68 Figure 10. Acceptance of ungrammatical trials by L2 groups and conditions ..... 68 Figure 11. Native control group results in the AJT by condition ..... 71 Figure 12. L1 German L2 English group`s results in the AJT by condition ..... 73
Figure 13. L1 Norwegian L2 English group`s results in the AJT by condition ..... 76 Figure 14. L1 Russian L2 English group`s results in the AJT by condition ..... 79

## 1 Introduction

Based on the similarities and differences among English, German, Norwegian and Russian, this thesis investigates the cross-linguistic influence in the acquisition of the English determiner (article) and tense-aspect systems by L1 German, L1 Norwegian and L1 Russian L2 English speakers. This study inspects the cross-linguistic influence from the perspectives of the Article Choice Parameter (ACP) (Ionin, 2003), the Fluctuation Hypothesis (FH) (Ionin, 2003; Ionin, Ko \& Wexler, 2004; Schönenberger, 2009; 2014), the Full Transfer Full Access Hypothesis (FT / FA) (Schwartz \& Sprouse, 1994, 1996) and the Feature Reassembly Hypothesis (FRH) (Lardiere, 2008; Cho \& Slabakova, 2009).

The studies mentioned above demonstrated that the different linguistic backgrounds, that is different L1s, have their influence on the L2 acquisition of certain units. This impact can be either facilitative or non-facilitative. English, German and Norwegian are similar in their determiner systems. In other words, definiteness and specificity are expressed with the help of the definite and indefinite articles, and definiteness is the main predictor of the article choice in all three languages. However, Russian is completely different from English regarding the determiner systems. Definiteness and specificity in Russian are expressed with the help of such words as odin (one), kakoj-to/kakoj-nibud` (some), word order or/and grammatical case. Thus, Ionin (2003) proposed the Fluctuation Hypothesis which explains linguistic behavior of the L1 Russian L2 English speakers in their article choice in English. The L1 Russian speakers tend to be driven by fluctuation process which implies that the Russian native speakers fluctuate between definiteness and specificity as the main predictor of the article choice in English. Based on the above, it is expected that it is easier for the L1 German and L1 Norwegian participants than for the L1 Russian participants to acquire and produce the English determiner system due to the facilitative influence from their L1s. Therefore, the first and the second research questions of this thesis are:

RQ1: Will L1 German and L1 Norwegian speakers show higher accuracy rates than L1 Russian speakers in their article choice in English due to the influence from their L1s (facilitative influence from German and Norwegian, non-facilitative influence from Russian)?

RQ2: Will L1 Russian L2 English speakers fluctuate between definiteness and specificity in their article choice in English, as predicted by the FH?

Another issue that is to be investigated within this thesis is the tense-aspect systems in German, Norwegian and Russian and their influence on the acquisition of its English counterpart. German, as well as Norwegian, are the languages that are structurally similar to English in terms of the Present Perfect and Past Simple. In English, German and Norwegian, the Present Perfect has the same structure: an auxiliary verb + past participle. However, the German PP has different semantic frames of use from the English PP. While English does not allow the Present Perfect with the definite past-time references and in sequence of events (narrative mode), the German PP can be used with both (de Swart, 2007; Fuchs, Götz \& Werner, 2016).

Norwegian, for its part, is alike English regarding the use of the PP and PS. The Norwegian and English Present Perfect and Past Simple constructions are used within the same conditions. However, Elsness (2000) defined three points that slightly differ the Norwegian PP from its English counterpart. The points are a) vaguely defined past-time reference; b) unique past-time reference; and c) inferential perfect. While the first two points could be accepted in English, according to Elsness (2000), the inferential perfect is a "phenomenon" which it typical for Scandinavian languages. It conveys that if " [...] an event with a distinct past-time reference reported not as a fact, but as an inference - perfective construction can be used" (Haugen, 1972 in Elsness, 2000, 11). Although it seems to be such a statement that is vague and complicated to define, it has been seen in use in Norwegian (see section 2.3.2 for details).

Russian, in its turn, differs from the English Present Perfect in a way that it does not have such tense itself, but instead divides the verbs into two grammatical aspects: perfective and imperfective. According to Sonnenhauser (2008), the verbs of the perfective aspect indicate the completion of an action/event, while the verbs of the imperfective aspect do not necessarily convey the meaning of completeness. In comparison to the English tense-aspect system, the Past Simple indicates that a certain event/action was finished at a certain point in the past, while the Present Perfect conveys a) the resultative state (a situation that entails a change of state); b) the experiential perfect; and c) the perfect of the recent past (Davydova, 2011, 52-73). In other words, the PP in English can also convey a semantic meaning of completeness, but (importantly) at an unspecified time in the past.

Based on the similarities and differences among English, German, Norwegian and Russian in their tense-aspect systems briefly presented above, the three L2 groups are expected to perform differently. The German participants are expected to accept the Present Perfect constructions in the Past Simple contexts due to the German PP being less restrictive in its terms of use. The

Norwegian participants are expected to be more accurate than the German participants in their use of the English PP and PS due to English and Norwegian being similar in allowing the PP and PS in the same contexts. The Russian participants are expected to associate the verbs of the perfective aspect with the Past Simple in English (that is completeness). Therefore, they are expected to accept the Past Simple constructions in the Present Perfect contexts in case if there is a perfective verb in a certain trial regardless of the past-time references or narrative mode. Accordingly, the third and the fourth research questions of this thesis are:

RQ3: Will L1 German L2 English speakers overuse the Present Perfect constructions in the Past Simple contexts due to negative L1 influence (the interference from their L1)? Will L1 Norwegian L2 English speakers use the Present Perfect and Past Simple constructions in English more accurately than the L1 German participants due to English and Norwegian being similar in the terms of use of the PP and PS tenses?

RQ4: Will L1 Russian L2 English participants accept the Past Simple constructions in the Present Perfect contexts (and vice versa) due to associating the perfective aspect of the verb with completeness (the interference from their L1)?

I will look at the performance of the three L2 English groups in the tense-aspect part of the AJT from the perspective of the Feature Reassembly Hypothesis (Lardiere, 2008). FRH implies that the L2 acquisition process is not just about the choice of certain features (The Fluctuation Hypothesis), but also about those features being classified into separate bunches in each language. As for example with English and Russian and their systems of tense and aspect. L2 learners have two tasks in L2 acquisition within the FRH: 1) map target features in the L2 input with the bunch of features from the L1 (if there is a match); and 2) reassemble those bunches of features into the ones that work for the target L2. Therefore, the FRH could amount for either successful or not successful mapping and reassembling the bunches of features into the target L2.

The organization of this thesis is the following: Chapter 2 presents the theoretical background of the second language acquisition relevant to this thesis and a few previous studies on the acquisition of the English article system. The expression tools of the definiteness, specificity and the Present Perfect / Past Simple tenses in English, German, Norwegian and Russian are presented in Chapter 2. The research questions, predictions, hypotheses and methodology of this study are presented in Chapter 3. The results of the study are covered in Chapter 4, while
the analysis and discussion of the results are presented in Chapter 5. I conclude the work that has been done within this thesis in Chapter 6.

## 2 Theoretical background

In this chapter I will introduce and discuss such terms as definiteness and specificity, a brief overview on the expression of the Present Perfect and Past Simple tenses in such languages as English, Norwegian, German and Russian and present previous studies on the relevant topics, theories and hypotheses within Second Language Acquisition on which those studies were based. This will provide a theoretical background relevant to my thesis. I will be talking about such hypotheses as the Universal Grammar, Article Choice Parameter, the Fluctuation Hypothesis, The Full Transfer / Full Access Hypothesis and the Feature Reassembly Hypothesis and some of the studies that used these theories previously.

### 2.1 Second language acquisition (SLA)

Second language acquisition or SLA is a field within applied linguistics which is placed side by side with theoretical linguistics. While theoretical linguistics covers theoretical SLA, which deals with the general theoretical framework for the description of language, applied linguistics brings linguistic theories into practice in various areas (by example of SLA). With reference to SLA, the term of the second language or L2 is used in a vague meaning: L2 is any language that one acquires after having mastered his or her first (L1) or native language. (Gass, Behney \& Plonsky, 2013, 4). SLA has been a critical issue to both teachers and learners of second language equally for a long time up to now. Regarding educational focus, teaching and learning a second language has always been of a highly important matter for linguistics who seek language learning solutions to facilitate instructors` job and answer educational enquiries. Very sophisticated processes are contained in the abbreviation SLA. As it was mentioned in the book by Gass et al. (2013), SLA is a study that looks at the second languages learning processes from various perspectives. From the educators` perspective, it is important to take into consideration language-teaching methodologies, which are developing due to numerous research in the field. From the learners' perspective, SLA studies how the learners create a 'bridge' (interlanguage) that connects L2 and L1 and how that 'bridge' helps them to achieve a certain level of proficiency and success in L2 acquisition.

There have been quite a few theories offered in the field of second language acquisition. One famous theory of SLA goes back to Stephen Krashen. He offered to divide the notions language learning and language acquisition back in 70s. Krashen has developed his theory of second
language acquirers who are assumed to have two autonomous systems for improving their ability in acquiring a second language. As I mentioned above drawing upon Krashen`s statements, they are language acquisition which is a subconscious process and language learning which is a conscious process. These systems are interconnected in an explicit way where subconscious acquisition seems to be more vital as it takes place naturally. The theory rotates around hypotheses that young learners subconsciously pick up the target language similarly to acquiring their mother tongue in informal situations. However, the acquisition process does not vanish in adults and remains a very important piece. (Krashen, 1982, 10). The first language has a critical role to play in second language acquisition. According to the studies by Lado (1957), Sharwood Smith (1982), Odlin (2003) a.o., it results in such processes as transfer and cross-linguistic influence. Whereas transfer implies L1 influence on the target language (that is a second language in this particular study) and can be either positive \({ }^{1}\) or negative, and cross-linguistic influence entails that all existing linguistic systems (whether a learner knows one, two or more languages prior to learning another one) play an important role in the acquisition process of a second language when it comes to possible interactions between the target language and the existing one(s). Apart from Krashen`s theory, there are certain hypotheses offered in the field which explain the role of particular variables in L2 acquisition. If it is for the Universal Grammar, then it is Access to UG Hypothesis, which can explain the assumptions of its influence (White, 2003, 15-17).

Speaking of the Universal Grammar, there is a long history behind a discussion whether we all have some innate knowledge concerning languages or all that is just acquired. This topic became relevant in the middle of $20^{\text {th }}$ century when Noam Chomsky offered Universal Grammar theory (further as UG) (Chomsky, 1965; 2014). The foundation of this theory is that all humans have innate knowledge when it comes to the acquisition of languages. Chomsky explained that there are certain grammatical principles that underlie the systems of all languages within their similarities, and which are innate and unchangeable. When it comes to the differences among the languages, UG parameters come into play. Those grammatical principles

[^0]and parameters imply certain subconscious mechanisms (constraints) that let people understand what is acceptable and what is not in the language that they acquire with or without previously sufficient input. This leads to a 'poverty of the stimulus' (POS) argument, which states that children can produce and interpret certain sentences in the language that they acquire (L1) without being previously exposed to those. Such points as language universals (very same UG principles), POS, ease and speed of child language acquisition are the strongest arguments for UG theory, which mainly relate to L1 acquisition.

However, White (2003), Han (2020) questioned whether UG plays the same role for L2 acquisition as for L 1 and whether it is available for L 2 learners. This suggests the access issue and results in the varied hypotheses concerning the extent to which L2 learners have access to UG (White, 2003, 15-16):

- No access
- Partial access (previously as indirect access)
- Full access (previously as direct access).

As SLA is "...the study of what is learned of a second language and, importantly, what is not learned;" (Gass et al., 2013, 10), acquisition of the English articles falls for both cases. With the help of aforementioned and additional linguistic theories, a conducted web experiment and statistical analysis, I will try to figure out what factors facilitate or complicate the acquisition of the English articles among such languages as German, Norwegian and Russian.

### 2.2 Definiteness and specificity

In this part of the current chapter, it is important to talk about cross-linguistic similarities, and most importantly, differences among the studied languages (Norwegian, German and Russian) that have their impacts on the acquisition and consequent use of the target language (English). In particular, cross-linguistic differences constitute the core and the grounds for the current project. If there was only one language available in the world, such projects as well as all the previous studies in SLA would just be not possible. Therefore, owing to such a variety of languages, the ways they differ (semantically, syntactically, morphologically) and resemble, it is possible to conduct a whole range of different studies, and in doing so expanding the borders of such science as linguistics and all the topics that comply with that.

Expression of definiteness and specificity as well as expression and constraints on perception of the Past Simple and Present Perfect tenses (which I will be discussing later on) in such languages as German, Norwegian, Russian and English languages form the whole skeleton of the current project. To begin with, I would like to present a few definitions of definiteness and specificity by some of the linguists. A number of studies have argued that definiteness comes along with uniqueness, referentiality, familiarity, salience or/and identifiability, while specificity is designated as a separate category; but yet, there is no exact definition of such features as definiteness and specificity. As Ionin $(2003,5)$ informally defines definiteness and specificity:

- "Definiteness, the speaker and hearer presuppose the existence of a unique individual in the set denoted by the NP (noun phrase);
- Specificity, then the speaker intends to refer to a unique individual in the set denoted by the NP and considers this individual to possess some noteworthy property".

These informal definitions are closely interrelated with the 'identifiability' criteria for definiteness and specificity by Von Heusinger (2002, 249):

Table 1. The 'identifiability' criteria for definiteness and specificity by Von Heusinger (2002, 249)

| Identified by | [+definite, + specific] | [-definite, + specific] | [-definite, -specific] |
| :--- | :--- | :--- | :--- | :--- |
| speaker | + | + | - |
| hearer | + |  | - |

As the Table 1 indicates, the object or the individual (the NP) can be recognized as definite only in case if both the speaker and the hearer can identify the referent, while in case if only the speaker can identify the referent - the NP is determined as indefinite specific (Von Heusinger, 2002).

### 2.2.1 In English

English plays the role of the target language in this thesis therefore I will start by presenting the English system of definiteness and specificity. English is a language in which definiteness can be expressed with the help of the definite article (the). While indefiniteness is expressed with the indefinite article (a/an). There is also the zero article ( $\phi$ ), which is used mostly with indefinite noncount (e.g., tea) and plural count nouns (e.g., apples). Specificity does not really intervene in determining what article should be used in a certain English sentence. English can be defined as such an +Articles language in which the choice of articles is driven by definiteness and not specificity. We can compare the English system to Samoan (Ionin et al., 2004), which is also an +Articles language, but in which the articles are distributed based on specificity. There are two articles in Samoan: $l e$ which is used in specific contexts, and $s e$ - in non-specific. Either of the articles are used regardless of definiteness. It suggests that these two studies: Ionin et al. (2004) \& Von Heusinger (2002) support each other`s statements regarding specificity:

- "Specificity is not simply a subcategory of indefinite NPs, but an independent category that can form a cross-classification." (Von Heusinger, 2002, 249)
- "The article system of Samoan provides additional evidence for the reality of the feature [+specific]." (Ionin et al., 2004, 9)

Referring to the English article system, an important question concerns a semantic difference between definite and indefinite articles in English. Such notions as familiarity, identifiability, uniqueness, inclusiveness come to the rescue. Lyons (1999) proposed that definiteness involves either identifiability or inclusiveness, or both. Later on, Von Heusinger (2002) criticized identifiability as a criterion for definiteness and supported other linguists` claims that definiteness is connected to familiarity, functionality, uniqueness or salience. Von Heusinger (2002, 250) introduced such an example from the novel The Name of the Rose to show that identifiability has little to do with definiteness:
(1) While we toiled up the steep path that wound around the mountain, I saw the abbey. I was amazed, not by the walls that girded it on every side, similar to others to be seen in all the Christian world, but by the bulk of what I later learned was the Aedificium. This was an octagonal construction that from a distance seemed a tetragon (a perfect form, which expresses the sturdiness and impregnability of the City of God), whose southern sides stood on the plateau of the abbey, while the northern ones seemed to grow from the steep side of the mountain, a sheer drop, to which they were bound.

As example (1) shows, definite noun phrases (which are numerous in the example above) do not always appear in the contexts that are identifiable for both the speaker and the hearer, and many of the NPs are newly introduced. At the same time, the following examples illustrate that definiteness is tied to familiarity and uniqueness (Von Heusinger, 2002, 251):
(2) [...] And I know that he [= the Evil One] can impel his victims to do evil in such a way that the blame falls on a righteous man, and the Evil One rejoices then as the righteous man is burned in the place of his succubus. (29)
(3) 'Come, come', William said, 'it is obvious you are hunting for Brunellus, the abbot's favorite horse, fifteen hands, the fastest in your stables.'

What these examples (2-3) show is that familiarity shows itself in the example (2), in which the NP (in bold) is used in the definite context in its second reference due to having been previously mentioned. Whereas example (3) demonstrates uniqueness by referring to the NP with the help of superlative degree. Summing up, as argues in Von Heusinger (2002), definiteness in the article system of the English language relies on the concepts of familiarity and uniqueness.

Turning now to the notion of specificity in English. Von Heusinger (2002) argues that specificity in English is a 'referential property' of NPs, different from both definiteness and indefiniteness. This supports what was previously said on the semantics of specificity. "[...] NP is specific when the speaker has an individual in mind as its referent." (Hellan, 1981 \& Ioup, 1977 in Enç, 1991, 1). Von Heusinger (2002) also stated that specificity is only sentence bound as it connects a newly-introduced context object to a previously introduced object (in the very same sentence), while definiteness covers more - that is, it is context bound as it identifies objects withing one context to each other.

Therefore, although definiteness is the main predictor of the article choice in English, specificity also plays its role as it not only expresses a 'referential property', but also adds to the number of contexts in which definite and indefinite articles can be used. Thus, these are the four contexts which will be discussed throughout the whole thesis (examples are taken from Ionin et al., 2004):

Table 2. Four types of contexts as to article use in English

|  | Contexts |
| :--- | :--- |
| $\mathbf{1}$ | [+definite, , specific] |
| $\mathbf{2}$ | [+definite, -specific] |
| $\mathbf{3}$ | [-definite, +specific] |
| $\mathbf{4}$ | [-definite, -specific] |

## 1. [+definite, + specific] - the;

(4) At a bookstore

Chris: Well, I've bought everything that I wanted. Are you ready to go?
Mike: Almost. Can you please wait a few minutes? I want to talk to the owner of this bookstore - she is my old friend.

## 2. [+definite, -specific] - the;

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

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

## 3. [-definite, + specific $]-a$;

(6) In an airport, in a crowd of people waiting for arriving passengers.

Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find a red-haired girl; I think that she flew in on Flight 239.

## 4. [-definite, -specific] - a.

(7) At a university.

Professor Clark: I'm looking for Professor Anne Peterson.
Secretary: I'm afraid she is busy. She has office hours right now.
Professor Clark: What is she doing?
Secretary: She is meeting with a student, but I don't know who it is.

Based on the 'identifiability' criteria (Table 1) by Von Heusinger (2002) and the variety of contexts (Table 2) (Ionin et al., 2004), in context $1[+\mathrm{def},+\mathrm{spec}]$ (example 4), the referent $(t h e$ owner) is identified by both the speaker and the hearer, it is definite and specific, therefore the definite article the is used. In context 2 [+def, -spec] (example 5), the referent is definite (as there must be only one manager in Samuel's office), but not specific (as the manager is
unknown to the speaker and the hearer). Accordingly, the is used because definiteness is the predictor of the article choice in English. In context 3 [-def, + spec] (example 6), the NP (a redhaired girl) is specific but not definite as it is identified only by the speaker, therefore the indefinite article $a$ is used. In context 4 [-def, -spec] (example 7), the referent is neither definite nor specific, not identified by neither speaker nor hearer, consequently the indefinite article $a$ is used.

The article system of English can be schematically represented in the following way:

Figure 1. Article system of English (based on Von Heusinger, 2002)


### 2.2.2 In Norwegian

Norwegian, unlike English (in which there are three articles: definite - the, indefinite - a/an \& zero article - $\phi$ ) has gender-based indefinite articles, which turn into definite suffixal articles:

- En with the nouns of masculine gender;

En bil - bil -en
A car - the car

- Ei with feminine, which turns into definite suffixal article $-a$;

Ei bok-bok-a
A book - the book

- $\quad E t$ with neuter.

Et vindu - vindu -et
A window - the window

Even though the article system in Norwegian is formally different from English, article choice in Norwegian is also regulated by definiteness and specificity. According to Anderssen (2008) (see also Anderssen, Lindquist \& Westergaard, 2018 a.o.), there is such a phenomenon in Norwegian as double definiteness. Definiteness in Norwegian can be expressed pre- or/and post-nominally:

- With the help of a suffixal article, appearing post-nominally (examples are taken and adjusted from Anderssen, 2008):
(8) Hus -et er veldig fint.

House -the. NEU is very nice 'The house is very nice.'

- By means of a pre-nominal determiner (a demonstrative - det (neuter) /den (masculine -feminine) often together with an adjective):
(9) Det hus -et er veldig fint.
the.NEU house-the.NEU is very nice
'The house is very nice.'
(10) Det gaml-e hus-et er veldig fint

The.NEU old house-the.NEU is very nice
'The old house is very nice.'

Note that in example (8) the demonstrative can be omitted, while the use of the demonstrative is obligatory in example (9). The Norwegian phenomenon of double definiteness is clearly visible in example (10). Suffixal article (et), pre-nominal demonstrative article (det) together with the adjective (gaml-e) in the same sentence demonstrate it.

At the first glance, the three examples above seem similar in their meanings judging from their English translations, but in fact they are different. When the demonstrative det is used together with the suffixal article -et, then it is possible to translate the example (9) into English as that house unlike in the example (8) in which we can say nothing else but the house. In this way, by using the demonstrative article det, the house becomes more distinct or, in other words, more unique. This correlates with what Anderssen (2008) concluded in her study on the acquisition of compositional definiteness in Norwegian. "The pre-adjectival position adds uniqueness,
which is equivalent to definiteness proper, while the post-adjectival position carries specificity. The suffixal article can spell out both positions (definiteness \& specificity), but when an adjective intervenes, this is no longer possible, and the pre-nominal determiner is added to spell out uniqueness" (Anderssen, 2008, 272). This is exactly the case with the example (9) in which pre-nominal demonstrative article det is used to express uniqueness (as that house), while the suffixal article -et conveys specificity. However, in the example (8), there is only one tool used - the suffixal article et, which marks definiteness as well as specificity.

The discussion above suggests that definiteness in Norwegian is tied to uniqueness, which in its turn can be conveyed by means of pre-nominal demonstratives (det/den) as well as suffixal articles (-en, -a, -et). At the same time, specificity is expressed by suffixal articles alone (-en, $a$, $-e t$ ). Schematically, this can be shown in the following way:

Figure 2. Article system of Norwegian (based on Anderssen, 2008)


### 2.2.3 In German

With respect to the article system, German is more like English than Norwegian. Its article system consists of three different types of articles (just like in English): definite (der, die, das), indefinite (ein, eine, ein) and zero article ( $\phi$ ). The reason why there are multiple definite and indefinite articles in the parentheses is that German articles can be inflected depending on the
gender, case and number. Table 3 and 4 illustrate the paradigms of the German definite and indefinite articles, respectively:

Table 3. German definite articles

| Case | Masculine | Feminine | Neuter | Plural | Meaning |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nominative | der | die | das | die | the |
| Accusative | den | die | das | die | the |
| Dative | dem | der | dem | den | to the |
| Genitive | des | der | des | der | of the |

## Table 4. German indefinite articles

| Case | Masculine | Feminine | Neuter | Plural | Meaning |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Nominative | ein | eine | ein | - | a/an |
| Accusative | einen | eine | ein | - | a/an |
| Dative | einem | einer | einem | - | to a/an |
| Genitive | eines | einer | eines | - | of a/an |

A recent study by Šimík \& Demian (2020) tested a hypothesis that "definite descriptions in German convey uniqueness (singular) or maximality (plural)". The study investigated whether definite descriptions in +Articles languages convey the same meanings as bare NPs in -Articles languages (Russian). Using the concepts of uniqueness and maximality ${ }^{2}$, Šimík \& Demian (2020) focused on uniqueness (for singulars) and maximality (for plurals). In this very recent study, there was a very interesting idea expressed by Šimík \& Demian (2020) that uniqueness is an integral part of maximality. If there is only one item that satisfies the description, it is

[^1]exactly the maximal number of available one. Therefore, colliding these two notions (uniqueness \& maximality) seems to be quite appealing. I think a few examples from Šimík \& Demian (2020, 329-331) can help to demonstrate these two notions practically:

> Der Waggon hat sich abgekoppelt.

The.MASC.NOM.SG. carriage has. REFL disconnected 'The carriage has been disconnected.'

Die Waggons haben sich abgekoppelt.
The.PL. NOM. carriages have.REFL disconnected
'The carriages have been disconnected.'

In these two examples above, the context is the same, the only difference is in the number of the NP. The context does not give any idea about the item/s (as it/they were not mentioned before). Šimík \& Demian (2020) argue that uniqueness and maximality come from the definite or indefinite form of NP in German. In the example (11), there is only one carriage, and consequently, it is unique, and the only one carriage satisfies the maximal number of carriages (only one is available). In the example (12), two carriages are accessible in the context and those two meet the maximal number of available ones. These examples work in favor of the assumption that definite descriptions in German convey uniqueness/maximality.

Šimík \& Demian (2020) applied the MAIN test to show that definite DPs express uniqueness and maximality in German. In the study, the participants heard sentences like the examples above and looked at two pictures lying face down on the screen. Upon hearing the utterance, one of the pictures was turned face up and the participant was asked to choose a matching picture. The participant could go for the picture that was turned face up or the other picture, which was still hidden. Šimík \& Demian (2020) predicted that the participants were to prefer the hidden picture in cases when they were exposed to the definite audio utterance followed by a picture that violated either uniqueness or maximality. For example, from Šimík \& Demian, (2020, 331):
(13) Die Lokomotive musste anhalten. Die Waggons haben sich abgekoppelt. The.SG. NOM. locomotive had to stop.INF. the.PL.NOM. carriages have.REFL disconnected
'The locomotive had to stop. The carriages have been disconnected.'

Figure 3. - Maximality condition (Šimik \& Demian, 2020, 331)


Given that the definite utterance (13) refers to a non-maximal number of referents (only two out of three carriages have been disconnected proceeding from the picture), the participants were to choose the covered picture. The reason for this is that the participants would spot disagreement on maximality between the utterance and the picture. The results indicated that the participants went for the hidden pictures more often regardless of the number (singular or plural), which in its turn, supports the hypothesis that definite descriptions in German convey uniqueness/maximality.

Schwarz (2013) analyzes definiteness based on uniqueness and familiarity (or anaphoricity). He argues that familiarity, as well as uniqueness, are the most prominent approaches that characterize definiteness. According to Schwarz (2013), familiarity serves as a tool to advert to referents that are familiar to interlocutors. For example:
(14) John bought a book and a magazine. The book was expensive.
(Schwarz, 2013, 537)

In example (14) the book is clearly the one that was previously introduced in the first sentence. It is already familiar, and therefore, it is used in the definite context in the second sentence. Schwarz (2013) divides German definite articles into two types: strong and weak. Weak articles are the ones that can contract with a preceding preposition, while strong cannot (see Table 5 and examples $15-16$ below).

Table 5. The definite article paradigm in German (from Ebert 1971 in in Schwarz, 2013, 538)

| Article Type | German |
| :--- | :--- |
| Preakosition+ Def |  |
| strong | $z u m$ - 'to the' |
|  | $z u$ dem ('to the') |

Schwarz (2013) states that there is mapping between strong articles and familiarity use; and weak articles and uniqueness-based use. For a definite item to be anaphoric (or familiar), its interpretation has to be based on its previous mention. In fact, uniqueness plays no role for the strong type of definite articles. It can be clearly observed in the following example:
(15) In der New Yorker Bibliothek gibt es ein Buch über Topinambur. Neulich war In the New York library exists.EXPL. a book about topinambur. Recently was ich dort und habe im /in dem Buch nach einer Antwort auf die Frage gesucht, I there and have in the.WEAK / in the.STRONG book for an answer to the question searched
ob man Topinambur grillen kann.
whether one topinambur grill can.
'In the New York public library, there is a book about topinambur. Recently, I was there and searcher in the book for an answer to the question of whether one can grill topinambur.'
(Schwarz, 2013, 540)

What example (15) demonstrates is that when the strong article (in dem 'in the') is used, the definite interpretation of the book in the second sentence can be ensured due to it being previously mentioned (that is, due to its familiarity). This suggests that there is mapping between strong articles and familiarity. In its turn, the following examples (16-17) illustrate that the weak articles in German satisfy the uniqueness-based use.
(16) Der Empfang wurde vom / *von dem Bürgermeister eröffnet. The reception was by the.WEAK / by the.STRONG mayor opened 'The reception was opened by the mayor.'

Armstrong flog als erster zum Mond.
Armstrong flew as first one to the. WEAK moon.
"Armstrong was the first one to fly to the moon."
(Schwarz, 2013, 541-542)

Examples above (16-17) refer to unique referents (the mayor / the moon) within the contextual scope. To give value of uniqueness to those, the weak definite articles should be used (vom / zum 'by the/to the').

Since German is quite alike English as to distinguishing articles on the basis of definiteness, specificity is not overtly expressed. Consider the following example from Bisle-Müller, (1991, 39 in Aribas \& Cele, 2021, 22):
(18) Ich bringe auf die Party morgen eine gute Freundin von mir mit, wenn es dir recht ist.
I take.FUT. to the party tomorrow a good friend of mine, if it you okay be.
'I will take a good friend of mine with me to the party tomorrow, if that is okay with you.'

In example (18) eine gute Freundin von mir mitt 'a good friend of mine' is used with an indefinite article eine for the reason that the referent is not identified by the hearer, but specific for the speaker. The article system of German can be represented the following way:

Figure 4. Article system of German (based on Šimík \& Demian, 2020; Schwarz, 2013)


### 2.2.4 Counterpart of definiteness and specificity in Russian

Acquisition of articles is a challenge for L1 Russian speakers (Ionin et al., 2003; Ionin et al., 2004; Ionin et al., 2006; Cho \& Slabakova, 2014 and others). Similarly to many other Slavic languages, Russian (except for Bulgarian) lacks articles. On the other hand, articles are part of the grammatical systems of English, Norwegian and German. Since Russian does not have articles, there is something else in the language that compensate their function, that is something that helps to express definiteness as much as specificity.

Several lexical structures have been suggested to express the semantics of definiteness and specificity in Russian:

- The word odin (one) \& kakoj-to / kakoj-nibud` (some);

Odin is translated into English as one and corresponds to the indefinite article in English (a/an). Recall that according to Ionin $(2003,108)$ the indefinite article expresses specificity (see example 19).
(19) Ja pročitala včera odnu knigu. Ona byla očen` interesnaja! I read-PST yesterday one book-ACC. She was-FEM-SG very interesting 'I read a (certain) book yesterday. It was very interesting!' (Ionin, 2003, 108) Example (19) demonstrates that odin can be used to express specificity: a book is indefinite, but specific in this context. Ionin`s proposal that odin 'one' marks specificity led her to the assumption that odin is not compatible with definiteness and does not convey uniqueness. Consequently, Ionin (2003) hypothesized that Russian speakers would relate odin to the English counterpart the, and therefore mark it as [+specific] regardless of definiteness. In this way, it may lead L1 Russian L2 English speakers to have specificity as the predictor of the article choice in English.

Let’s turn to kakoj-to \& kakoj-nibud`. These two words can be translated into English as some. The difference that they have is connected to their scope. Kakoj-to is a wide-scope quantifier, while kakoi-nibud` is a narrow-scope one. Consider examples 20 and 21 below:
(20) Lena xočet procest kakuju-to knigu.

Lena wants read-INF some book-ACC
'Lena wants to read some book.'

The examples (20-21) above demonstrate the scopal difference between kakoj-to and kakojnibud . Although, both of these quantifiers can be used in the same context, they have different range. Kakoj-to implies that the referent (kakuju-to knigu) is not identified by the speaker, therefore takes wide scope. While kakoj-nibud` takes narrow scope (for ex., kakuju-to knigu 'some book' of those that are available). Ionin (2003) hypothesized that Russian speakers might map kakoj-to and kakoj-nibud to the and \(a\) respectively due to the scope they take and interpretation they convey. However, as in the case of odin, the assumption that the Russian speakers relate kakoj-to and kakoj-nibud` to English indefinite a/an and definite the respectively was not supported by the data in Ionin`s study (2003).

- Word order

Word order can influence the interpretation of an NP as definite or specific in Russian. The job that word order does regarding definite or indefinite items is behind the following examples:
(22) Koška vbeżala v komnatu.

Cat-NOM ran into room
'The cat ran into the room.'
(23) V komnatu vbežala koška.

In room ran cat-NOM
'Into the room ran a cat.'
(Ionin, 2003, 111)

In example (22), the subject, koška 'cat' is used preverbally, and is understood as a definite subject. In example (23), the same subject appears post-verbally and is comprehended as an indefinite subject. Although, there is a 'but'! In cases when a postverbal subject gets some modification (as possession in the following example 24), then the subject can have both readings - indefinite or definite depending on the context.
(24) V komnatu vbežala koška moego soseda.

In room ran cat.NOM. my neighbor.GEN
'Into the room ran a/the cat of my neighbor.'

Ionin (2003) proposed that the preverbal subject position in Russian would be correlated with the preverbal subject position in English for Russian speakers and therefore may be linked to definiteness.

- Grammatical case

The last, but not the least - cases in Russian which are six in total (the nominative, genitive, dative, accusative, instrumental and prepositional cases). Accusative case is used to express definiteness of a certain item, while genitive case - indefiniteness. For example:

$$
\begin{align*}
& \text { Ja boys` sobaki }  \tag{25}\\
& \text { I fear dog-GEN } \\
& \text { 'I am afraid of a dog.' } \\
& \text { (26) Ja boys` sobaku } \\
& \text { I fear dog-ACC } \\
& \text { 'I am afraid of the dog.' }
\end{align*}
$$

In this way, in the example (25) sobaka 'a dog' is in genitive case and thus, indefinite; while sobaka in (26) has a definite interpretation and it is in accusative case. It is worth saying that if one speaks of anything abstract or about anything in general, one should use genitive case, and if to talk about anything particular - accusative case should be used.

Finally, having looked at all the ways of expressing definiteness/indefiniteness and specificity in Russian; having introduced and analyzed the assumptions made by Ionin (2003), it is still difficult to say what exactly is responsible for definiteness/indefiniteness and specificity in Russian. Whether it is word order, grammatical cases, or words odin and kakoj-to/kakoj-nibud. It is also hard to say if any effects of specificity found in Russian really have their impact on the article choice in L2 English due to L1 transfer.

### 2.3 Present Perfect

The use, meaning and processing of Present Perfect (PP) and Past Simple (PS) is another feature that I would like to look at in the four languages involved in my study. Previous work on the tense and aspect systems of these languages have yielded a number of important generalizations. I will briefly review them one by one.

Korrel (1993) dealt with three main differences in the use of the PP in English and Dutch. The differences are the following: 1) present tense in Dutch when present perfect in English; 2) PS in English when PP in Dutch; and 3) problem of translating Dutch PP into English when there are no clear adverbial adjuncts. All three differences were explained to stem from one
underlying cause: "representing the present instant of duration either as about to unroll or as having been actualized." (Korell, 1993, 35).
de Swart (2007) used Reichenbach`s (1947) characterization (E-R,S) to discuss the Present Perfect in relation to the Past Simple in English, French, Dutch and German. (see section 2.3.1). She argued that Reichenbach's characterization suits for the PP constructions in all four languages involved in the study. However, the differences that are found among these languages imply that the Present Perfect cannot be used in narrative contexts in English and Dutch, while it can be used in French and German (see section 2.3.3).

Fuchs, Götz \& Werner (2016) investigated the influence of learner proficiency level and mode (in writing or orally) on the usage rate of the Present Perfect by L1 German L2 English learners in contrast to native speakers. The results suggested that: 1) the PP is more frequent in writing in L1 German L2 English learners; and 2) only the most advanced learners use the Present Perfect as frequently as native speakers of English (see section 2.3.3).

Elsness (2000) dealt with the opposition between the Present Perfect and the Past Simple in English and Norwegian. Having analyzed the data from the English-Norwegian Parallel Corpus (ENPC), he found out that the PP is more frequent in Norwegian than in English. English constraints on the use of the Present Perfect constructions turned out to be the reason for more frequent occurrences of the PP in Norwegian. (see section 2.3.2).

Davydova (2011) gave a broad overview on variation among present perfect contexts in nonnative Englishes (Indian English, Singapore English, East African English) as well as in varieties of English spoken in Russia and Germany. Having provided descriptions of similarities and differences in the paradigm of use of the English PP across its varieties, she worked on developing generalizations across the recorded varieties.

Sonnenhauser (2008) explained the semantics behind grammatical aspect (perfective/imperfective) in Russian. (see section 2.3.4).

### 2.3.1 In English

Present Perfect is a complex linguistic category in the English language. Not just because of its compound structure (an auxiliary verb has/have + past participle), but due to its restrictions on
modification by time adverbials, its resistance to narrative structure and being hard to acquire. De Swart (2007) presented Reichenbach`s (1947) characterization of the Present Perfect in English as \(E-R, S\) (whereas E - event; S - speech time; R - reference time; ( - ) - precedence; ( , ) - coincidence). The following examples from de Swart \((2007,2274)\) can illustrate this: a. *Sara left at six o`clock.
E,R-S
b. Sara has left this afternoon.
E-R,S

In both cases above, events (E) take place before the speech time (S); however, to see the actual difference it is important to pay attention to ( - ) and (, ), which convey crucial information. In 27(a) the event (E) coincides with the reference time (R) and precedes the speech time (S), while in 27 (b) the event (E) precedes the reference time (R) and coincides with the speech time (S). Therefore, the analysis of PP sentence (27b) shows that the event has its result at the moment of speech (Sara is not present at the moment as the result of leaving), while in PS example (27a) it is simply stated that the event took place.

Reichenbach`s analysis of the English PP turns out to be not complete without indicating adverbs. The English PP is quite restricted and does not combine with deictic ${ }^{3}$ time adverbials. As evident from the examples above, 27(a) is a PS utterance as the event referred to definite point in the past, while 27(b) involves a deictic adverbial and yet stays a PP utterance (de Swart, 2007).

According to de Swart (2007) (see also Fuchs, Götz \& Werner, 2016), the English Present Perfect does not typically appear in narrative contexts (unlike German, as will be shown later on). Consider examples 28 (a-b) from de $\operatorname{Swart}(2007,2274)$ :
a. *When John has seen (PP) me, he has got (PP) frightened.
b. When John saw (PS) me, he got (PS) frightened.

As these examples show, the Present Perfect structure is not acceptable in 28(a) as it requires the sequence of events while telling a story, when it is completely acceptable to use the past simple structure in 28(b). According to Davydova (2011, 52-73), the Present Perfect in English conveys a) the resultative state (a situation that entails a change of state), for example:

[^2]Huddleston and Pullum, 2002: 145 in Davydova $(2011,57)$
b) the experiential perfect, for example:

I have played tennis, but not very often.
Siemund 2004, 414 in Davydova $(2011,60)$
c) the perfect of the recent past:

She has recently been to Paris.

Huddleston and Pullum, 2002: 145 in Davydova $(2011,61)$

To sum up, the Present Perfect in English does not combine with time adverbials (definite ones) and does not appear in a sequence of events (narration mode), however can still denote the completeness (importantly - indefinite completeness). The Past Simple in English, in its turn, conveys completeness.

### 2.3.2 In Norwegian

Similarly to English, the tense and aspect system of Norwegian also involves a PP and a PS form. Elsness (2000) gave a contrastive overview of the distinctions and similarities between the English Present Perfect (in relation to the Past Simple) and its counterparts in Norwegian. Although the structure (an auxiliary verb $h a+$ the past participle) and conditions of use of the Present Perfect and Past Simple are similar in English and Norwegian, in comparison to English, the Norwegian Present Perfect behaves slightly different from its English counterpart. Speaking of similarities, in both English and Norwegian, the PS constructions refer to events that clearly took place in the past time and do not relate to the present point in time, while the PP constructions are used for the events that expand from the past to the present and situations that take place in such time range.

However, Elsness (2000) defined several points where the Present Perfect and Past Simple opposition differs in the pair English-Norwegian. These contexts include: a) the vaguely defined past-time reference; b) the unique past-time reference; and c) the inferential perfect.

Examples below illustrate contexts in which perfective constructions are allowed in Norwegian, while they are not appropriate in English (Faarlund et al., 1997: 567 in Elsness, 2000, 9-11):

Husets eier arbeidet I haven mellom klokken 12 og 15 og i denne tiden har tyven gått inn i det ulåste huset og stålet en veske på kjøkkenet.
The owner of the house worked in the garden between 12 and 3 p.m. and during this time the thief has walked into the house and stolen a bag in the kitchen.
'The owner of the house worked in the garden between 12 and 3 p.m. and during this time the thief walked into the house and stole a bag in the kitchen.'
[inferential perfect]
The three examples above demonstrate a set of distinctions between English and Norwegian concerning PP and PS. Starting with the vaguely defined past-time reference point (example 32), which is at the borderline of being accepted in both English and Norwegian, and finishing with the inferential perfect use (example 34) that is not characteristic for English, while it is acceptable in Norwegian. Inferential perfect use is typical for Scandinavian languages and implies that any event with a distinct past-time reference can be reported with a perfective constructions if "[...] it is reported not as a fact, but as an inference" (Haugen, 1972, 135 in Elsness, 2000, 11). For this reason, the perfective structure in the example (34) is acceptable in Norwegian even though there is a definite past-time reference. Although in the example (33), which is classified as 'unique past-time reference', there is no definite time point in that sentence, it clearly refers to an event that had been finished in the past. Even then, Norwegian allows perfective construction, while PS would be preferably used in English in this case.

In this section, I described and discussed the system of the Present Perfect and the Past Simple in Norwegian in its opposition to the English counterparts. Norwegian PP and PS systems are very similar to those in English. They allow the PP and PS constructions in the same contexts, while Norwegian is a bit less restricted on the use of the PP.

### 2.3.3 In German

Applying Reichenbach`s analysis on the Present Perfect constructions cross-linguistically, in particular to German, and keeping in mind two crucial criteria such as adjustment by time adverbials and restrictiveness on narrative contexts, it is possible to see that German does not behave like English in this regard. Even though the formal structure of the German Present Perfect is the same as the English one (one of the auxiliary verbs sein/haben + the past participle), and the fact that $E-R, S$ structure is applicable to German as well as to English, the German PP constructions have no such restrictions as to occur with the time adverbials and in narrative contexts. In this study, I'm discussing Present Perfect in relation to the Past Simple. As evident from the examples below, perfective and past simple constructions can be used interchangeably in German (de Swart, 2007; Fuchs, Götz \& Werner, 2016). Consider examples (35-36) from de Swart, (2007, 2276):

$$
\begin{array}{lr}
\text { a.* Sara has left at six o`clock. } & {[* \text { English PP] }} \\
\text { b. Sara ist um sechs Uhr abgefahren. } & {[\text { German PP] }}
\end{array}
$$

a. *When John has seen (PP) me, he has got (PP) frightened. [*English PP] b. Als Johan mich gesehen hat (PP), hat er Angst bekommen (PP). [German PP]

In the example 35(b), the German Present Perfect construction allows the definite time adverbial (sechs Uhr), as well as in 36(b) the narrative context fits just fine in the present perfect construction.

From the SLA point of view, the English Present Perfect is quite late to be acquired by L2 English learners due to its complex structure in comparison to the Past Simple (de Swart, 2007; Fuchs, Götz \& Werner, 2016). Several factors have been proposed to explain this pattern: L1 influence, length of exposure to English, input, proficiency level in English, stay in an Englishspeaking country. Fuchs, Götz \& Werner $(2016,302)$ argued that the acquisition of the Present Perfect constructions can be accounted for in terms of the Default Past Tense Hypothesis. This hypothesis was originally proposed for the native English-speaking learners of Romance languages. These learners tend to acquire the past tense markers earlier than aspectual ones. The authors applied the Default Past Tense Hypothesis to the L1 German L2 English context. They argue that the learners choose Past Simple over the Present Perfect in their utterances due to the simplicity of the former tense form. Moreover, the learners did so far beyond the early stages of acquisition. This may seem surprising, because the German and the English Present Perfect are very much alike structurally. Furthermore, the PP is very frequent in German and
used more often than the Past Simple. The Present Perfect in English is also very frequent. It would be logical to expect some L1 influence in this domain that would be reflected in early acquisition of the PP, but this was not the case. The study showed that the L1 German L2 English learners produced the perfective structures less frequently in comparison to the native speakers. Several factors came out as significant predictors of the PP use. Proficiency and length of exposure to English correlated significantly with native-like use.

To sum up, in this section I presented the German Present Perfect in comparison to the English Present Perfect. There are some similarities, however, it is worth mentioning that there are certain discrepancies, too. As to similarities between these two languages: English and German are similar in their formal structures of the Present Perfect; the PP constructions are as equally as frequent in both languages. Turning to the differences between these two languages, German Present Perfect constructions can be used interchangeably with the Past Simple constructions, while it is not acceptable in English; unlike English, the German PP has not restrictions on time adverbials and narrative contexts. The production data in my experiment will help shed light on the acquisition of tense and aspect in English.

### 2.3.4 Grammatical aspect in Russian

When it comes to Russian, everything seems to differ quite significantly from English, German and Norwegian. There is no such category in Russian as the Present Perfect tense. At the same time, all verbs in Russian can be classified as either imperfective or perfective. Consider the following examples from Sonnenhauser $(2008,2078)$ :
(37) On otkryl dver.

He open-PS.PF door
'He opened the door' [otkryl 'opened' - perfective]
Rebenok kričal.
Child cry-PS. IPF
'The child was crying' [kričal 'cried' - imperfective]

The sentence in the example (37) indicates the completeness of the action/event, and the verb otkryl 'opened' in this example is perfective. As evident from the English translation, the perfective aspect of the verb in Russian corresponds to the Past Simple tense in English. The example (38) involves imperfective verb. This makes us interpret this particular event as
something that was happening in the past, but the fact that the verb kričal 'cried' is imperfective does not mark its completeness. By marking a certain event as completed, does it mean that the perfective aspect of the verb in Russian can amount to the Past Simple in English?

This all resumes in a question whether there is a cross-linguistic influence on the acquisition and production of the English PP constructions by L1 Russian speakers. If there is such influence, what is its role? I will try to answer the questions above with the help of the production data in my experiment.

### 2.4 The Article Choice Parameter \& the Fluctuation Hypothesis (Ionin, 2003)

The Article Choice Parameter (the ACP) was originally formulated by Tania Ionin in her PhD thesis in 2003 (Ionin, 2003) and consequently discussed and tested in other works (Ionin, Ko \& Wexler, 2004, 12). It proposes that +Articles languages (in particular languages with a system of two articles (definite and indefinite) can be divided into two semantic types. In Ionin`s (2003, $79)$ and Ionin, Ko \& Wexler $(2004,12)$ words:

The Article Choice Parameter (for two-article languages):
A language which has two articles distinguishes them as follows:
Setting I. Articles are distinguished on the basis of specificity
Setting II. Articles are distinguished on the basis of definiteness.

In other words, English as the two-articles language, falls for the Setting II as it distributes its articles based on definiteness. At the same time, Samoan, which is also a two-article language, goes for Setting I as it splits articles based on specificity. These two settings are illustrated in Tables 6 \& 7 by Ionin $(2003,80)$ and Ionin, Ko \& Wexler $(2004,13)$ :

Table 6. Samoan system
Setting I (article choice built on specificity)

|  | +definite | -definite |
| :--- | :--- | :--- |
| + specific | the | the |
| -specific | a | a |

Table 7. English system
Setting II (article choice built on definiteness)

|  | +definite | -definite |
| :--- | :--- | :--- |
| +specific | the | $a$ |
| -specific | the | $a$ |

Within the Article Choice Parameter, Ionin (2003; see also Ionin, Ko \& Wexler, 2004) argues that L2 English learners perceive English as the two-article language and consequently have to choose what Setting they will follow in the process of acquisition of the English articles. In case if the transfer from learners` L1 is not available (e.g., if a learner`s L1 is -Articles language), L2 English learners do not favor one Setting over another, because there is no such a classification system in their L1 and therefore no Settings to transfer. (Ionin, 2003, 84). The Article Choice Parameter can explain the acquisition of +Articles languages with two, three or more-articles systems, and makes predictions for the acquisition of articles by learners of L1s being -Articles languages. Based on the Article Choice Parameter, Tania Ionin (2003) proposed the so-called Fluctuation Hypothesis.

The Fluctuation Hypothesis (FH):

1. L2-learners have full access to UG principles and parameters settings.
2. L2-learners fluctuate between different parameter settings until the input leads them to set the parameter to the appropriate value (Ionin, 2003, 23; Ionin, Ko \& Wexler, 2004, 16).

What this hypothesis states is that children acquiring their mother tongue perceive languages as +Articles or -Articles. Subsequently, they pick and stick to either of the Settings of the Article Choice Parameter (definiteness or specificity) if it is relevant for their native language. This means that if the first language that a child acquires is, let's say, Russian, s/he will know that Russian is an -Articles language and will subconsciously ignore the Article Choice Parameter. When it comes to the acquisition of an L2 that is +Articles language (let`s assume it is English), a learner has to: 1) detect that this particular language is +Articles language; and 2) establish which of the Settings of the Article Choice Parameter works for this particular L2. In this case, picking and sticking to either of the Settings of the Article Choice Parameter turns out to be a long and thorny path. In the first line of its definition, FH implies that all L2 learners have access to UG, in other terms, L2-learners have access to the Settings of the Article Choice Parameter no matter at what age they start acquiring their L2. The second line of the FH definition states that L 2 learners whose L 1 is a -Articles language fluctuate between Setting I and Setting II while acquiring a +Articles L2. It is thus expected that L1 Russian L2 English learners may fluctuate between Settings I and II and sometimes produce articles based on definiteness and sometimes based on specificity. According to Ionin, Ko \& Wexler (2004, 18), L2-learners can eventually end up choosing and sticking to either of the Settings of the Articles Choice Parameter for the target L2 when they receive sufficient input. The predictions of the Fluctuation Hypothesis for L1 -Articles languages are summarized in Table 8 (Ionin, Ko \& Wexler 2004, 19):

Table 8. Predicted article choice in L2 English

|  | +definite (target: the) | -definite (target: a) |
| :--- | :--- | :--- |
| +specific | Correct use of the | Overuse of the |
| -specific | Overuse of $a$ | Correct use of $a$ |

Bearing in mind that regardless of specificity, articles in English are regulated by definiteness, it is evident from the Table 8 that L2-learners of -Articles languages may produce the in the indefinite specific and $a$ in the definite non-specific contexts guided by specificity in both cases, which is not appropriate for the English language.

### 2.4.1 Ionin, Ko \& Wexler (2004)

To test their prediction, Ionin, Ko \& Wexler (2004) recruited 70 adult L2 English learners whose L1s were -Articles languages and 14 adult L1 English native speakers as a control group. The learners were 30 L1 Russian speakers and 40 L1 Korean speakers. All of the participants lived in the USA while the study was conducted. The participants were given three tasks: a forced-choice elicitation task, a written production task, and a written proficiency test. The elicitation task contained 76 short English-language dialogues and the task was to fill in the blanks with one of the offered options ( $a$, the, and zero article). The dialogues were sorted according to the contexts from the Table 8 which you can see below together with examples taken from Ionin et. al (2004, 22-23).
(39) [+definite, +specific]

Conversation between two police officers
Police Officer Clark: I haven't seen you in a long time. You must be very busy.
Police Officer Smith: Yes. Did you hear about Miss Sarah Andrews, a famous lawyer who was murdered several weeks ago? We are trying to find (a, the, -) murderer of Miss Andrews - his name is Roger Williams, and he is a well-known criminal.
(40) [+definite, -specific]

Bill: Im looking for Erik. Is he home?
Rick: Yes, but he`s on the phone. It's an important business matter. He is talking to ( $a$, the, -) owner of his company! I don't know who that person is - but I know that this conversation is important to Erik.
(41) [-definite, +specific]

Phone conversation
Jeweler: Hello, this is Robertson`s Jewelry. What can I do for you, ma`am? Are you looking for some new jewelry?
Client: Not quite - I heard that you also buy back people`s old jewelry.
Jeweler: That is correct.
Client: In that case, I would like to sell you (a, the, -) beautiful silver necklace. It is very valuable - it has been in my family for 100 years!
(42) [-definite, -specific]

Chris: I need to find your roommate Jonathan right away.
Clara: He is not here - he went to New York.
Chris: Really? In what part of New York is he staying?
Clara: I don't really know. He is staying with (a, the, -) friend - but he didn't tell me who that is. He didn't leave me any phone number or address.

The contexts and the examples above were considered to be the main ones, which were completed with the additional item types. The following were two additional contexts (Ionin et al., 2004, 23-24):
First-mention indefinite [-definite, -specific]

Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Roger: Yes! It was great. He got lots of gifts - books, toys. And best of all - he got (a, the, -) puppy!

$$
\begin{equation*}
\text { Previous-mention definite [+definite, }+ \text { specific }] \tag{44}
\end{equation*}
$$

Molly: How is your grandpa Sam`s farm doing?
Tom: All right, thanks. Last summer, Grandpa needed some new animals, so he went to an animal market.
Molly: Did he find any?
Tom: Yes - he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought ( $a$, the, -) horse.

These two additional contexts (first-mention indefinite \& previous-mention definite) were added in order to check whether the results were going to be the same within [+definite, + specific] as well as within [-definite, -specific].

Russian and Korean native speakers took all three tasks, while English natives completed only forced-elicitation task. The predictions of the Fluctuation Hypothesis were supported by the results in one of the tasks (elicitation). The results demonstrated that L2 English learners generally followed the patterns displayed in Table 8. This led to the conclusion that the mistakes of the L2 English learners whose L1 lacked articles were not chaotic but regular and of a particular pattern. Both, Russian and Korean speakers were similar in their performance during the task: they "...overused the more with [+specific] than with [-specific] indefinites and overused a more with [-specific] than with [+specific] definites" (Ionin et al., 2004, 30). That is, L1 Russian and L1 Korean L2 English learners relied on specificity in the contexts that were not appropriate for specificity parameter. L1 Russian speakers had different levels of English proficiency (4 learners were beginners, 11 were intermediate and 15 were advanced). L1 Korean native speakers were more of a homogeneous group ( 1 beginner, 6 intermediate and 33 advanced). Turning now to the effect of the proficiency, it was found that advanced L1 Russian L2 English speakers were more accurate in their output (concerning both, definites and indefinites) compared to intermediate and beginner levels of proficiency. As for the L1 Korean

L2 English speakers, the majority of the group belonged to the advanced level of proficiency, and no significant effect of the proficiency level on the production was found.

The hypotheses (ACP \& FH) and the predictions discussed above were subsequently tested in a number of subsequent studies, with some of the studies finding evidence that supported the hypotheses, and some studies going against them (Tryzna, 2009; Schönenberger, 2014; Sarker \& Baek, 2017).

### 2.4.2 Schönenberger et al. (2009) \& Schönenberger (2014)

In 2014, Schönenberger conducted an empirical study with L1 Russian and L1 German speakers investigating article use in adult L2 (that is English). Based on the previous works, she mentioned two particular problems (Schönenberger, 2014, 81):

- "The ungrammatical omission of obligatory articles (e.g., Goad \& White, 2007; Lardiere, 2004; Radford, 1990; Trenkic, 2009 in Schönenberger, 2014)
- The use of an incorrect article, typically using the definite article instead of the indefinite (e.g., Huebner, 1983; Master, 1987; Parrish, 1987; Thomas, 1989; Wexler, 2011; Zdorenko \& Paradis, 2008 in Schönenberger, 2014)."

The following two examples by an adult Mandarin native speaker demonstrate aforementioned problems respectively (Schönenberger, 2014, 81):
"And she made phone call to someone" [omission of an obligatory indefinite article a - '...a phone call']
"She take the bath."
(White, 2008, 253)

Ionin (2003), Ionin, Ko \& Wexler (2004), Ionin, Zubizaretta \& Maldonado (2008) previously compared speakers of different L1s in the production of English articles involving the Article Choice Parameter, the Fluctuation Hypothesis and its predictions. Schönenberger (2014) followed a similar path investigating whether L1 Russian natives fall for fluctuation and L1 German natives for transfer (due to the features of their L1s: as German is +Articles language, while Russian -Articles). In order to support or reject her assumptions, within two years (2008

- 2009), Schönenberger (2014) recruited two groups of L1 Russian students and one group of L1 German students (Schönenberger, 2014, 89-91):
- 102 L1 Russian students of economics and technical sciences with Russian or other -Articles L1 (Ukrainian, Turkish, Bashkir, Tatar), only three of them spoke other +Articles L2 than English (French, German);
- 39 L1 Russian students of English whereas all of them spoke another +Articles L2 besides English (French, German, Spanish) and some of them spoke some -Articles L2s (Bashkir, Japanese, Latin, Tatar, Turkish);
- 107 L1 German students of English, some of them spoke another +Articles L2 (Dutch, French, Greek, Italian, Norwegian, Spanish), or -Articles L2 (Japanese, Latin, Polish, Russian);
- 8 English native speakers as a control group.

Schönenberger (2014) used the written forced-elicitation task from Ionin, Ko \& Wexler (2004) and the very same one that I described in section 2.2.1. The L1 Russian participants were divided into two groups therefore the results of the written forced-elicitation task were analyzed separately as well. Students of economics and technical sciences fell for the first problem mentioned above. Although they showed $50 \%$ accuracy in the test, in the other $50 \%$ of incorrect answers they frequently went for $\phi$ (zero article) in definite contexts, where definite article the was required. As a result, the articles omission rate varied from 14-24\%. Overall, students of economics and technical sciences showed tendency to fluctuate in their article choice in such contexts as [+definite, -specific] \& [-definite, +specific] - in which article production is expected to base on fluctuation, which is in favor of the Fluctuation Hypothesis. However, in such contexts as [+definite, + specific] \& [-definite, -specific] - contexts in which article choice is expected to be rather on target, L1 Russian students of the same group performed quite erroneously. They misused articles in $30 \%$ of cases, which is, in its turn, contradicts the Fluctuation Hypothesis (Schönenberger, 2014, 92-94).

Regarding the second group of L1 Russian students of English, the ratio of the responses on target was rather high - 77-93 \%. Speaking of the first expected problem, that is articles omission, the rate was $1-9 \%$. From the Fluctuation Hypothesis perspective, this group of participants performed entirely building on the fluctuation process by misusing indefinite article $a$ in [+definite, -specific] contexts and definite article the in [-definite, +specific] contexts (Schönenberger, 2014, 94-95). As Schönenberger (2014) concluded, there may be a
reason why participants with the same L1 (Russian) showed different results in the test. Compared to L1 Russian students of economics and technical sciences, L1 Russian students of English were exposed to English for about two years longer as well as all they spoke another +Articles L2 (with definiteness as the predictor of the article choice). All of the above collectively gave the latter an advantage.

In contrast, German students of English showed $90 \%$ accuracy rate in the production of articles regardless of contexts. However, in such controversial contexts as [+definite, -specific] \& [definite, + specific], which underlie the Fluctuation Hypothesis and which are predicted to be the most challenging ones regarding article choice for those whose L1 is -Articles, German participants made some mistakes. This led to a conclusion that they were driven by fluctuation (unexpectedly). They demonstrated $8 \%$ rate of articles misuse in [+definite, -specific] context and $95 \%$ in [-definite, + specific] context.

With reference to Schönenberger et al. (2009), it turned out that having knowledge of another +Articles L2 has its significant influence on the acquisition of English as the L3. The study demonstrated this fact by collecting spontaneously produced data (free talk and the narration of a picture story) from native speakers of Russian with L2 German in L3 English (who lived in Germany for some years) and compared them to L1 Russian L2 English participants living in Russia. The participants from the L3 group showed positive influence of German on the production of English articles with low articles misuse and moderate article omission (17 \%). Only $2 \%$ misuse of $a$ in [+definite, +specific] context and $12 \%$ misuse of the in [-definite, +specific] context. They also demonstrated negative influence of the German language as L2. It lied in the word order (V2 phenomenon) which is characteristic to German and which appeared in the spontaneously produced utterances by the participants. For example:
"And later come the wolf and destroy the house." [verb comes before the NP] (Schönenberger et al., 2009, 12)

In the meantime, L1 Russian L2 English participants showed worse results as to articles omission. The ratio of article omission exceeded $50 \%$ and in such a crucial context for the Fluctuation Hypothesis as [-definite, +specific], the ratio of article omission was even higher: $69 \%$. In the authors` opinion, it may be a result of initially not correct input, as the instructors of English in Russia omit articles in their speech.

To sum up the revised studies, it is necessary to say that it is not that easy to detect what exactly and to what extent is involved in L2 acquisition processes. The results of the study (Schönenberger, 2014) turned out to differ not only between Russian and German participants, but also within the same language group. L1 Russian students of economics and technical sciences did not really back up the Fluctuation Hypothesis, while L1 Russian students of English did. In case with L1 German students of English, Germans performed nearly perfectly. It resulted in Schönenberger`s (2014) conclusion that the Article Choice Parameter was successfully settled in German native speakers with regard to the article choice in English, which is ruled by definiteness (Schönenberger, 2014, 101-103). The earlier study (Schönenberger, 2009) demonstrated that the fact that a participant knows another L2 (whether it is +Articles or -Articles) has its impact on the acquisition of L2 or L3. As much as it is important to keep track of how a student is exposed to input of the language that $\mathrm{s} /$ he acquires: whether it is in the naturalistic or classroom settings.

### 2.5 The Full Transfer / Full Access Hypothesis (Schwarz \& Sprouse, 1994; 1996)

L2 acquisition, in fact, is a way more complex process than L1 acquisition due to the learner`s previous linguistic experience (that is acquired L1). One of the hypotheses that looks at L2 acquisition through the prism of UG and L1 interaction is Full Access / Full Transfer Hypothesis (Schwartz \& Sprouse 1994, 1996; White 1989). Schwartz \& Sprouse (1996) defined FT/FA Hypothesis the following way: "FT/FA hypothesizes that the initial state of L2 acquisition is the final state of L1 acquisition (Full Transfer) and that failure to assign a representation to input data will force subsequent restructurings, drawing from options of UG (Full Access)." Let’s say, there is a L1 Russian speaker who started learning English. At some point, L1 Russian L2 English learner will face a new feature along the acquisition process (that is articles). L1 Russian L2 English learner will: 1) address his/her L1 to find similar features between the mother tongue (Russian) and the studied language (English) to facilitate the acquisition; and 2) in case when L1 does not have such features, L1 Russian L2 English learner will appeal to UG (according to FT/FA Hypothesis).

Having looked at different hypotheses (Minimal Trees (Vainikka \& Young-Scholten, 1994 in Schwartz \& Sprouse, 1996), Weak Transfer (Eubank 1993/94 in Schwartz \& Sprouse, 1994)), Schwartz \& Sprouse (1996) argued that FT/FA is more credible (from the cognitive
perspective). The main interest of the study (Schwartz \& Sprouse, 1994) was to look at the position of the verb (in German as the L2), since it is different from the L1 (Turkish) and to see if there is influence from L1. German and Turkish follow SOV word-order pattern (subject-object-verb; nonfinite verb-auxiliary verb) in embedded clauses (as well as in main clauses in Turkish), but these two languages are not that similar in this regard. There is the so-called V2 phenomenon that characterizes German, and which always moves the finite verb to the second place in the main (or matrix) clause.

The study of L1 Turkish speaker acquiring German (Schwartz \& Sprouse, 1994) proved the absolute influence (Full Transfer) of L1 by collecting the spontaneous production data of L1 Turkish L2 German speaker for 26 months. The participant was L1 Turkish speaker who moved to Germany at the age of 15 to look for a job. Prior to moving, the participant did not have any previous background in German language. He started being exposed to German with the help of the German governmental employment office for 10 hours per week of instruction in German language and 20 hours per week of vocational and social instruction (Schwartz \& Sprouse, 1994: 333). All the jobs that the participant was involved in used German as the language of the workplace. However, at the first interview that the participant had 8 months after his arrival to Germany, he produced only one- and two-word utterances (Schwartz \& Sprouse, 1994, 334). Therefore, the researchers divided the bulks of data into stages: Stage 0 (not reported due to insufficient data), Stage 1, Stage 2 and Stage 3 (according to the development of the acquisition of German language by L1 Turkish L2 German participant).

Here is the sample of what the participant produced in the corresponding Stages (Schwartz \& Sprouse, 1994):

Stage 1:
(48) Der Mann seine Frau dekïßt
the man his wife kissed
'The man kissed his wife'
(10 February 1983)
(49)
jetzt er hat Gesicht [das is falsches Wagen]
Now he has face that is wrong car
'Now he makes a face (that) that is the wrong car'
(10 February 1983)

Stage 2:
in my village I have five years in the school gone 'In my village `I went to school for five years
daß er eine Wagen brauchte
that he a car needed 'that he needed a car'
(27 January 1984)

Stage 3:
(52) Draußen hatte die Polizei eine Wagen brauchen sollten

Outside had the police a car need should
'Outside the police should have (used) a vehicle'
(5 August 1984)
(53) Hat viele Menschen zu ihm gehorcht

Has many people to him obeyed
'Many people obeyed him'
(5 August 1984)

If to look at the data above, we can see that at the Stage 1 the participant was producing simple sentences in German with characteristic to Turkish SOV word order (not producing properly embedded clauses yet (Stage 1: example (49) - lacking daß - 'that'). This so far supported FT/FA Hypothesis. The same happened at the Stage 2, four months after the first batch of data was recorded (Stage 2 - example 50). Eventually, the participant started producing embedded clauses at the Stage 2 with an appropriate to Turkish as well as to German SOV word order (Stage 2: example 51). Moving on to the Stage 3, we can see that at this point the participant performed the V2 phenomenon in the target language (Stage 3: example 52). Although some mistakes still occurred (Stage 3: example 53 - verb hat 'has' comes first which is appropriate in German.

Much more remained unknown in L2 acquisition. It was not possible to see a pattern as to how L1 Turkish or any other L1 learner would acquire German features, in particular verb positioning (due to the study being only of one participant). Despite that, it was possible to see that depending on the stage of language development, the participant made different progress. He either made mistakes in the target language due to L1 influence or/and lack of exposure and sufficient input or successfully produced new structures of the target language. Therefore, with the afore-discussed paper it was possible to show that not only input and L1 influences L2 acquisition (negatively or positively), but also UG is there to help with its principles.

### 2.6 The Feature Reassembly Hypothesis (Lardiere, 2008)

In my study which evolves around SLA, I am trying to look at the acquisition and production of English articles by speakers of various L1s (whether it is -Articles or +Articles languages) from the perspective of different theories and hypotheses. Turn has reached the Feature Reassembly Hypothesis (further as FRH). The Feature Reassembly approach is responsible for the syntactic analysis of the acquisition of certain properties of L2 by those whose L1s are Articles.

Lardiere (2008) suggested that processes that are involved in L2 acquisition and that are discussed withing the FT /FA Hypothesis are not that straightforward. She claimed that it is not only about parameter setting (Universal Grammar) and choice of certain features (the Fluctuation Hypothesis), but also about classifying features of this or that language into separate bunches. The idea of separate bunches of features builds on the variation in grammatical systems among all the languages. By Lardiere`s example $(2008,113)$, such a feature as [+past] is expressed in different ways in such languages as English, Irish and Somali. In English this feature is expressed with the help of the verb, in Irish, it shows itself on complementizers and in Somali on determiners and adjectives.

If to project this on the current study, such features as [definiteness] and [present perfect tense] are expressed differently in the studied languages. In English definiteness is expressed with the help of definite article the; in Norwegian with the help of suffixes added to a noun depending on the gender: -en for masculine, $-a$ for feminine, $-e t$ for neuter; and German (der for masculine, die for feminine, das for neuter; the forms of articles add up depending on the case), while in Russian definiteness is expressed with the help of demonstrative and possessive pronouns, case endings, word order. Speaking of the Present Perfect tense, it is worth saying that its expression also varies among the studied languages. In English and Norwegian Present Perfect tense is composed and expressed with the help of the appropriate form of the auxiliary verb to have / har respectively, plus the past participle of the main verb. In German it is a bit more complicated as there is a choice between two auxiliary verbs: haben (to have) or sein (to be) combined with the past participle of the main verb. Whereas, in Russian Present Perfect tense does not really show up the way it does in the aforementioned languages, but it is expressed with the help of aspect of the verb.

Many if not all will agree that L2 acquisition is a sophisticated process due to the crosslinguistic interactions and comparisons between L1 and L2. On the feature [past], Lardiere
(2008) argued that "...it does not encode a unitary interpretable feature, nor is it restricted to a particular domain" (Lardiere, 2008, 113). Regarding the feature [definiteness] among such languages as English, Norwegian, German and Russian, it is necessary to say that it does not relate only to one pattern as, let`s say, articles. It is a broader matter, depending on the L1 and the language that is being acquired, it is interwoven with a composition of the word (in case with Norwegian suffixes and Russian word endings), mood (German cases) or with word order (Russian).

Within L2 acquisition and FRH, it is important not just to look at what features get transferred from L1 to L2, but also to investigate how the features of L1s and L2s are combined in the new bunches and how the bunches of features of a certain L1 get reassembled in new bunches in L2 that is being acquired. This is exactly what underlies the FRH. L2 learners 1) map or crosscheck target features in the L2 input with the bunch of features from their L1 (when there are matches found); and 2) reassemble those bunches of features into the ones that work best for the target L2. In other words, there are two stages of FRH: mapping and reassembling.

Lardiere (2008) conducted eight and a half years long study interviewing L1 Chinese L2 English speaker (in writing and orally) residing in the USA for ten years at the moment when the study started. The study covered such linguistic features as definiteness (quantifiers \& demonstrative pronouns), plural number marking, wh-movement, subject raising and case marking. In general, the participant did very well almost in all tested features with quite high accuracy rates varying from $63 \%$ to $100 \%$. The participant proved to have acquired definiteness feature in English correctly with certain errors in the use of definite articles and indefinite determiners. It was explained by introducing the differences between English and Chinese in this context. Plural marking in Chinese requires definiteness, while in English plurality does not imply definiteness. As definiteness and number plural marking are interwoven in the acquisition of English for L1 Chinese speaker, these two features belong to different feature bunches in these two languages. That was what, on Lardiere`s (2008) opinion, that caused difficulties for L1 Chinese speaker - to reassemble the features definiteness and number from L1 Chinese into a new bunch, that is appropriate for English. Due to L1 Chinese L2 English speaker`s further data, it was evident that other features as wh-movement, subject raising and case marking were successfully acquired. Even though some of them could not be crosschecked (mapped) with her L1, as Chinese simply lacks some features like case marking. Accordingly, Lardiere $(2008,133)$ claimed "... that the acquisition of nominative case marking in English by a native Chinese speaker does not involve anything like the resetting of a parameter in terms
of syntactic feature selection, but it does involve acquiring morphological knowledge, which is a part of morphological competence". Hence the overall result of the study inspired Lardiere (2008) to suggest a term 'morphological competence' ${ }^{4}$ and subsequently tie it to the research field in SLA even though a model of morphological competence requires further development.

### 2.6.1 Cho \& Slabakova (2014)

Cho and Slabakova (2014) held an investigation with L1 English and L1 Korean L2 Russian speakers. They claimed that reassembling explicitly (overtly) expressed L1 features into the ones which are implicitly (covertly) expressed in a target L2 is a way more complex process than the reversed one. The range of difficulty was presumably identified on the grounds of nature of the feature. In other words, how easily it was to notice this or that feature in the utterances in the target language. They recruited 56 L1 Russian as a control group, 49 L1 English and 53 L1 Korean L2 Russian participants and tested two latter groups in the acquisition of definiteness in Russian by means of the word order and adjectival possessors. As it was discussed earlier, definiteness in English is expressed with the help of articles, while in Russian, language that lacks articles, there are a few different ways to express definiteness. The ones that are looked at in Cho \& Slabakova (2014) are adjectival possessors and word order. In Korean, definiteness is expressed in a very similar way to the one in Russian: via possessors only not adjectival, but nominal. The Felicity Judgement task served as a testing instrument. The participants had to read short text fragments in their native languages and then evaluate the given target sentences (only in Russian) as felicitous or infelicitous interpretation of what they had read on a 5-point likert scale. For example (Cho \& Slabakova, 2014, 15-16):
(54) Sergei moved into a new apartment a couple of weeks ago. The apartment is in a great location and the rent is very good. Sergei is happy with the apartment but there's one problem. Sergei is having a hard time sleeping because some kids next door wake him up every night with their crying. Now Sergei is thinking about moving to another apartment.

```
a. Sergej bolše ne možet terpet' detsk-ij plač. [-definite]
    Sergei longer not can tolerate child-ADJ.ACC crying-NOUN.ACC 12345
```

[^3]| b. Sergej bolše ne možet terpet' plač det-ej. | [ $\pm$ definite] |
| :--- | :--- |
| Sergei longer not can tolerate crying-NOUN.ACC child-NOUN.GEN.pl | 12345 |
| 'Sergei can no longer tolerate some/the children crying.' | I don't know |

In addition to proposed morphological competence by Lardiere (2008) within feature reassembly approach in L2 acquisition, Cho \& Slabakova (2014) proposed to fundamentally address to such a fact as whether a feature is overtly or covertly expressed in L1. The research question was "[...] whether L2 learners acquire the overtly marked property, possessormodifiers, earlier than the covertly marked property, word order." (Cho \& Slabakova, 2014, 17). As the main means of the expression of definiteness, which were looked at in the target language (that is Russian) were word order and adjectival possessors, to analyze and compare the outcome data - the results were divided into several groups (Cho \& Slabakova, 2014, 17):

- "Comparisons between categories: adjectival possessor versus nominal possessor in [+definite] contexts (which was divided into the following four conditions: adjectival possessors in [+definite] contexts; adjectival possessors in [-definite] context; nominal possessors in [+definite] contexts and nominal possessors in [-definite] contexts);
- Comparison between properties: possessor modifiers versus word order."

Building on the aforementioned division of the results, the group results demonstrated that the L1 Korean participants performed better than L1 English participants in such opposed scenarios as: 1) adjectival possessors in [+definite] versus [-definite] contexts; 2) nominal versus adjectival possessors in [definite] contexts. The advantage that the Korean participants had in this part may be explained by the fact that their L1 was of a great help (as definiteness is expresses with the help of nominal possessors in Korean). It helped them to detect the differences between adjectival and nominal possessors as well as the contexts. While L1 English participants performed better only in the second opposed scenario (nominal possessors versus adjectival in [+definite] contexts).

When it comes to word order as the other means of the expression of definiteness in the target Russian language, the individual results were more expletive than the group ones. The task was to rate the OVS (object-verb-subject) sentences depending on whether the subject was definite
or indefinite based on the context. The definite object was supposed to be accepted in preverbal position, while the indefinite object was supposed to be unacceptable in the same preverbal position. For example (Cho \& Slabakova, 2014, 16):

$$
\begin{equation*}
\text { [+definite ] / Topic object in preverbal position } \quad \text { [OVS should be accepted] } \tag{55}
\end{equation*}
$$

Oleg and his brothers Sergei and Aleksei always help their mom make dinner. Today they made mushroom soup, baked potatoes and beet salad. When their dad came home and tried the soup, he asked: kto svaril takoj’ vkusnij’ sup? ('Who made such delicious soup?')
a. Sup svaril Oleg. 12345

Soup boiled Oleg
'Oleg cooked soup'
b. Ego svaril Oleg. 12345
it boiled Oleg
'Oleg cooked it’

$$
\begin{equation*}
\text { [-definite] / focused object in preverbal position } \quad[\text { OVS should be rejected }] \tag{56}
\end{equation*}
$$

I was watching TV when Aunt Galya called. She wanted to talk to Mom. I told her that Mom is busy cooking. Aunt Galya asked: Što gotovit tvoja mama? ('What is your mom cooking?')
a. Sup gotovit mama. 12345
soup cooks Mom.
'Mom is cooking soup'
b. Sup gotovit ona. 12345
soup cooks she.
'She is cooking soup'
The group results did not detect much of a difference in the performances of either of the groups (neither L1 Korean, nor L1 English participants). However, the individual results on word order showed that the L1 English L2 Russian participants performed way better (in distinguishing the OVS with a definite object versus the OVS with an indefinite object) than L1 Korean L2 Russian participants at the advanced level of Russian. This suggests that the English natives managed to spot the differences between their L1 grammar and L2 (Russian) grammar. Unlike L1 Korean participants, who at no matter what level of Russian proficiency did not show any target-like performance. Even though word order covertly (or contextually) expresses definiteness in both Russian and Korean languages, this syntactic feature (word order) requires reassembly while acquiring Russian as L2 due to the OV. Despite the fact that Cho \& Slabakova (2014) predicted that defining definiteness via word order will be especially challenging and
complicated, the English natives spotted the difference between the definite and indefinite object in the OVS order in Russian. Consequently, the conclusions of the study suggest "... that remapping a covertly realized feature (in both the L 1 and L 2 ) that requires reassembly presents the most challenging task". Therefore, such study broadens the frames within one perspective. In other words, the perspective of the Feature Reassembly Hypothesis within SLA by adding such items into consideration as whether the features are overtly or covertly presented; whether the features are directly or indirectly expressed; and/or whether the reassembly itself is necessary.

## 3 Research questions and methodology

In this chapter I will present the method and the procedure of my project. First, I will introduce the research questions, hypothesis and predictions in section 3.1; then I will outline the methodology in the section 3.2. I will describe how the experimental task was designed, how the participants were recruited and how the actual experiment took place.

### 3.1 Research questions, hypotheses and predictions

Previous studies have shown that L2 English learners of +Articles languages are influenced by their L1s when it comes to the article use in English (usually positive transfer or facilitation ${ }^{5}$ ). While L2 English learners of -Articles languages also tend to be influenced by their L1s (negative transfer or interference ${ }^{6}$ ) (Schöneneberger, 2009; 2014; Ionin, 2003; 2008; Ionin, Ko \& Wexler, 2004; Schwartz \& Sprouse 1994; 1996; Cho \& Slabakova, 2014, among others; see sections 2.2 -2.6.1).

Given that English, German, Norwegian and Russian have different article systems and the ways they convey definiteness and specificity, RQ1 and RQ2 will investigate cross-linguistic influence among these languages in relation to the acquisition of the article system of English. Discussed studies and data on the L1 German production of the English articles argue that the Article Choice Parameter is successfully and correctly set in L1 German L2 English speakers (Schönenberger, 2014, 101-103).

The Article Choice Parameter (for two-article languages):
A language which has two articles distinguishes them as follows:
Setting I. Articles are distinguished on the basis of specificity
Setting II. Articles are distinguished on the basis of definiteness.
(Ionin, 2003, 79; Ionin, Ko \& Wexler, 2004, 12)

[^4]According to the ACP, German is similar to English in terms of having the same parameter setting (Setting II) as to the article choice: that is definiteness for both languages.

However, it gets more complicated when it comes to Russian in relation to the acquisition of the article system of English. Russian is an -Articles language, and therefore there is no transfer available when it comes to the acquisition of the + Articles L2. This will be investigated withing the RQ1. Building on the Article Choice Parameter, Ionin (2003) formulated the Fluctuation Hypothesis to explain the process of the acquisition of the +Articles L2 by -Articles L1 learners. According to the FH, L1 Russian L2 English learners have: 1) to detect that English is a +Articles language; and 2) to determine which of the Settings of the Article Choice Parameter works for English. The complications begin at the stage of determining the right Setting for the language that is being acquired. In other words, L1 Russian L2 English learners fluctuate between Setting I and Setting II (fluctuate between definiteness and specificity as the predictors of the article choice). This will be investigated within the RQ2.

Turning now to the Present Perfect and Past Simple constructions, German allows the Present Perfect constructions in narrative contexts and with definite past time references while English does not. Norwegian and English are quite similar regarding the use of the Present Perfect and Past Simple constructions with Norwegian PS being more frequently used compared to its English counterpart (see section 2.3.2). Russian, for its part, divides verbs into perfective and imperfective. This may lead to a situation where Russian speakers would categorize verbs in a novel language as either completed vs. not completed. In case of English, perfective verbs may be mapped to either the Past Simple or Present Perfect. Since the four languages differ in the Present Perfect and Past Simple structures and terms of their use, RQ3 and RQ4 will investigate cross-linguistic influence among the very same languages with regard to the use of PP and PS constructions in English.

RQ1: Will L1 German and L1 Norwegian speakers show higher accuracy rates than L1 Russian speakers in their article choice in English due to the influence from their L1s (facilitative influence from German and Norwegian, non-facilitative influence from Russian)?

RQ2: Will L1 Russian L2 English speakers fluctuate between definiteness and specificity in their article choice in English, as predicted by the FH?

RQ3: Will L1 German L2 English speakers overuse the Present Perfect constructions in the Past Simple contexts due to negative L1 influence (the interference from their L1)? Will L1

Norwegian L2 English speakers use the Present Perfect and Past Simple constructions in English more accurately than the L1 German participants due to English and Norwegian being similar in the terms of use of the PP and PS tenses?

RQ4: Will L1 Russian L2 English participants accept the Past Simple constructions in the Present Perfect contexts (and vice versa) due to correlating the perfective aspect of the verb with completeness (the interference from their L1)?

The hypotheses $\left(\mathrm{H}_{1}\right)$ of this thesis are the following:

## $\mathrm{H}_{1}$ :

- L2 English speakers of +Articles languages (German and Norwegian) will perform more accurately than L2 English speakers of -Articles languages (Russian) in their article choice in English due to CLI (facilitative influence from German and Norwegian, non-facilitative influence from Russian).
- L2 English speakers of -Articles language (Russian) may fluctuate between definiteness and specificity in their article choice in English due to not having established the right Setting of the Article Choice Parameter.
- L2 English speakers of German will overuse the Present Perfect constructions in the Past Simple contexts in English due to German being less restricted in terms of use of the PP.
- L2 English speakers of Norwegian will use the PP and the PS constructions in English more accurately than the L1 German L2 English speakers due to Norwegian PP and PS having the same terms of use of PP and PS as in English.
- L2 English speakers of Russian will overuse the Past Simple in the Present Perfect contexts due to overgeneralizing the perfective aspect as to the Past Simple constructions and therefore completion of an event/action.

Based on the RQs and hypotheses, the predictions are the following:
Prediction 1: German and Norwegian L2 English speakers will accurately use articles in English since both German and Norwegian are +Articles languages with definiteness as the main predictor of the article choice. Moreover, definiteness is tied to uniqueness in all three
languages which may facilitate the acquisition of the English article system. Prediction 1 is based on the assumption of CLI from the L1.

Prediction 2: Russian L2 English speakers will fluctuate between definiteness and specificity in their article use in English, which will lead them to make mistakes of a particular pattern. (see Table 9 below from Ionin, Ko \& Wexler, 2004, 19). Prediction 2 is based on the assumption of CLI from the L1 \& FH.

Table 9. Predicted article choice in L2 English by L1 Russian speakers (Ionin, Ko \& Wexler, 2004, 19)

|  | +definite (target: the) | -definite (target: a) |
| :--- | :--- | :--- |
| +specific | Correct use of the | Overuse of the |
| -specific | Overuse of $a$ | Correct use of $a$ |

What Table 9 shows is that the most problematic contexts for L1 Russian L2 English speakers will be [+definite, -specific] and [-definite, +specific] with overuse of $a$ and overuse of the respectively. This implies that Russian L2 English speakers are driven by specificity in their article choice.

Prediction 3: German L2 English speakers will overuse the Present Perfect constructions in the Past Simple context, since German allows the PP in such contexts where English does not (narrative mode; together with past time references). Norwegian L2 English speakers will reject the Present Perfect constructions in the Past Simple contexts, since Norwegian is like English regarding the conditions of use of the PP and the PS (PS - for the events referred to the distinct past time point; PS - for the events that expand from the past to the present and that take place in such time range). In other words, the Norwegian participants are expected to use the English PP and PS constructions more accurately than the German participants.

Prediction 4: The Russian L2 English speakers may overuse the Past Simple constructions in the Present Perfect contexts in English due to linking completion of an action/event (perfective aspect of the verb) with the Past Simple. In other words, regardless of the past-time references or narrative mode, the Russian L2 English participants are expected to judge the PP and PS trials by what aspect the verbs in a certain trial is.

Prediction 1 is based on the previous studies that claimed that the speakers of +Article languages (with Setting II as the article choice predictor) can easily set the Setting of the Article Choice Parameter when acquiring the other +Articles language (Ionin, Zubizarerreta and Maldonado, 2008; Ionin, 2003; Schönenberger, 2014, among others). According to the ACP, there will be no complications for them in the article choice while acquiring English. This is compatible with the Full Transfer / Full Access Hypothesis (Schwartz \& Sprouse, 1994, 1996). What the FT/FA hypothesis claims is that the acquisition of a +Articles L2 is facilitated due to the transfer of the article semantics from the +Articles L1.

Prediction 2 is based on the crucial differences between English and Russian with regard to the article system. Since Russian is an -Articles language, articles will be acquired as a new grammatical category. Based on the Article Choice Parameter, L1 Russian L2 English speakers are still influenced by their L1. This is seen in having complications to set either of the Settings of the Article Choice Parameter that would suit the L2 that is being acquired. It may be expected that Russian speakers will fluctuate between definiteness and specificity as the main predictors of the article choice in English.

Prediction 3 is based on the differences in the conditions of use of the Present Perfect and the Past Simple in German in comparison to English. The main difference that stands out is that English is more restrictive in its use of the PP constructions than German. It cannot be used in the narrative contexts, which imply sequence of events; and it cannot be used with the past time references. Unlike German which allows the Present Perfect constructions in aforementioned cases. Norwegian, for its part, works in L1 Norwegian L2 English speakers` favor. Norwegian facilitates processing of the PP and PS constructions in English for L1 Norwegians due to the aforementioned constructions functioning in the same way in both languages.

Prediction 4 is based on Russian being different from English with regard to the Present Perfect tense. Primarily, Russian does not have such tense as the Present Perfect. Instead, the verbs in Russian are divided into two aspects: perfective and imperfective. Perfective aspect of the verb implies that the action was finished, while imperfective is underspecified in terms of completeness (Sonnenhauser, 2008). In English, the Present Perfect implies an action that started in the past and extends to the present. While the Past Simple denotes an event that took place at the definite past time point. We may hypothesize that Russian native speakers may link perfective aspect of the verb (completeness) with the English Past Simple.

### 3.2 Method

I used an online acceptability judgments task (AJT) to investigate the acquisition of English articles and the Present Perfect/the Past Simple constructions among L1 German, Norwegian and Russian L2 English speakers. One condition was a modified version of Ionin, Ko \& Wexler (2004) task (see section 3.3), while the Tense-Aspect condition was new. From the perspective of SLA, the acceptability judgment task proved itself to be a reliable tool to test L2 learners` knowledge at the stage of fluent L2 production (Sprouse, Schütze, Carson \& Almeida, 2013; Sprouse \& Almeida, 2017; Myers, 2009; among others). In addition to the main task, participants were asked to fill in the background questionnaire, which included questions about the participants` age, native language(s), other foreign language(s), age of exposure to English, proficiency level in English etc. (see Appendix 1 for details). The background factors are important to control for in order to isolate the effects of L1.

### 3.2.1 The acceptability judgment task (AJT)

Condition 1 (Article Use) in the acceptability judgment task was a modified version of the forced-choice elicitation task from Ionin et al. (2004).
(57) [+definite, +specific]

Kathy: My daughter Jeannie loves that new comic strip about Super Mouse.
Elise: Well, she is in luck! Tomorrow, I'm having lunch with (a, the, ø) creator of this comic strip - he is an old friend of mine.
(Ionin et al., 2004, 22)
In Ionin`s (2004) task the sentence in italics is the target sentence while the rest of the dialogue introduces the context. The part in bold (example 57) is the actual task - to pick one of the articles. To convert it into the acceptability judgment task, I inserted the correct (the) or incorrect article (a/an, $\emptyset$ ) and let the participants judge whether the target sentence is acceptable or not acceptable. Condition 2 was about Tense-Aspect domain. The sentences and dialogues that contained target Present Perfect and Past Simple constructions were added. The participants were asked to judge whether those sentences were acceptable or not acceptable, just like with the Condition 1.

The AJT consisted of 60 dialogues/sentences of 10 contexts. The 60 dialogues/sentences were equally divided into 30 grammatical and 30 ungrammatical ones. There were 6 contexts aimed to test the article use and 2 contexts to test the use of the Present Perfect/Past Simple
constructions. In addition to the experimental items, there were also 6 grammatical and 6 ungrammatical fillers relating to subject-verb agreement, tense forms, plurality, word order. Each context contained 6 items $(6 * 8+6+6=60)$, where each item had three options: $a, b$ and $c$. Whereas $a$ is contextually targeted item and $b$ and $c$ are wrong. Consequently, I created two lists of the AJT test (see section 3.2.3). Each list contained the same 60 dialogues/sentences of the same contexts. They only differed in their options: if in the List 1 there was a dialogue of a [+definite, +specific] context of an option $a$ - then in the List 2 it was the same dialogue of the same context, but of an option $b$ or $c$. I randomized the contexts and the items in the lists the way that there were not more than 5 right or wrong items in a row to avoid priming ${ }^{7}$ (see Appendix 2). Here are the contexts with the samples:

The contexts to test the use of articles:

1. [+definite, + specific] - target the

List 1. C. Eric: I really liked that book you gave me for my birthday. It was very interesting! Laura: Thanks! I like it too. I would like to meet author of that book someday. I saw an interview with her on TV, and I really liked her!
List 2. A. Eric: I really liked that book you gave me for my birthday. It was very interesting! Laura: Thanks! I like it too. I would like to meet the author of that book someday. I saw an interview with her on TV, and I really liked her!
2. [+definite, -specific] - target the

List 1. C. Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered!
Are you investigating his murder?
Police officer: Yes. We are trying to find murderer of Mr. Peterson - but we still don't know who he is.
List 2. A. Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?
Police officer: Yes. We are trying to find the murderer of Mr. Peterson - but we still don`t know who he is.
3. [-definite, + specific] - target $\boldsymbol{a}$

[^5]List 1. A. In an airport, in a crowd of people who are meeting arriving passengers.
Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find a red-haired girl; I
Think that she flew in on Flight 239.
List 2. $B$. In an airport, in a crowd of people who are meeting arriving passengers.
Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find the red-haired girl; I Think that she flew in on Flight 239.
4. [-definite, -specific] - target $\boldsymbol{a}$

List 1. C. In a children`s library. Child: I'd like to get something to read, but I don't know what myself. Librarian: Well, what are some of your interests? We have books on any subject. Child: Well, I like all sorts of things that move - cars, trains ... I know! I would like to get book about airplanes! I like to read about flying! List 2. A. In a children`s library.
Child: I'd like to get something to read, but I don't know what myself.
Librarian: Well, what are some of your interests? We have books on any subject.
Child: Well, I like all sorts of things that move - cars, trains ... I know! I would like to get a book about airplanes! I like to read about flying!
5. gen [+definite, +specific] - target the

List 1. B. Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things - several magazines, two red pens, and an interesting new
Book. I really like a book.
List 2. A. Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things - several magazines, two red pens, and an interesting new
Book. I really like the book.
6. gen [-definite, - specific] - target $\boldsymbol{a}$

List 1. C. Judy: Last Saturday, I didn't have anywhere to go, and it was raining.
Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And then I read book.
List 2. A. Judy: Last Saturday, I didn't have anywhere to go, and it was raining.

Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And then I read a book.

Gen stands for the generic article use in such context as [+definite, + specific] and [-definite, specific]. By generic article use I mean the previous-mention definite for the [+definite, + specific] context and first-mention indefinite for the [-definite, -specific] context.

The context to test the use of the Present Perfect/Past Simple:
7. $[+\mathrm{pp},-\mathrm{ps}]$ - target the $\boldsymbol{P P}$

List 1. A. Brandon: Have you bought Dayna`s birthday present yet? Fin: Not yet. List 2. C. Brandon: Had you bought Dayna`s birthday present yet? Fin: Not yet.
8. $[-\mathrm{pp},+\mathrm{ps}]$ - target the $\boldsymbol{P S}$

List 1. C. When did your family move to New Zealand?
They had moved there 7 years ago.
List 2. A. When did your family move to New Zealand?
They moved there 7 years ago.

Fillers:

Henry got a puppy for Christmas that became his best friend. Bobby the was dog called. [ungrammatical]

- A tree fell onto my car last week.
- Was there much damage?
- Well, yeah. I had to buy a new car.

Participants had to judge whether a dialogue/sentence was acceptable or not acceptable by clicking respective buttons (see Appendix 2 to see the Lists).

### 3.2.2 Participants

There were 4 groups of participants who were recruited online. Russian native speakers were recruited with the help of the recruiting company OMI (Online Market Intelligence www.omirussia.ru ). German and English native speakers were recruited with the help of Facebook posts and email distribution. Norwegian native speakers were recruited partly with
the help of Prolific (www.prolific.co), Facebook posts and email distribution. In total there were 114 participants among which 30 Russians, 34 Germans, 37 Norwegians and 13 English native speakers as a control group. The main selection criteria were that the participants were minimum 18 years old and were at least at the pre-intermediate proficiency level in English. All the German, Norwegian and Russian participants started learning English at the school settings. The following Table 10 illustrates age distribution among the participants:

Table 10. Age distribution among the participants

| Participants | The age range | The mean age |
| :--- | :--- | :--- |
| German $(\mathbf{n}=\mathbf{3 4})$ | $18-46$ | 27.47 |
| Norwegian $(\mathbf{n}=\mathbf{3 7})$ | $20-50$ | 27.29 |
| Russian $(\mathbf{n}=\mathbf{3 0})$ | $26-67$ | 39.87 |
| English $(\mathbf{n}=\mathbf{1 3})$ | $25-48$ | 32.85 |

The Table 10 shows the youngest and the oldest participants among the language groups, as well as the mean age. Additionally, 13 English native speakers were recruited as a control group. They were from the United States, the United Kingdom, Canada and South Africa (see the detailed information on all the participants in Appendix 3).

### 3.2.3 Procedure

The task was created in the Visual Studio Code (code.visualstudio.com) and uploaded to JATOS (Lange, Kühn, Filevich, 2015). The experiment was conducted entirely online. The estimated time to complete the task together with the background questionnaire was $25-30$ minutes. The English native speakers were the fastest to complete the task. It took them no longer than 15 - 20 minutes. Norwegians, Germans and Russians finished the task within 25 35 minutes. Due to conducting the experiment online, it was possible to recruit all the participants at the same time. It was done with the help of OMI (Online Market Intelligence www.omirussia.ru), Prolific (www.prolific.co) and distribution of the link in social media as well as via email.

As I mentioned earlier, I created two lists of the AJT which included grammatical and ungrammatical versions of the stimuli (see section 3.2.1). Each item could appear in one of the
three options ( $a, b$ and $c$ ). $A$ was always grammatical, while $b$ and $c$ were ungrammatical. In dialogues/sentences with the target article the , the option $b$ contained the indefinite article $a / a n$, and the option $c$ included the zero article ( $\phi$ ). When the target article was $a$, the option $b$ contained the definite article the, and the option $c$ - the zero article ( $\phi$ ). The stimuli in each list were randomized in such a way that there were no more than 5 correct/wrong stimuli in a row (the lists are presented in Appendix 2). The lists were evenly and sequentially distributed among the participants. When the first participant clicked on the link, s/he was assigned to complete List 1. The second participant was assigned List 2, etc.

In the first part of the experiment, the participants had to complete the background questionnaire (see section 3.2 and Appendix 1 for details). No personal information was collected. The participants received instructions prior to starting the AJT, where they were asked to read each dialogue/sentence carefully and judge the part in italics as acceptable or not acceptable. There were 60 items in total. The examples (58-61) are sample test sentences in the acceptability judgment task:
(58) It has been 4 hours since we came here! Let's go grab a bite! (acceptable)
(not acceptable)
(59) The deadline is only in a week but delivered I assignment my final yesterday.
(acceptable) (not acceptable)
(60) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park. Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to the girl.
(acceptable)
(not acceptable)
(61) In a clothing store

Clerk: May I help you?
Customer: Yes, please! I've rummaged through every stall, without any success. I am looking for a warm hat. It's getting rather cold outside.
(acceptable)
(not acceptable)

The presentation was one stimulus per page, and it was not possible for the participants to go back to change their answers. In total, there were 69 questions in the experiment: 9 questions in the background questionnaire and 60 in the acceptability judgment task. All items (including Condition 1 on Article Use adapted from Ionin et al. (2004) and Condition 2 on Tense-Aspect)
were matched in terms of length, vocabulary and complexity. This was done to avoid the influence of misperception of potentially complicated vocabulary or complex constructions that are outside of the scope of the current study.

## 4 Results

In this chapter I will present the results of the study and statistical analysis performed with the help of the R statistical software (R Core Team, 2020). First, in 4.1 I will describe each group of participants with regards to the English proficiency level and age of exposure to English. Second, in 4.2 I will present the general results of the acceptability judgment task. The subsection 4.2.1 will include the results of the L2 groups matched by proficiency, followed by the performance of the matched groups in accepting the grammatical and ungrammatical trials in 4.2.2. In the sub-section 4.2.3 I will present the results of the L2 groups matched by proficiency in sub-conditions "Article Use" and "Tense-Aspect". Subsequent sections 4.3, 4.4, 4.5 and 4.6 will cover the results of each language group (native control group and L2 groups matched by proficiency) in the acceptability judgment task by conditions and trials.

### 4.1 Participants - the English proficiency and age of exposure to English

The participants` level of English proficiency was measured using a six-points (beginner - preintermediate - intermediate - upper-intermediate - advanced - native) self-estimation scale in three aspects: reading, writing and speaking. To obtain a unified proficiency score per each participant and the mean proficiency score of each language group, the six-points scale was replaced with respective points 1 - beginner; 2 - pre-intermediate; 3 - intermediate; 4 - upperintermediate; 5 - advanced, 6 - native in each aspect. For example, if a participant evaluated her/himself as, let`s say, upper-intermediate in speaking, advanced in reading and intermediate in writing, it would be $(4+5+3) / 3=4$. The proficiency score of this particular participant would then be 4. Although 'native' part of the self-estimation scale was presented to the L2 participants, none of them picked native as his/her proficiency level in any of the aspects. The Table 11 below demonstrates the age range, mean age, mean proficiency score and the mean age of exposure to English in each language group:

Table 11. The age range, mean age, mean proficiency, mean AoE score among the groups

| Participants | Age range <br> (years) | Mean age | Mean prof. score | Mean AoE |
| :--- | :--- | :--- | :--- | :--- |
| (years) | (out of 6) | (years) |  |  |
| German (n=34) | $18-46$ | 27.47 | 4.27 | 8.85 |
| Norwegian (n=37) | $18-50$ | 27.29 | 4.46 | 6.59 |
| Russian (n=30) | $25-67$ | 39.87 | 3.79 | 10.23 |
| English (n=13) | $25-48$ | 32.85 | 6 | NA |

Table 11 summarizes the participants` demographics. As evident from Table 11, Russian native speakers constitute the group with the oldest participants, while the Germans are the youngest. Norwegians generally started being exposed to English at a younger age ( 6.59 y.o.) than Germans ( 8.85 y.o.) and Russians (10.23 y.o.). Norwegian native speakers also outperform German and Russian natives in their English proficiency score ( 4.46 vs 4.27 vs 3.79 respectively). Figure 5 illustrates the proficiency levels in the three L2 groups:

Figure 5. Comparison of the proficiency levels among the language groups


As Figure 5 and Table 11 show，German（4．27）and Norwegian（4．46）groups are closer to each other when it comes to the proficiency scores，while the Russian group（3．79）falls a bit behind． Figure 6 demonstrates the mean age of onset of learning English for the three L2 groups．

Figure 6．Mean AoE to English among the language groups

Participants 白 Ger 官 Nor 追 Rus


Figure 6 shows that L1 Norwegian speakers were generally the youngest（ 6.59 y．o．）to start being exposed to English for the first time，L1 German speakers were the second youngest group to start learning English（ 8.85 y．o．），and L1 Russian speakers were the oldest（10．23 y．o．） to have been first exposed to English among the three groups．This may indicate a relationship between age of first exposure and proficiency level of that same second language．Naturally， the earlier the first exposure to L2 occurred（and therefore the longer），the higher proficiency level is expected（Kharkhurin，2008）．However，the Russian group is the oldest one，which implies that length of exposure to English should have been the longest in this group．

## 4．2 The acceptability judgment task－the general results

The acceptability judgment task was designed to test whether there is a cross－linguistic influence among L1 Norwegian，L1 German and L1 Russian L2 English speakers regarding fluent use of the English articles and the Present Perfect／Past Simple constructions（see section
3.2.1 for details). The AJT consisted of 60 sentences/dialogues that were equally divided into grammatical and ungrammatical ones. Each grammatical sentence had its ungrammatical counterpart based on the condition, article type or tense-aspect construction. The actual task was to judge whether a sentence or a part of a dialogue in italics was acceptable (0) or not acceptable (1).

Article choice was tested in six contexts: [+definite, + specific], [+definite, - specific], [-definite, + specific], [-definite, -specific], generic [+definite, + specific], generic [-definite, - specific]. The use of the Present Perfect and Past Simple constructions was tested in two contexts: [+pp, $-\mathrm{ps}],[-\mathrm{pp},+\mathrm{ps}]$. The results of article choice and the PP and PS conditions were grouped into four contexts: the definite context ([+definite, + specific], [+definite, - specific]), the indefinite context ([-definite, +specific], [-definite, -specific]), the generic context (generic [+definite, + specific ${ }^{8}$, generic [-definite, -specific]), and the Present Perfect/Past Simple context ([+pp, -$\mathrm{ps}],[-\mathrm{pp},+\mathrm{ps}]$ ). In addition, there was the fifth context of results - fillers (both, grammatical and ungrammatical). The ungrammatical fillers were of different ungrammatical structures in terms of syntax, number and tense disagreement.

Figure 7 and Tables 12-15 demonstrate the general performance of four groups of participants and the ratio of their responses in five conditions of the results (the definite, the indefinite, the generic, fillers, the $\mathrm{pp} / \mathrm{ps}$ contexts) in the acceptability judgment task.

[^6]> Vicky: Where were you yesterday? I tried to call you, but you weren't home.
> Rachel: I went to a bookstore yesterday.
> Vicky: Oh, what did you get?
> Rachel: I got lots of things - several magazines, two red pens, and an interesting new book. I really like the book.

Gen [-def, -spec]: Judy: Last Saturday, I didn't have anywhere to go, and it was raining.
Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And then I read a book.

Figure 7. General results among the language groups


Table 12. The percentage ratio of responses in English group by context

| Group | English |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Condition | Def | Fillers | Gen | Indef | PP/PS |
| Correct responses \% | 87 | 94 | 86 | 88 | 81 |
| Wrong responses \% | 13 | 6 | 14 | 12 | 19 |

Table 13. The percentage ratio of responses in German group by context

| Group | German |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Condition | Def | Fillers | Gen | Indef | PP/PS |
| Correct responses \% | 87 | 93 | 78 | 79 | 75 |
| Wrong responses \% | 13 | 7 | 22 | 21 | 25 |

Table 14. The percentage ratio of responses in Norwegian group by context

| Group | Norwegian |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Condition | Def | Fillers | Gen | Indef | PP/PS |
| Correct responses \% | 80 | 89 | 77 | 78 | 78 |
| Wrong responses \% | 20 | 11 | 23 | 22 | 22 |

Table 15. The percentage ratio of responses in Russian group by context

| Group | Russian |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Condition | Def | Fillers | Gen | Indef | PP/PS |
| Correct responses \% | 53 | 79 | 54 | 55 | 70 |
| Wrong responses \% | 47 | 21 | 46 | 45 | 30 |

Surprisingly, the native control group did not perform with $100 \%$ accuracy, there was a certain ratio of what we judged as 'incorrect' responses in each condition, especially in tense-aspect ( $28 \%$ ) and generic contexts ( $14 \%$ ). The German group performed the closest to the native control group on all condition contexts with a somewhat higher ratio of incorrect responses in the tense-aspect context ( $25 \%$ ). The Norwegian group completed the task with slightly worse results in comparison to the German group. The L1 Russian speakers demonstrated the lowest
ratio of correct responses, and the highest ratio of wrong responses on all conditions (see sections 4.3, 4.3, 4.3 for more detailed results for each language group).

To analyze the results of the L2 English groups, a generalized linear mixed-effect model was fit to predict accuracy by condition, language group and their interaction. Proficiency was added as a separate fixed effect; individual participants and stimuli were included as random effects (see Appendix 4). The model revealed the following significant effects: condition generic ( $\mathrm{p}<$ $0.05, \beta=0.84){ }^{9}$, condition indefinite ( $\mathrm{p}<0.05, \beta=0.63$ ), condition $\mathrm{pp} / \mathrm{ps}(\mathrm{p}<0.05, \beta=0.93)$ and fillers ( $p<0.05, \beta=-0.93$ ). The model also revealed a significant effect of groups: Norwegian group ( $\mathrm{p}<0.05, \beta=0.73$ ) and Russian group ( $\mathrm{p}<0.05, \beta=1.96$ ). In addition, the following interactions were significant: pp/ps condition and L1 Norwegian group ( $p<0.05, \beta$ $=-0.71$ ); condition generic and L1 Russian group ( $\mathrm{p}<0.05, \beta=-0.78$ ); condition indefinite and L1 Russian group ( $\mathrm{p}<0.05, B=-0.71$ ); and the $\mathrm{pp} / \mathrm{ps}$ condition and L1 Russian group ( $\mathrm{p}<$ $0.05, \beta=-1.67$ ). This indicates that the aforementioned contexts were more problematic for the participants whose L1s were Norwegian and Russian than for the L1 Germans. This in turn may be indicative of cross-linguistic influence.

Finally, proficiency had a significant effect on accuracy ( $\mathrm{p}<0.05, \beta=-0.16$ ). This suggests that the participants` judgments for all the stimuli of the AJT were affected by their levels of English proficiency.

Post-hoc pairwise comparisons of the model were used to analyze how the three L2 English groups differed in their performance in each condition. Comparisons showed that in the definite, generic and indefinite contexts the German and Russian ( $p<0.05, \beta=-1.88, \beta=-1.09, \beta=-$ 1.16 respectively) groups significantly differed in their performance as well as the Norwegian and Russian ( $p<0.05, \beta=-1.30, \beta=-1.06, \beta=-1.06$ in the respective conditions). There was also difference between the German and Russian groups ( $p<0.05, \beta=-1.30$ ) and the Norwegian and Russian ( $p<0.05, \beta=-0.70$ ) groups in fillers (see Appendix 4). There was not any significant contrast between any of the groups in the $\mathrm{pp} / \mathrm{ps}$ context.

[^7]
### 4.2.1 The AJT results of the L2 groups matched by proficiency

To avoid such a significant influence of proficiency on the results of the AJT, the L2 participants were matched by their proficiency levels. The proficiency scale for the L2 participants ranged from 1 to 5 (see section 4.1 for details on the proficiency scale). The minimum L2 participants` proficiency score was 3 and the interim scores were $3.33,3.66,4.33$, 4.66. Instead of grouping the participants into seven groups (5, 4.66, 4.33, 4, 3.66, 3.33 and 3 ), the level structure of proficiency was simplified into three groups (5, 4 and 3$)^{10}$. Whereas 5 accounted for the respective proficiency score of the individual participants; the participants with the interim scores between 4 and 5 (4.33 and 4.66) were marked with 4 ; and the participants with the proficiency scores between 3 and 4 were marked with 3 . The following Table 16 demonstrates the subset of the participants matched by proficiency:

Table 16. The subset of the L2 participants matched by proficiency

|  | Groups of participants |  |  |
| :--- | :--- | :--- | :--- |
| Proficiency level | Russian | Norwegian | German |
| $\mathbf{5}$ | 3 | 5 | 5 |
| $\mathbf{4}$ | 10 | 12 | 12 |
| $\mathbf{3}$ | 11 | 7 | 7 |
| Total \# of participants | $\mathbf{2 4}$ | $\mathbf{2 4}$ | $\mathbf{2 4}$ |

Since the groups were created building on the maximum number of participants per proficiency level, we can see from the Table 16 that there were the fewest L1 Russian L2 English participants of the advanced level of English proficiency. There were also the fewest L1 Norwegian and L1 German L2 English participants of the intermediate level of English proficiency.

[^8]Figure 8. General results among the L2 groups matched by proficiency


Table 17. The percentage ratio of responses in L2 groups (matched by proficiency) by conditions

| Condition | Def | Fillers |  |  |  |  | Gen |  | Indef |  | PP/PS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Response <br> (0=correct, <br> l=wrong) | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{1}$ |  |
| German <br> (n=24) | $88 \%$ | $12 \%$ | $93 \%$ | $7 \%$ | $77 \%$ | $23 \%$ | $77 \%$ | $23 \%$ | $76 \%$ | $24 \%$ |  |
| Norwegian |  |  |  |  |  |  |  |  |  |  |  |
| (n=24) |  |  |  |  |  |  |  |  |  |  |  |

As evident from the Figure 8 and Table 17, the Russian group still performed worse in all the conditions even though all the L2 English participants were matched by their proficiency levels. Surprisingly, the German and Norwegian groups showed the same ratio of correct responses in the $\mathrm{pp} / \mathrm{ps}$ condition ( $76 \%$ ).

A generalized linear mixed-effects model was fit to predict accuracy by condition, language group, proficiency and their interaction. Individual participants were included as random slopes and stimuli were included as random effects (see Appendix 5). The model did not reveal any significant effects of any of the variables. However, post-hoc pairwise comparisons of the model revealed the contrasts between the groups` performance within the conditions controlled for proficiency. There was a significant difference between the German and Russian groups in the definite ( $p<0.05, \beta=-2.05$ ), generic ( $p<0.05, \beta=-1.08$ ), indefinite ( $p<0.05, \beta=-1$ ) contexts and fillers ( $p<0.05, \beta=-1.30$ ). The Norwegian and Russian groups also differed in their performance in the definite ( $p<0.05, \beta=-1.49$ ), generic ( $p<0.05, \beta=-1$ ) and indefinite ( $p<0.05, \beta=-0.86$ ). No significant effects were found between any of the groups in the $\mathrm{pp} / \mathrm{ps}$ condition.

### 4.2.2 Acceptability rates of grammatical and ungrammatical trials

The general results for the acceptability judgment task are presented in Figures 9-10 and Table 18 for both grammatical and ungrammatical items across conditions and by language groups matched by proficiency.

Figure 9. Acceptance of grammatical trials by L2 groups and conditions


Figure 10. Acceptance of ungrammatical trials by L2 groups and conditions


Table 18. The percentage ratio of acceptance of grammatical \& ungrammatical trials by condition and group

| Grammatical |  |  |  |  |  | Ungrammatical |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Condition | Def | Fillers | Gen | Indef | $\begin{aligned} & \text { PP/ } \\ & \text { PS } \end{aligned}$ | Def | Fillers | Gen | Indef | $\begin{aligned} & \text { PP/ } \\ & \text { PS } \end{aligned}$ |
| Ger | 46\% | 45\% | 40\% | 44\% | 44\% | 41\% | 47\% | 35\% | 32\% | 33\% |
| Norw | 41\% | 41\% | 38\% | 43\% | 41\% | 39\% | 47\% | 36\% | $32 \%$ | 35\% |
| Rus | 38\% | 38\% | 34\% | 37\% | 41\% | 13\% | 43\% | 22\% | 20\% | 30\% |

Note that ratio of acceptance of ungrammatical trials was counted by bounding the ratio of acceptance of ungrammatical trials of options $b$ and $c$. The ratio presented in the Table 8 are the ratio of the correct judgments.

Figures 9-10 and Table 18 show that in general the German group performed the best out of the three L2 groups in terms of grammaticality. They performed with slightly worse results in recognizing the ungrammatical items of the generic ( $35 \%$ ), indefinite ( $32 \%$ ) and $\mathrm{pp} / \mathrm{ps}(33 \%)$ contexts. The Norwegian group performed very similarly to the German group with slightly better results in unaccepting the ungrammatical items of the generic ( $36 \%$ ) and $\mathrm{pp} / \mathrm{ps}(35 \%)$ contexts. The Russian group, in its turn, performed with the lowest ratio of acceptance of grammatical and ungrammatical items across all the conditions. In general, the performance of all three L2 groups is relatively similar in accepting the grammatical trials with L1 Russian group having a bit more of the incorrect responses, while there is a noticeable gap in the acceptance ratio on the ungrammatical trials between the German/ Norwegian and Russian groups. Given that the L2 groups were matched by proficiency, this suggests cross-linguistic influence.

### 4.2.3 The AJT results of the L2 groups in sub-conditions "Article Use" and "Tense-Aspect"

All the conditions of the article use ([+def, -spec], [-def, +spec], [+def, +spec], [-def, -spec], gen [+def, +spec], gen [-def, -spec]) were grouped into one big condition "Article Use" and the [+pp, -ps], [-pp, +ps] were grouped into "Tense-Aspect" condition. The fillers condition was left out separately. To assess statistical differences between the responses in grammatical and
ungrammatical trials in the two conditions ("Article Use" and "Tense Aspect") separately, generalized linear mixed-effects model was fit, where the accuracy was predicted by an interaction of the condition, language group, grammaticality. Proficiency was included as a separate fixed effect; the individual participants were included as random slopes, and stimuli as random effects (see Appendix 6). The model revealed a significant effect of the Russian group ( $\mathrm{p}<0.05, \beta=0.98$ ). Ungrammatical trials had significant effect on the accuracy scores ( $p<0.05, \beta=1.05$ ). In addition, there were following significant interactions found: condition fillers and ungrammatical trials ( $\mathrm{p}<0.05, \beta=-1.86$ ), condition "Tense-Aspect" and ungrammatical trials ( $p<0.05, \beta=0.64$ ), the Norwegian group and ungrammatical trials ( $p<$ $0.05, \beta=-0.46$ ), the Russian group and ungrammatical trials ( $p<0.05, \beta=0.81$ ) and the Russian group, condition "Tense-Aspect" and ungrammatical trials $(p<0.05, \beta=-0.94)$.

Post-hoc pairwise comparisons of the model within groups, conditions and grammaticality revealed some significant differences between the L2 groups in grammatical as well as ungrammatical trials. For the part of the grammatical trials, the comparisons showed that the German and Russian groups differed in their performance in the "Article Use" condition (p $<$ $0.05, \beta=-0.98$ ) as well as in Fillers ( $p<0.05, \beta=-1.03$ ). There was also a significant difference between the Norwegian and German groups in the "Article Use" condition ( $p<0.05, \beta=-0.53$ ).

For the ungrammatical trials, the German and Russian groups varied in the "Article Use" ( $\mathrm{p}<$ $0.05, \beta=-1.80$ ) and Fillers ( $p<0.05, \beta=-1.56$ ). The Norwegian and Russian groups, for their part, also differed in the "Article Use" condition ( $p<0.05, \beta=-1.73$ ) and Fillers ( $p<0.05, \beta=$ -1.56).

### 4.3 Native control group results in the AJT

The native control group performed not with a $100 \%$ accuracy in the acceptability judgment task. Having looked at the general results in sections 4.2 and 4.2.1, it was discovered that there were a few problematic contexts for the native control group. They were Present Perfect/Past Simple context with the highest ratio of incorrect responses (19\%); the generic context with the ratio of incorrect responses of $14 \%$; and the definite context with $13 \%$ of incorrect responses. Therefore, I was interested to look at the aforementioned contexts more closely. The following Figure 11 and Table 19 demonstrate the native control group`s results in all the conditions of the AJT:

Figure 11. Native control group results in the AJT by condition


Table 19. The percentage ratio of responses in native control group by condition

| Group | English |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Condition | [-def, -spec] | [-def, + spec] | [-gib, $+g r]$ | $[-p p$ $+p s]$ | $\begin{aligned} & {[+d e f,} \\ & - \text { spec }] \end{aligned}$ | $\begin{aligned} & {[+d e f,} \\ & +s p e c] \end{aligned}$ | $\begin{aligned} & {[+g i b,} \\ & -g r] \end{aligned}$ | $\begin{aligned} & {[+p p} \\ & -p s] \end{aligned}$ | Gen [-def, <br> -spec] | $\begin{aligned} & \text { Gen }[+d e f, \\ & + \text { spec }] \end{aligned}$ |
| Correct responses \% | 88 | 88 | 88 | 94 | 79 | 95 | 99 | 69 | 81 | 91 |
| Wrong responses \% | 12 | 12 | 12 | 6 | 21 | 5 | 1 | 31 | 19 | 9 |

Figure 11 and Table 19 illustrate the details of the aforementioned problematic conditions for the native control group. What can be seen from the Figure 11 and the Table 19 is that it was the $[+\mathrm{pp},-\mathrm{ps}]$ condition that made the general results signal about PP/PS context being
problematic. The ratio of correct responses in this condition is only $69 \%$, while the ratio of incorrect responses - $31 \%$.

Having analyzed the [+pp, -ps] condition by trials and participants acceptability judgments, it was found that some English native participants mistakenly accepted Past Simple constructions in the Present Perfect contexts, as in (see Tables 23-25 in Appendix 7 for details on the acceptability judgments by conditions and trials):
(b) - Did you ever drink Turkish coffee?

- Unfortunately, no.
[target PP - accepted as grammatical by $75 \%$ of the participants]
The trial from the above is usually used to ask about general life experiences and usually used with an adverb ever and the Present Perfect construction. The participants might have misjudged the aforementioned trial due to expecting hidden context.

As can be seen from Table 19, there was a rather high ratio ( $21 \%$ ) of wrong responses in the [+def, -spec] condition. The mistakes the native control group participants made within this condition is that they did not accept the definite article the in the condition it belonged, and mistakenly accepted zero article instead of the target definite the, as in:
(a) At a gallery

Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful!
Sarah: I would like to meet the author of that painting.
Unfortunately, I have no idea who it is since the painting is not signed.
[target the - accepted as ungrammatical by $100 \%$ of the participants]
(c) At a supermarket

Sales Clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it's completely spoiled! I want to talk owner of this store. I don't know who he is, but I want to see him right now! [target the - accepted as grammatical by $60 \%$ of the participants]

Another condition that turned out to be erroneous for the native control group is the generic [def, -spec] condition with $19 \%$ of incorrect responses (see Table 19). In this condition, English native participants did not accept the indefinite article a/an in the generic [-def, -spec] condition, and mistakenly accepted the definite article the in one of the trials, as in:
(a) Usually at school children learn such facts about animals as $a$ whale is a mammal.
[target a - accepted as ungrammatical by $50 \%$ of the participants]
(b) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got the puppy.
[target a - accepted as grammatical by $50 \%$ of the participants]

### 4.4 Results of the German group in the AJT

Proceeding from the structures of German and English, and in particular terms of use of the Present Perfect and Past Simple constructions in both languages, the pp/ps context was expected to be the most problematic one for the L1 German participants. While the article choice was expected to be of no problem. The following Figure 12 and Table 20 demonstrate the performance of the L1 German group in the AJT by conditions.

Figure 12. L1 German L2 English group`s results in the AJT by condition


Table 20. The percentage ratio of responses in the German group by condition

| Group | Ger |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Condition | [-def, <br> -spec] | [-def, $+ \text { spec] }$ | $\begin{aligned} & {[-g i b,} \\ & +g r] \end{aligned}$ | $[-p p$ $+p s]$ | [+def, -spec] | $\begin{aligned} & {[+d e f,} \\ & +s p e c] \end{aligned}$ | $\begin{aligned} & {[+g i b,} \\ & -g r] \end{aligned}$ | $\begin{aligned} & {[+p p} \\ & -p s] \end{aligned}$ | Gen [-def, <br> -spec] | $\begin{aligned} & \text { Gen[+def, } \\ & + \text { spec] } \end{aligned}$ |
| Correct responses \% | 81 | 73 | 91 | 76 | 85 | 90 | 95 | 77 | 79 | 74 |
| Wrong responses \% | 19 | 27 | 9 | 24 | 15 | 10 | 5 | 23 | 21 | 26 |

Based on the general results (Figure 7 and Table 13 in the section 4.2), such contexts as the indefinite, generic and pp/ps were problematic for German participants ( $20 \%, 22 \%$ and $25 \%$ of incorrect responses respectively). Figure 12 and Table 20 indicate that both $[-\mathrm{pp},+\mathrm{ps}]$ and [ $+\mathrm{pp},-\mathrm{ps}$ ] conditions were the reason why the ratio of correct responses of the German group in the $\mathrm{pp} / \mathrm{ps}$ context was just $75 \%$ (see Table 13). However, only one condition skewed the general results in the indefinite context - [-def, +spec] condition with $27 \%$ of incorrect responses. The same applies to the generic context - gen [+def, + spec] condition with $26 \%$ of incorrect responses.

The analysis of the trials by [+pp, -ps] condition showed that L1 German participants unexpectedly accepted some trials with the Past Simple constructions in the Present Perfect contexts in English, such as in the following example (see Tables $26-29$ in Appendix 8 for details on the acceptability judgments by conditions and trials):
(b) - Did you ever drink Turkish coffee?

- Unfortunately, no.
[target $\boldsymbol{P P}$ - accepted as grammatical by $73 \%$ of the participants]

In the $[-\mathrm{pp},+\mathrm{ps}]$ condition, German participants performed as expected. Due to German being less restrictive about terms of use of the Present Perfect, some German participants accepted PP constructions in the Past Simple contexts with definite past time references, as in:
(b) - For how long have you known each other?

- I think I have met her in 1986.

When it comes to the article choice, the analysis of the trials within the [-def, +spec] condition illustrated that the L1 German L2 English participants mistakenly accepted the definite article the in the indefinite contexts:
(b) In an airport, in a crowd of people who are meeting arriving passengers
Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find the red-haired girl; I think that she flew in on Flight 239.
[target $\boldsymbol{a}$ - accepted as grammatical by $78 \%$ of the participants]
In the generic [+def, + spec] condition, the most common mistake made by L1 German participants was that they either mistakenly accepted the indefinite article and/or did not accept the definite article in the definite context, as in:
(a) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked a book.
[target $\boldsymbol{a}$ - accepted as ungrammatical by $56 \%$ of the participants]
(71)
(b) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to a girl.
[target the - accepted as grammatical by $78 \%$ of the participants]

### 4.5 Results of the Norwegian group in the AJT

Based on the similarities between Norwegian and English regarding the article use and especially the terms of use of the Present Perfect and Past Simple constructions, facilitative influence of L1 was expected. However, Norwegian group performed similarly and slightly worse than the German group by making mistakes in the same conditions although the mean score of English proficiency of Norwegians (4.46) was higher than that of Germans (4.27). The
following Figure 13 and Table 21 show the results of the Norwegian group in the acceptability judgment task by conditions.

Figure 13. L1 Norwegian L2 English group`s results in the AJT by condition


Table 21. The percentage ratio of responses in the Norwegian group by condition

| Group | Norw |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Condition | [-def, -spec] | [-def, + spec] | [-gib, $+g r]$ | $[-p p$ $+p s]$ | $\begin{aligned} & {[+d e f,} \\ & - \text { spec }] \end{aligned}$ | $\begin{aligned} & {[+d e f,} \\ & + \text { spec }] \end{aligned}$ | $\begin{aligned} & {[+g i b,} \\ & -g r] \end{aligned}$ | $\begin{aligned} & {[+p p} \\ & -p s] \end{aligned}$ | Gen [-def, <br> -spec] | $\begin{aligned} & \text { Gen }[+d e f, \\ & + \text { spec }] \end{aligned}$ |
| Correct responses \% | 77 | 72 | 83 | 92 | 78 | 78 | 94 | 61 | 80 | 71 |
| Wrong responses \% | 23 | 28 | 17 | 8 | 22 | 22 | 6 | 39 | 20 | 29 |

What can be seen from the Figure 13 and Table 21 is that there are five conditions in which the ratio of incorrect responses crosses $20 \%$. The conditions are: [-def, -spec] - $23 \%$; [-def, +spec] $-28 \%$; [+def, -spec] - $22 \%,[+\mathrm{pp},-\mathrm{ps}]-39 \%$ and generic [+def, +spec$]-29 \%$.

The main mistake made by L1 Norwegian participants in the [ +pp , -ps] condition was of the same character as L1 German participants made in the same condition (see Tables $30-34$ in Appendix 9 for details on the acceptability judgments of Norwegian group by condition and trials). They accepted Past Simple constructions in the Present Perfect contexts, as in:
(b) How far are you in the homework for the reading class? Up to now, I read the third chapter, the second volume of "The War and Peace".
[target PP - accepted as grammatical by $69 \%$ of the participants]

In the [+def, -spec] condition, some of the Norwegian participants did not accept the definite article the in the definite context, as well as accepted the indefinite article where it should not have been accepted:
(a) At a gallery

Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful!
Sarah: I would like to meet the author of that painting.
Unfortunately, I have no idea who it is since the painting is not signed.
[target the - accepted as ungrammatical by $73 \%$ of the participants]
(b) Bill: I'm looking for Erik. Is he home?

Rick: Yes, but he is on the phone. It's an important business matter. He is talking to an owner of his company! I don't know who that person is, but I know that this conversation is important to Erik.
[target the - accepted as grammatical by 45\% of the participants]
In the indefinite context group, and in particular in such conditions as [-def, +spec] and [-def, spec], L1 Norwegian participants erroneously accepted the definite article the and the zero article in the indefinite contexts, as in:

2(b) In an airport, in a crowd of people who are meeting arriving passengers

Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find the red-haired girl; I think that she flew in on Flight 239.
[target a - accepted as grammatical by $73 \%$ of the participants]
(76)
(c) In a children`s library

Child: I'd like to get something to read, but I don't know what myself.
Librarian: Well, what are some of your interests? We have books on any subject.
Child: Well, I like all sorts of things that move: cars, trains. I know! I would like to get book about airplanes! I like to read about flying!
[target a - accepted as grammatical by $38 \%$ of the participants]
There was a mistake that prevailed in the generic [+def, +spec] condition. Some of the Norwegian participants accepted the indefinite article a/an even though the target article was the definite one, as in:
(b) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to a girl.
[target the - accepted as grammatical by $64 \%$ of the participants]

### 4.6 Results of the Russian group in the AJT

Given that Russian is totally different from English regarding the determiner and tense-aspect systems, non-facilitative influence of L1 was expected. Additionally, the mean score of English proficiency of Russian group was the lowest (3.79) among the L2 groups which might have influenced the overall performance of L1 Russian L2 English participants. In the following Figure 14 and Table 22 we can see the results of the Russian group by each condition of the acceptability judgment task.

Figure 14. L1 Russian L2 English group`s results in the AJT by condition


Table 22. The percentage ratio of responses in the Russian group by condition

| Group | Rus |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Condition | [-def, -spec] | [-def, $+ \text { spec] }$ | $[-g i b,$ $+g r]$ | $\begin{aligned} & {[-p p,} \\ & +p s] \end{aligned}$ | $[+d e f$, <br> -spec] | $\begin{aligned} & {[+d e f,} \\ & + \text { spec }] \end{aligned}$ | $\begin{aligned} & {[+g i b,} \\ & -g r] \end{aligned}$ | $\begin{aligned} & {[+p p,} \\ & -p s] \end{aligned}$ | Gen [-def, -spec] | $\begin{aligned} & \text { Gen }[+d e f, \\ & + \text { spec }] \end{aligned}$ |
| Correct responses \% | 59 | 54 | 74 | 75 | 47 | 55 | 87 | 66 | 56 | 53 |
| Wrong responses \% | 41 | 46 | 26 | 25 | 52 | 45 | 13 | 34 | 44 | 47 |

Figure 14 and table 22 demonstrate that almost all conditions of the AJT turned out to be problematic for L1 Russian L2 English participants. In 9 out of 10 conditions, the ratio of incorrect responses crosses $20 \%$. As expected, the most problematic conditions were the ones that Ionin, Ko \& Wexler $(2004,19)$ predicted to be problematic in the Fluctuation Hypothesis:
[-def, +spec] with $46 \%$ of incorrect responses and [+def, -spec] - $52 \%$ of incorrect responses (see Tables $35-42$ in Appendix 10). In the [+def, - spec] condition, some of L1 Russian L2 English participants did accept the indefinite article just like it was predicted and expected, as in:
(b) After a woman`s running race

Reporter: Excuse me! Can you please let me in?
Guard: What do you need?
Reporter: I am a reporter. I need to talk to a winner of this race.
I don't know who she is, so can you please help me?
[target the - accepted as grammatical by $82 \%$ of the participants]
L1 Russian L2 English participants also mistakenly accepted zero article in the [+def, -spec] condition quite frequently:
(c) Conversation between a police officer and a reporter. Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder? Police officer: Yes. We are trying to find murderer of Mr. Peterson, but we still don't know who he is.
[target the - accepted as grammatical by $91 \%$ of the participants]
In the $[-\mathrm{def},+\mathrm{spec}]$ condition, some of the participants mistakenly accepted the definite article just like was predicted by Ionin et al. (2004), ss well as they accepted zero article:
(b) In a "Lost and Found"

Clerk: Can I help you? Are you looking for something you lost?
Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for the green scarf. I think that I lost it here last week.
[target $\boldsymbol{a}$ - accepted as grammatical by $82 \%$ of the participants]
(c) Reporter 1: Hi! I haven't see you in weeks. Do you have time for lunch?
Reporter 2: Sorry, no. Im busy with a story about local medicine. Today, I am interviewing doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews.
[target $\boldsymbol{a}$ - accepted as grammatical by $73 \%$ of the participants]
However, in such conditions where no fluctuation and no conflict between definiteness and specificity was expected [+def, + spec] and [-def, -spec], the ratio of incorrect responses was
rather high - 45 and $41 \%$ respectively. Having looked at the acceptability judgments of all the participants of the Russian group in these two conditions, there seems to be a pattern by which L1 Russian participants were led in making repetitious mistakes. The participants tended to accept the indefinite article in the $[+\mathrm{def},+\mathrm{spec}]$ condition quite frequently; as well as accepted the definite article in the [-def, -spec] condition, as in the following examples:
(b) At a bookstore

Chris: Well, I`ve bought everything that I wanted. Are you ready to go? Mike: Almost. Can you please wait a few minutes? I want to talk to an owner of this bookstore. She is my old friend. [target the - accepted as grammatical by \(82 \%\) of the participants] (b) Karen: Where`s Beth? Is she coming home for dinner? Anne: No. She is eating dinner with the colleague; she didn't tell me who it is.
[target $\boldsymbol{a}$ - accepted as grammatical by $64 \%$ of the participants]
In addition, L1 Russian participants also accepted zero article in both definite and indefinite contexts, as in:
(c) In a children`s library

Child: I'd like to get something to read, but I don't know what myself.
Librarian: Well, what are some of your interests? We have books on any subject.
Child: Well, I like all sorts of things that move; cars, trains. I
know! I would like to get book about airplanes! I like to read about flying!
[target $\boldsymbol{a}$ - accepted as grammatical by $91 \%$ of the participants]
(c) Eric: I really liked that book you gave me for my birthday. I was very interesting.
Laura: Thanks! I like it, too. I would like to meet author of that book someday. I saw an interview with her on TV, and I really liked her!
[target the - accepted as grammatical by $82 \%$ of the participants]
The most responses in the $[+\mathrm{pp},-\mathrm{ps}]$ condition were right, the participants mostly accepted the Present Perfect in the target-like contexts. However, there are several trials where the participants mistakenly accepted the Past Simple in the Present Perfect context:
(b) - Did you ever drink Turkish coffee?

- Unfortunately, no.
[target $\boldsymbol{P P}$ - accepted as grammatical by $82 \%$ of the participants]

In the $[-p p,+p s]$ condition, some of the Russian participants accepted Present Perfect constructions in the Past Simple contexts:
(b) - For how long have you known each other?

- I think I have met her in 1986.
[target PS - accepted as grammatical by $82 \%$ of the participants]

When it comes to the generic use of English articles, L1 Russian L2 English participants performed with quite low ratio of correct responses: $56 \%$ of correct response in the gen [-def, -spec] and $53 \%$ in the gen [+def, +spec] condition. The participants tended to accept the zero article in both conditions:
(c) Cutdown of wilderness affects some species massively. Tiger is in danger of becoming extinct.
[target the - accepted as grammatical by $64 \%$ of the participants]
(c) Judy: Last Saturday, I didn't have anywhere to go, and it was raining.
Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And I read book.
[target $\boldsymbol{a}$ - accepted as grammatical by $64 \%$ of the participants]
The participants also showed a certain pattern as to not accepting the definite article in the gen $[+$ gen,+ spec $]$ and not accepting the indefinite article in the gen [-def, -spec] condition:
(a) Eric: My friend was in the office at the university, but he really didn't want to work.
Bill: So, what did he do?
Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to a student.
[target $\boldsymbol{a}$ - accepted as ungrammatical by $54 \%$ of the participants]
(91)
(a) I have been to Paris recently and visited some remarkable places. The Mona Lisa hangs in the Louvre.
[target the - accepted as ungrammatical by $62 \%$ of the participants]

The last but not the least, L1 Russian L2 English participants accepted the indefinite article in the gen [+def, + spec] condition, and accepted the definite article in the gen [-def, -spec]:
(b) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got the puppy. [target \(\boldsymbol{a}\) - accepted as grammatical by \(82 \%\) of the participants] (b) Molly: How`s your grandpa Sam`s farm doing?

Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market. Molly: Did he find any? Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought a horse.
[target the - accepted as grammatical by 77\% of the participants]

### 4.7 Summary of the results of the AJT

The statistical analysis of the performance of the L1 German, L1 Norwegian and L1 Russian L2 English groups in the AJT revealed that some variables had their effects on the participants` accuracy scores. In particular, such variables as the level of English proficiency, Russian and Norwegian as L1s, such conditions as generic, indefinite and pp/ps had significant effect on the participants` accuracy scores. With respect to the L2 English groups matched by proficiency, the post-hoc pairwise comparisons of the model revealed that Russians scored significantly lower that Norwegians and Germans on conditions that tested the use of articles (definite, generic and indefinite conditions). No significant differences were found between the groups in the Tense - Aspect condition. The rates of acceptability of the grammatical and ungrammatical trials showed that L1 German participants performed the best among the L2 groups across all the conditions. The L1 Russian group performed with the lowest rates out of the three L2 groups.

The results of each group individually revealed that L1 German L2 English group performed with the highest accuracy scores in the trials that tested the use of articles, followed by the L1 Norwegian L2 English group. The L1 Russian L2 English group performed with the lowest accuracy scores in the Article Use conditions with the highest rate of incorrect responses in the
[-def, +spec] and [+def, -spec] conditions. Even though no significant differences were found between the L2 English groups matched by proficiency in the Tense-Aspect condition, the individual results of each L2 English group showed that the Norwegian group performed slightly more accurately in the $[-\mathrm{pp},+\mathrm{ps}]$ condition than the German group ( $92 \%$ of the correct responses against 76 \% respectively), while the Russian group performed with 75 \% accuracy in the same Tense-Aspect condition.

## 5 Analysis and Discussion

In this chapter I will be discussing the results presented in the previous chapter in relation to the research questions and predictions presented in section 3.1. I will be covering the research questions in the following sections $5.1-5.4$.

### 5.1 RQ1: Will L1 German and L1 Norwegian speakers show higher accuracy rates than L1 Russian speakers in their article choice in English due to the influence from their L1s (facilitative influence from German and Norwegian, non-facilitative influence from Russian)?

As presented in section 3.1, the prediction for this question was that L1 German and L1 Norwegian L2 English speakers will accurately use articles in English since German and Norwegian are +Article languages with definiteness as the main predictor of the article choice, just like in English. Based on the Article Choice Parameter (Ionin, 2003, Ionin et al., 2004, a.o.), German, Norwegian and English belong to the same semantic type: the languages in which articles are distinguished on the basis of definiteness (Setting II of the ACP). Therefore, the setting of the ACP must be successfully set in L1 German and L1 Norwegian L2 English speakers with regards to the English article choice. The Fluctuation Hypothesis that emerged from the ACP was not meant to be applicable to the speakers whose L1s are -Article languages as it deals with L2 learners figuring out which one of the two Settings of the ACP is relevant for the L2 that is being learnt (the process of fluctuation). In other words, in this study it was not fluctuation but L1 transfer that was expected as facilitative influence from German and Norwegian regarding the article choice in English.

However, in Schönenberger`s study (2014), it was discovered that L1 German L2 English speakers were driven by fluctuation in the fluctuation contexts: [+def, -spec] and [-def, +spec] as they demonstrated $8 \%$ and $95 \%$ of article misuse respectively.

Although the overall performance of the L1 German L2 English group was mostly successful, a few unexpected findings were discovered from the results reported in section 4.4. By looking at the fluctuation contexts first, L1 German L2 English speakers` ratio of incorrect responses was \(27 \%\) only in one of the fluctuation contexts - [-def, +spec], while it was only \(15 \%\) of incorrect responses in the [+def, - spec] context. Surprisingly, there was a rather high ratio in one of the non-fluctuation contexts - generic [+def, + spec] with \(26 \%\) of incorrect responses. In all the other article choice contexts, the ratio of correct responses was quite high - it was above \(80 \%\). A frequent occurrence of the definite article the, as well as acceptance of the zero article, were the main errors in the fluctuation context [-def, +spec]. Given quite successful ratio of correct responses in the other fluctuation context ([+def, -spec] - \(85 \%\) ) L1 German participants` performance may illustrate just partial fluctuation process.

In the non-fluctuation generic [+def, +spec] context, L1 German L2 English participants frequently mistakenly accepted the indefinite article $a / a n$, as well as did not accept the definite article the, which was unexpected. It could be connected with the German paradigm of strong and weak articles ${ }^{11}$ that cover the notions of familiarity and uniqueness respectively (Schwarz ,2009 in section 2.2.3). The use of the definite article in such context as generic [+def, + spec] in English is explained by familiarity, that is previously mentioned item in the context. The same applies to German. However, in order to interpret an item as familiar due to it being previously mentioned in the context, the strong article should be used in German (see section 2.2.3 and Table 5 for the details on strong and weak articles in German). Although there is no such a paradigm in English as strong and weak articles, it might have been in the way for L1 German participants to accurately judge the stimuli in the generic specific definite contexts.

Turning now to the L1 Norwegian L2 English group and given that the mean score of English proficiency of the general L1 Norwegian group was the highest (4.46 out of 5) among the three L2 groups, the results of the L1 Norwegian group matched by proficiency with other L2 groups reported in section 4.5 were not as expected. Since the article choice in Norwegian is also regulated by definiteness, the prediction for the performance of the Norwegians was the same as for the L1 German participants: they were expected to perform accurately due to the facilitative influence from their L1. And partly there was a facilitative influence observed in the performance of the L1 Norwegian participants in their article choice. Especially, in such contexts as [+def, + spec], and generic [-def, -spec] with $78 \%$ and $80 \%$ of correct responses respectively. However, the results also showed that in the fluctuation contexts [-def, + spec] and [ + def, - spec] the ratio of incorrect responses was higher than in the German group: $28 \%$ and $22 \%$ of incorrect responses respectively. The Norwegian participants did not accept the definite article the and accepted the indefinite article in the [+def, -spec] contexts; they accepted the

[^9]definite article the and the zero article in the $[-\mathrm{def},+\mathrm{spec}]$ context. This may be indicative of a slight fluctuation process behind such performance.

There was another context in the article use part of the AJT in which L1 Norwegian L2 English participants made more mistakes than expected. It was the generic $[+d e f,+$ spec $]$ context with 29 \% of incorrect responses. The frequent mistake discovered in this context was that Norwegian participants mistakenly accepted the indefinite article $a / a n$, as well as the zero article, just like German participants. The definiteness in Norwegian can be expressed in three ways: the pre-nominal demonstratives (det/den); adjectives; and suffixal articles (en, $a$, et) (see section 2.2.2 for details). All these tools can be used altogether to express definiteness, which creates such a phenomenon as double definiteness in Norwegian. While specificity can be expressed with suffixal articles alone. Given that definiteness and specificity in English are expressed just with the help of the articles, the discrepancy between the two languages with regards to expressing the definiteness and specificity might have been a problem. In other words, the lack of either the pre-nominal demonstratives and/or adjectives in the English stimuli in the AJT could have been the reason why L1 Norwegian participants could not perform more accurately in a non-fluctuation generic [ + def, + spec] context.

The results of the L1 German and L1 Norwegian L2 English participants turned out to be quite diverse. Based on the findings (see sections 4.4 and 4.5), I argue that the Fluctuation Hypothesis has been unexpectedly and partly supported according to the results of the German and Norwegian participants in the fluctuation contexts of the article use in the AJT. The arguments for my statement are that the L1 German as well as L1 Norwegian participants performed partly according to the predictions of the FH in the fluctuation contexts (Ionin et al., 2004, 19 overuse of $a$ in the [+def, -spec] and overuse of the in the [-def, +spec]). When it comes to nonfluctuation contexts, it could be argued that the Feature Reassembly Hypothesis was also supported based on the L1 German and L1 Norwegian L2 English participants` performance. The German and Norwegian L2 English speakers might have been transferring some of the features that help expressing definiteness and specificity in their L1s to English, which conforms to the FRH. In case of L1 Germans, it could have been a paradigm of strong and weak types of articles that map with familiarity and uniqueness respectively. While Norwegians could have been influenced by the double definiteness structure in their L1. In other words, from the FRH perspective and the problematic generic [ + def, +spec ] context, L1 German as well as L1 Norwegian participants had difficulties reassembling different features of definiteness and specificity from their L1s to the ones relevant for English in that particular context.

Despite a slight fluctuation process in the fluctuation contexts and marginally erroneous performance in the generic definite specific context, the facilitative influence of L1s was quite significant since the ratio of the correct responses did not drop below $72 \%$ among the contexts of the article choice.

Summing up, to answer the research question, the overall results of the German and Norwegian groups were of a significantly higher accuracy than the ones of the L1 Russian group in the contexts that tested the article use. The generalized linear mixed-effect model which included all L2 groups illustrated that proficiency played a significant role in predicting the accuracy scores. The results of the L1 German and Norwegian groups matched by proficiency showed that both groups performed very similarly to one another (see Table 17). We could also observe very similar results of the L1 German and L1 Norwegian groups on the grammatical and ungrammatical trials (see Table 18) which were significantly higher than the ones of the L1 Russian group. We can conclude that L1 German and L1 Norwegian participants performed so well due to the facilitative influence from their L1s.

### 5.2 RQ2: Will L1 Russian L2 English speakers fluctuate between definiteness and specificity in their article choice in English, as predicted by the FH?

The prediction for this research question was that L1 Russian speakers will fluctuate between definiteness and specificity in their article use in English due to the differences between English and Russian regarding article systems. Russian does not have articles, and definiteness and specificity in Russian are expressed with the help of word order, grammatical case or words odin and kakoj-to/kakoj-nibud (see section 2.2.4 on the counterpart of definiteness and specificity in Russian). Russian speakers are expected to have difficulties in setting either of the Settings of the Article Choice Parameter relevant for English. Furthermore, they are expected to fluctuate between definiteness and specificity being the main predictor of the article use in English. In particular, in the fluctuation contexts [+def, -spec] and [-def, +spec], Russian speakers are expected to overuse $a$ and the in the respective contexts according to the predictions of the Fluctuation Hypothesis (see section 2.4 on the ACP and FH).

According to the previous studies from the Chapter 2 on the Russian L2 English speakers` performance in the forced choice elicitation task regarding article choice, Russian participants generally followed the patterns of the predictions of the FH (Ionin, Ko \& Wexler, 2004; Schönenberger, 2009; 2014). In the three studies, the participants showed the patterns of fluctuation in the aforementioned fluctuation contexts by overusing the indefinite article in the [+def, -spec] and overusing the definite article the in the [-def, +spec] context. The ratio of article omission by L1 Russian L2 English participants was also the case in Shönenberger (2009). Schönenberger`s (2009) opinion on that was that the insufficient input might have been the reason. The level of English proficiency or knowledge of another + Articles foreign language proved to have had impact on the accuracy scores (Schönenberger, 2014). In other words, the more proficient a participant was in English, the better his/her results were; and if a participant knew another +Article foreign language, the better his/her performance was.

The results of the current acceptability judgment task in this study showed that every context of the article use was problematic for the L1 Russian L2 English participants (see section 4.6 on the detailed results of the Russian group in the AJT). The fluctuation contexts ([+def, -spec] \& [-def, +spec]) stood out with the highest ratio of incorrect responses $52 \%$ and $46 \%$ respectively. There was also a rather high ratio of incorrect responses in the generic [+def, + spec] context $-47 \%$. While the remaining [-def, -spec], [+def, +spec] and generic [-def, spec] contexts were within $45 \%$ of incorrect responses.

Having taken a closer look at the fluctuation contexts and the participants` performance by trials, it was discovered that the mistake that prevailed in the [+def, -spec] was accepting the indefinite article just as it was predicted by the FH (Ionin et al., 2004, 19) as well as accepting the zero article. Therefore, the prediction of the current research question based on the predictions of the FH as to the [+def, -spec] context was supported by the results of the L1 Russian participants in the respective context.

The other fluctuation context, [-def, +spec] supported the prediction of the FH as to the expected overuse of the definite article. Russians did accept the definite article the in the [-def, +spec] context, as well as the zero article. The results of the Russian group in these two fluctuation contexts demonstrated that L1 Russian participants did not set the correct Setting of the Article Choice Parameter relevant to English, and therefore were driven by fluctuation between definiteness and specificity in their article choice. The misuse of the zero article could be explained by the lack of input, since English instructors in Russia do not provide enough instructions to the students on the rules of use of the articles, especially the zero article.

Moreover, given that English teachers are also influenced by their L1 regarding the article use in English, they frequently misuse or omit articles.

In such contexts where fluctuation was not expected, Russian participants performed with just $52 \%$ and $59 \%$ accuracy in the respective contexts [+def, +spec], [-def, -spec]. The accuracy in the [-def, -spec] is higher than in the [+def, +spec] which could be explained by the fact that the indefinite article is easier to acquire (Avery \& Radišić, 2007; Chung, 2011). The analysis of the responses by trials showed that the participants were accepting the definite article in the [-def, -spec] context, and accepting the indefinite article in the [+def, + spec] context.

Turning to the generic contexts in which the ratio of incorrect responses reached $47 \%$ in the generic [+def, + spec] and $44 \%$ in the generic [-def, - spec] contexts. In the generic [+def, +spec] context, Russian participants frequently accepted the zero as well as indefinite article as grammatical, while in the generic [-def, -spec] context they also accepted zero article as grammatical as well as did not accept the indefinite article as grammatical.

The results of the generic, as well as $[-$ def, - spec] and $[+$ def, + spec] contexts do not support the Fluctuation Hypothesis, but rather indicate not firmly acquired knowledge of the article system in English. The lack of sufficient input, as it was mentioned by Schönenberger (2009), also might have been the reason of the Russian participants` performance. Our generalized linear mixed-effect model (see Appendix 4) revealed that having Russian as the L1 had its impact on the accuracy scores in the indefinite ( $p<0.05, \beta=-0.71$ ) and generic contexts ( $p<0.05, \beta=-$ 0.78 ). This suggests non-facilitative influence from Russian as the L1. The results in the article choice conditions of the L1 Russian group matched by proficiency with the German and Norwegian groups were still worse across all the conditions involving article use than the ones of the L1 German and Norwegian groups (see Table 17). The main difference between the L1 Russian and L1 German/L1 Norwegian groups in the article use conditions is found in the acceptance of the ungrammatical trials of the AJT (see Table 18). However, the rates of acceptance of the grammatical trials within the article choice conditions are relatively similar among the three L2 groups. This may be indicative of a general yes-bias in the Russian group due to the lack of differences in the grammatical (and significant differences in the ungrammatical trials). In other words, the Russian participants might not have had any sensitivity to the article use and accepted everything. However, the big difference between the Russian and the German/Norwegian groups in the acceptability rates of the ungrammatical trials could be explained by the cross-linguistic influence. In other words, the German and

Norwegian L2 English speakers had facilitative influence from their L1s while the Russian L2 English speakers had non-facilitative influence from their L1 regarding the article use in English.

In conclusion, based on the results of the Russian group in the AJT, I argue that the Fluctuation Hypothesis was supported due to the results in the [+def, -spec] and [-def, +spec] contexts. Therefore, I could argue that L1 Russian L2 English participants fluctuated between definiteness and specificity in the aforementioned contexts. Regarding all the other contexts of the article use in the AJT, the cross-linguistic influence and therefore the lack of sensitivity to articles due to the absence of articles in Russian could explain the participants` performance.

### 5.3 RQ3: Will L1 German L2 English speakers overuse the Present Perfect constructions in the Past Simple contexts due to negative L1 influence (the interference from their L1)? Will L1 Norwegian L2 English speakers use the Present Perfect and Past Simple constructions in English more accurately than the L1 German participants due to English and Norwegian being similar in the terms of use of the PP and PS tenses?

The main prediction for this compound question was that L1 German participants would overuse the Present Perfect constructions in the Past Simple contexts, since German allows the PP in such contexts where English does not (e.g., narrative mode; and together with the definite past time references) (see section 2.3.3 on the PP in German). While L1 Norwegian L2 English participants were predicted to reject the Present Perfect constructions in the Past Simple contexts, since Norwegian is very much alike English regarding the terms of use of the PP and PS (see section 2.3.2 on the PP in Norwegian).

Second language acquisition research on the Present Perfect has put forth the so-called Default Past Tense Hypothesis (Fuchs, Götz \& Werner, 2016). It argues that L2 learners acquire the past tense markers prior to the ones relevant for the Present Perfect tense due to a higher simplicity of the former. In Fuchs, Götz \& Werner`s (2016) study, L1 German L2 English speakers produced the Present Perfect constructions in English less frequently than English natives despite the fact that the PP is as equally as frequent in both languages. Such factors as proficiency and length of exposure to English influenced the frequency of the PP use. Given that the Present Perfect is structurally very similar in English and in German, and the fact that the PP is comparable in frequency in both languages, facilitative L 1 influence is expected to occur in L1 Germans` PP use in English. However, based on the fact that German Present Perfect constructions can be used interchangeably with the Past Simple constructions (which is not allowed in English), non-facilitative L1 influence from German is also expected.

When it comes to the use of the Present Perfect and Past Simple in Norwegian in comparison to English, things are more alike. The terms of use as well as structures of the PP in both languages are very similar. However, there is one point in which English and Norwegian Present Perfect can be different. It is a so-called inferential perfect that is characteristic for Scandinavian languages. It implies that any event with a distinct past-time reference can be reported with a perfective construction if "[...] it is reported not as a fact, but as an inference" (Haugen, 1972, 135 in Elness, 2000, 11). Although this distinction is quite vague and such contexts were not purposefully tested in the current AJT, it might come in the way in the Norwegian participants` performance in English.

The results from the acceptability judgment task on the tense-aspect part showed that German participants performed as expected in the $[+\mathrm{ps},-\mathrm{ps}]$ context by accepting the Present Perfect constructions in the Past Simple contexts with distinct past time references (such as yesterday, in 1986, etc.). The ratio of incorrect responses was $23 \%$ in the [ $+\mathrm{pp},-\mathrm{ps}]$ context and $24 \%$ in the $[-\mathrm{pp},+\mathrm{ps}]$ context. Considering the fact that the Present Perfect and the Past Simple can be used interchangeably in German, the participants also accepted some trials with the Past Simple constructions in the Present Perfect contexts in the $[-\mathrm{ps},+\mathrm{pp}]$ context.

Based on the results from the German group, I argue that the Feature Reassembly Hypothesis has been supported. FRH implies that L2 learners go through the stages of mapping and reassembling the bunches of features from their L1 to the target L2. Proceeding from the German participants` performance, I argue that L1 German L2 English participants transferred the semantic features of the PP from their L1 into English. As it is discussed in section 2.3.3, the Present Perfect in German implies the same meaning as the Past Simple, and vice versa. In other words, from the perspective of the FRH, the German participants failed at reassembling the bunches of features of the PP from German into the ones relevant for the English PP.

There was only one context in the tense-aspect part of the AJT that was problematic for the L1 Norwegian L2 English participants: namely the [+pp, -ps] context with $39 \%$ of incorrect
responses. Norwegians accepted the Past Simple constructions in the Present Perfect contexts quite frequently. It could be explained by the Default Past Tense Hypothesis (Fuchs, Götz \& Werner, 2016) which I mentioned in this section earlier. The results of the L1 Norwegian L2 English participants in the $[+\mathrm{pp},-\mathrm{ps}]$ context imply that the Past Simple constructions are easier to acquire and therefore easier to use. However, despite the differences between the Norwegian and English Present Perfect suggested by Elsness (2000; see section 2.3.2) ${ }^{12}$, the ratio of correct responses in the $[-\mathrm{pp},+\mathrm{ps}]$ context was quite high $-92 \%$. It implies that the Norwegians rejected the Present Perfect constructions in the Past Simple contexts as it was predicted for the current research question.

The results of the generalized linear mixed-effect model showed a negative interaction between the tense-aspect contexts and L1 Norwegian group ( $p<0.05, \beta=-0.71$ ). It implies that in comparison to the German group`s performance (which was the baseline in this model) in the same contexts, the accuracy scores in the tense-aspect contexts were affected by Norwegian as the L1. The rates of the acceptance of the grammatical and ungrammatical trials in the tenseaspect contexts by the L1 German and L1 Norwegian groups matched by proficiency did not really differ (see Table 18). In conclusion, the performances of the German and Norwegian groups were in line with the predictions of this research question.

### 5.4 RQ4: Will L1 Russian L2 English participants accept the Past Simple constructions in the Present Perfect contexts (and vice versa) due to associating the perfective aspect of the verb with the event completion (the interference from their L1)?

As presented in section 3.1, the prediction for this research question was that L1 Russian L2 English speakers will overuse the Past Simple constructions in the Present Perfect contexts in English regardless of the past-time references or narrative mode due to associating the completion of the event (perfective aspect of the verb) with the Past Simple. Given that the

[^10]verbs in Russian are divided into perfective and imperfective, non-facilitative influence is expected from Russian regarding the PP use in English. According to Sonnenhauser (2008, 2078), perfective aspect in Russian implies completeness, while imperfective does not necessarily imply that the action was completed (see section 2.3.4). In English, in its turn, the Past Simple conveys a semantic interpretation of a finished action/event, while the Present Perfect can appear in the following contexts (Davydova, 2011, 52-73):
a) the resultative state (a situation that entails a change of state);
b) the experiential perfect;
c) the perfect of the recent past (see section 2.3.1 for details).

In other words, the Present Perfect in English conveys the indefinite completeness of an action/event, as it cannot be specified with time adverbials - otherwise the Past Simple would have to be used. Completeness in Russian, for its part, is expressed regardless of the time adverbials but with a verb of the perfective aspect.

The results of the acceptability judgment task revealed that both tense-aspect contexts turned out to be less problematic for L1 Russian participants than the conditions that tested the article use. They performed with only $25 \%$ of incorrect responses in the [-pp, +ps] context and $34 \%$ of incorrect responses in the [ +pp , -ps] context (see section 4.6 for details). The Russian participants did accept the Past Simple constructions in the [+pp, -ps] context, and they accepted the Present Perfect constructions in the [-pp, +ps ] context (see section 4.6 for details on the Russian participants` performance). This suggests that the Past Simple as well as the Present Perfect in English correlated with a state of completion for the Russian participants. This may indicate that regardless of the context (a target PP or a target PS), time adverbials or narrative mode, L1 Russian participants judged the stimuli according to the aspect of the verb which is transferred from their L1.

The model that was fit for the L2 groups matched by proficiency did not show any significant effect of the Russian group in the tense-aspect contexts (section 4.2.1 and Appendix 5). The Russian group matched by proficiency with the German and Norwegian groups, differed in acceptance of the ungrammatical trials in the tense-aspect part of the AJT by $5 \%$ with the Norwegian group and by $3 \%$ with the German group (see Table 18). Post-hoc pairwise comparisons of any of the models did not reveal any difference between any of the groups in the tense-aspect part of the AJT.

## 6 Conclusion

This thesis has examined the cross-linguistic influence in the acquisition of the English determiner and tense-aspect systems by L1 Norwegian, L1 German and L1 Russian speakers. Previous studies on the acquisition and production of the English article system have argued that L2 learners of +Articles languages (with the same article choice parameter setting) are predicted to be relatively accurate in their article choice in English due to the facilitative influence from their L1s (German, Norwegian). However, L2 learners of -Articles languages are expected to fluctuate between the settings of the Article Choice Parameter due to the differences in the determiner systems between the L1 and L2 that is being acquired. In other words, L1 speakers of -Articles languages are predicted to fluctuate between definiteness and specificity as the main predictor of the article choice until they figure out which of the settings of the ACP is relevant for the L2 that is being acquired (Ionin, 2003; Ionin, Ko \& Wexler., 2004; Ionin, Zubizarreta \& Maldonado, 2008). According to the Fluctuation Hypothesis, speakers of -Articles L1s are expected to overuse the indefinite article a/an in the definite nonspecific [+def, -spec] contexts and overuse the definite article the in the indefinite specific [def, + spec] contexts (Ionin et al., 2004, 19).

When it comes to the tense-aspect system in English and its counterparts in German, Norwegian and Russian, three different performance patterns were expected. German allows the Present Perfect constructions in the Past Simple contexts regardless of the past-time references and narrative mode. Therefore, L1 German participants were expected to accept the Present Perfect constructions in the Past Simple contexts. Norwegian is very similar to English in terms of the PP and PS use, and therefore L1 Norwegian participants were expected to be more accurate in their judgements of the PP and PS constructions. Russian verbs are divided into two aspects (perfective and imperfective). L1 Russian participants were expected to associate the perfective aspect of the verb with the Past Simple in English. Therefore, they were expected to overaccept the Past Simple constructions in the Present Perfect contexts.

As it was discussed in the Chapter 2, the predictions of the Fluctuation Hypothesis for the L2 learners of both the -Articles and +Articles languages find support in previous studies (Ionin, 2003; Ionin et al., 2004; Ionin et al., 2008; Schönenberger, 2009; 2014). Current study provides further support for the decisive role of L1 in the acquisition of the determiner system in an L2. This thesis also provides further support for the cross-linguistic influence of L1 in the
acquisition of the tense-aspect system in an L2 with the Feature Reassembly Hypothesis (Lardiere, 2008; Cho \& Slabakova, 2014).

Turning to the tense-aspect part of this study, I argued that the results of the current project found support in the Feature Reassembly Hypothesis. I argued that L2 English learners were influenced by their L1s by transferring semantic features of the tense-aspect systems from their L1s into English.

The acceptability judgment task was used to investigate the questions above. The AJT consisted of 60 dialogues/sentences of 10 different conditions. All the dialogues/sentences were equally divided into 30 grammatical and 30 ungrammatical ones. There were 6 conditions targeted to test the article use ([+def, +spec], [+def, -spec], [-def, +spec], [-def, -spec], generic [+def, +spec], generic [-def, -spec]) and 2 conditions to test the use of the Present Perfect and Past Simple constructions ([+pp, -ps], [-pp, +ps]). Additionally, there were also 12 fillers equally divided into grammatical and ungrammatical ones. Each dialogue sentence was presented with a part in italics and the participants were asked to judge whether a dialogue/sentence was acceptable or not acceptable based on the part in italics.

101 L2 English participants were recruited, and 13 English natives were recruited as a control group. There were 37 L1 Norwegian, 34 L1 German and 30 L1 Russian participants. The German and Norwegian participants had higher mean English proficiency score than the Russian participants ( 4.27 and 4.46 against $3.79 / 5$ respectively).

Analysis of the results of the AJT revealed that the L1 German L2 English participants performed the best out of the three L2 groups in their article use in English in both general groups and the ones matched by proficiency (see Tables 13 and 17). The German participants matched by proficiency with the other L2 groups also scored the best in the acceptance of the grammatical and ungrammatical trials of the AJT (see Table 18). However, the Germans` performance was worse in $[-\mathrm{def},+\mathrm{spec}]$ and generic $[+\mathrm{def},+$ spec] contexts in comparison to all the other articles use contexts. The mistakes made by the German participants made in one of the fluctuation contexts ([-def, +spec]) are consistent with the findings in Schönenberger (2014). The Norwegian group performed very similarly to the German group in the article use contexts of the AJT. Although L1 Norwegian were expected to perform quite accurately in the articles use, they performed worse in such article use contexts: [-def, -spec], [-def, +spec], $[+$ def, - spec $],[+$ def, + spec $]$ and generic $[+$ def, + spec] than in remaining article use contexts.

However, despite the similarities in the determiner systems between English and Norwegian, the Norwegians` performance in the fluctuation contexts ([+def, -spec], [-def, + spec]) provides grounds to argue that they were driven by fluctuation process in their article use in English. Even though the L2 English groups were matched by English proficiency, the Russian group performed the worst among the three L2 English groups. L1 Russian L2 English participants had the highest scores of incorrect responses in the fluctuation contexts ([+def, -spec], [-def, + spec]) followed by all the other articles use contexts ([-def, -spec], [+def, +spec], generic [def, -spec], generic [+def, +spec]) (see Table 22). All the L2 English participants accepted the zero article in the contexts where it did not belong. This is consistent with Master (2003), where he argues that the zero article is more difficult to acquire than the definite or/and indefinite ones.

In the tense-aspect part of the AJT, the Norwegian group performed slightly better than the German, just as it was expected. The Russian group performed with the lowest scores of correct responses in the tense-aspect part of the AJT. The performance of the L1 German group suggests that the participants with German as the L1 transferred semantic features of the Present Perfect and Past Simple from their L1 to the English counterpart. Therefore, the German participants accepted the Present Perfect constructions in the Past Simple contexts. While the Norwegian participants accepted the Past Simple constructions in the Present Perfect contexts. The performance of the German group finds support in the Feature Reassembly Hypothesis (Lardiere, 2008; Cho \& Slabakova, 2014). While the performance of the Norwegian group, in my opinion, is consistent with the Default Past Tense Hypothesis (Fuchs, Götz \& Werner, 2016).

Although, the results of this study support findings in other studies on L2 article and tenseaspect use, and are consistent with the Fluctuation Hypothesis, the Feature Reassembly Hypothesis and the Default Past Tense Hypotheses, there are several questions that remain unclear. First, frequent acceptance of the zero article by the German, Norwegian and Russian participants in the contexts where it is not appropriate in English is not in line with the crosslinguistic influence but may be an artefact of insufficient input or the specifics of the L2 acquisition of the zero article. I believe that the stimuli targeting to test the use of the zero article should be included to the acceptability judgment task in the further studies on this topic. Second, even though there was no significant effect of proficiency in the model fit for the L2 English groups matched by proficiency, there was still a little difference in the proficiency levels between the German/Norwegian and Russian groups. Therefore, it would be useful to recruit
the participants of strictly the same English proficiency levels to avoid its influence. A complementary study testing the German, Norwegian and Russian L2 English speakers` performance on a forced-choice elicitation or/and a production task would be very informative and could either complement or oppose to the results found in the AJT in this study.

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## Appendices

## Appendix 1: The background questionnaire

1. Age
2. County of origin
3. Country of residence
4. Native language(s)
5. Other foreign language(s)
6. At what age did you start learning English?
7. English proficiency

Self-evaluation scale:
-Speaking (beginner, pre-intermediate, intermediate, upper-intermediate, advanced)
-Reading (beginner, pre-intermediate, intermediate, upper-intermediate, advanced)
-Writing (beginner, pre-intermediate, intermediate, upper-intermediate, advanced)
8. Educational background (high school, BA, MA, PhD...)
9. What language do you use:
-in family
-at work
-with friends
-in studies
-social media
-leisure time (book, movies, podcasts...)

## Appendix 2: The acceptability judgment task

## List 1

| CONDITION | ITEM |
| :--- | :--- |
| gen [-def, -spec] | 1c. Eric: My friend Tom was in his office at the university, but he <br> really didn't want to work. Bill: So, what did he do? <br> Eric: Well, he walked around my department. He had some coffee and <br> checked his email. And he talked to (a, the, $\varnothing$ ) student. |
| [-def, +spec] | 1a. In an airport, in a crowd of people who are meeting arriving <br> passengers <br> Man: Excuse me, do you work here? <br> Security guard: Yes. Man: In that case, perhaps you could help me. I <br> am trying to find (a, the, $\varnothing$ ) red-haired girl; I think that she flew in on <br> Flight 239. |
| [-pp, +ps] | 1c. - When did your family move to New Zealand? - They had moved <br> there 7 years ago. |
| gen [-def, -spec] | 2c. Judy: Last Saturday, I didn't have anywhere to go, and it was <br> raining. Samantha: So, what did you do? |


|  | Judy: First, I cleaned my apartment. Then I ate lunch. And then I read (a, the, ø) book. |
| :---: | :---: |
| [+pp, -ps] | 1a. It has been 4 hours since we came here! Let`s go grab a bite! \\ \hline gen [+def, +spec] & \begin{tabular}{l} 1b. Vicky: Where were you yesterday? I tried to call you, but you weren't home \\ Rachel: I went to a bookstore yesterday. \\ Vicky: Oh, what did you get? Rachel: I got lots of things - several magazines, two red pens, and an interesting new book. I really liked (a, the, ø) book. \end{tabular} \\ \hline [-gib, +gr] & 1.- What did the doctor say? - He thinks I have too much stress. \\ \hline [+pp, -ps] & 2a. Brandon: Have you bought Dayna`s birthday present yet? Fin: Not yet. |
| [+gib, -gr] | 1 b . The deadline is only in a week but delivered I assignment my final yesterday. |
| gen [ + def, +spec] | 2a. Sarah: Yesterday, I took my granddaughter Becky for a walk in the park. <br> Claudia: How did she like it? Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to (a, the, $\varnothing$ ) girl. |
| [-def, - spec] | 1c. In a children`s library \\ Child: I'd like to get something to read, but I don't know what myself. \\ Librarian: Well, what are some of your interests? We have books on any subject. \\ Child: Well, I like all sorts of things that move - cars, trains ... I know! I would like to get (a, the, \(\varnothing\) ) book about airplanes! I like to read about flying! \end{tabular} \\ \hline [-gib, +gr] & 2. I have tried to quit smoking so many times but I don't have enough will power. - Ypi have to believe in yourself. \\ \hline [+gib, -gr] & 2c. My fiancé and me went to visit my family. Fish the we all ate and dessert then made. \\ \hline [-def, - spec] & \begin{tabular}{l} 2a. In a clothing store \\ Clerk: May I help you? \\ Customer: Yes, please! I've rummaged through every stall, without any success. I am looking for ( a , the, \(\varnothing\) ) warm hat. It's getting rather cold outside. \end{tabular} \\ \hline [-gib, +gr] & 3. - I got a ticket for \(140 \$\) yesterday. - Were you speeding? - No, I parked at the wrong place. \\ \hline [-pp, +ps] & 2b. - For how long have you known each other? - I think I have met her in 1986. \\ \hline [-def, +spec] & \begin{tabular}{l} 8a. Meeting on a street \\ Roberta: Hi, William! It’s nice to see you again. I didn't know that you were in Boston. William: I am here for a week. I am visiting (a, the, \(\varnothing\) ) friend from college - his name is Sam Brown, and he lives in Cambridge now. \end{tabular} \\ \hline [+def, -spec] & \begin{tabular}{l} 1c. Conversation between a police officer and a reporter Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder? \\ Police officer: Yes. We are trying to find (a, the, \(\varnothing\) ) murderer of Mr. Peterson - but we still don t know who he is. \end{tabular} \\ \hline \end{tabular} \begin{tabular}{\|c|c|} \hline [+gib, -gr] & 3a. My mom was going to bake a cake. So, I walked to the store and will buy milk. \\ \hline [-def, - spec] & \begin{tabular}{l} 3c. In a school \\ Student: I am new in this school. This is my first day. \\ Teacher: Welcome! Are you going to be at the school party tonight? \\ Student: Yes. I'd like to get to know my classmates. I am hoping to find (a, the, ø) new good friend! I don't like being all alone. \end{tabular} \\ \hline [+def, -spec] & \begin{tabular}{l} 2a. At a supermarket \\ Sales clerk: May I help you, sir? \\ Customer: Yes! I am very angry. I bought some meat from this store, but it is completely spoiled! I want to talk to (a, the, \(\varnothing\) ) owner of this store. I don't know who he is, but I want to see him right now! \end{tabular} \\ \hline [+def, +spec] & \begin{tabular}{l} 2 c . Eric: I really liked that book you gave me for my birthday. It was very interesting! \\ Laura: Thanks! I like it too. I would like to meet (a, the, ø) author of that book someday. I saw an interview with her on TV, and I really liked her! \end{tabular} \\ \hline [-pp, +ps] & 3a. - What is that on your shoulder? - Yesterday I crashed my car and hurt my shoulder pretty bad. \\ \hline [+def, -spec] & \begin{tabular}{l} 3b. After a woman`s running race <br> Reporter: Excuse me! Can you please let me in? <br> Guard: What do you need? <br> Reporter: I'm a reporter. I need to talk to ( a , the, ø) winner of this race. I don't know who she is, so can you please help me? |
| gen [-def, -spec] | 3b. Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Roger: Yes! It was great. He got lots of gifts - books, toys. And best of all - he got (a, the, ø) puppy. \\ \hline [-def, - spec] & \begin{tabular}{l} 4a. Sam: I'm having some difficulties with my citizenship application. Julie: What are you going to do? \\ Sam: Well, I need some advice. I am trying to find (a, the, ø) lawyer with lots of experience. I think that's the right thing to do. \end{tabular} \\ \hline [-def, - spec] & \begin{tabular}{l} 8b. Karen: Where`s Beth? Is she coming home for dinner? |
| Anne: No. She is eating dinner with (a, the, ø) colleague; she didn't tell me who it is. |  | <br>


\hline [+def, -spec] \& | 4c. At a gallery |
| :--- |
| Sarah: Do you see that beautiful landscape painting? |
| Mary: Yes, it's wonderful. |
| Sarah: I would like to meet (a, the, ø) author of thar painting. |
| Unfortunately, I have no idea who it is, since the painting is not signed. | <br>


\hline [-def, +spec] \& | 3b. In a restaurant |
| :--- |
| Waiter: Are you ready to order, sir? Or are you waiting for someone? |
| Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with ( a , the, $\varnothing$ ) colleague from work. She will be here soon. | <br>


\hline gen [ + def, + spec] \& | 3a. Molly: How is your grandpa Sam`s farm doing? \\ Tom: All right, thanks. Last summer, Grandpa needed some new animals, so he went to an animal market. Molly: Did he find any? Tom: Yes - he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought ( a , the, \(\varnothing\) ) horse. \end{tabular} \\ \hline \end{tabular} \begin{tabular}{\|c|c|} \hline [-def, +spec] & \begin{tabular}{l} 4b. In a "Lost and Found" \\ Clerk: Can I help you? Are you looking for something you lost? \\ Customer: Yes ... I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for ( a , the, \(\varnothing\) ) green scarf. I think that I lost it here last week. \end{tabular} \\ \hline gen [-def, -spec] & 4a. Tom: How was your trip to New York? Susan: Great! I went to many museums and ate in lots of wonderful restaurants. I also visited many friends. And I saw (a, the, \(\emptyset\) ) play. \\ \hline gen [ + def, + spec] & \begin{tabular}{l} 4a. Alice: What did you do last night? \\ Robin: I went to a video store and got two videos - a German film and a video game. Then, I came home and watched (a, the, \(\varnothing\) ) film. \end{tabular} \\ \hline [+gib, -gr] & 4a. Mary and John are married; she has been together for 20 years. \\ \hline [+pp, -ps] & 3 b - Did you ever drink Turkish coffee? Unfortunately, no. \\ \hline [-gib, +gr] & \begin{tabular}{l} 4. - A tree fell onto my car last week. - Was there much damage? \\ - Well, yeah. I had to buy a new car. \end{tabular} \\ \hline [-pp, +ps] & 4a. Where were you last weekend? - I went to a karaoke bar and sang with some friends on Saturday. \\ \hline [-pp, +ps] & 5c. - Do you know anything about Shakespeare? - Yes. Shakespeare was writing more than 30 plays. \\ \hline [+def, +spec] & \begin{tabular}{l} 3b. At a bookstore \\ Chris: Well, I've bought everything that I wanted. Are you ready to go? \\ Mike: Almost. Can you please wait a few minutes? I want to talk to (a, the, \(\varnothing\) ) owner of this bookstore - she is my old friend. \end{tabular} \\ \hline [-pp, +ps] & 6a. I had so much to do for the university that I fell asleep right at my desk this afternoon. \\ \hline [+gib, -gr] & 5a.I saw my classmate was out for a jog. The dog will running besides him. \\ \hline gen [ + def, +spec] & 5b. I have been to Paris recently and visited some remarkable places. A Mona Lisa hangs in a Louvre. \\ \hline [+def, -spec] & 8a. Rose: Let`s go out to dinner with your brother Samuel tonight. Alex: No, he is busy. He is having dinner with (a, the, ø) manager of his office; I don't know who that is, but I'm sure that Samuel can't cancel this dinner. |  |
| :--- | :---: |
| [+pp, -ps] | 4a. - Have you ever been to Australia? Yes. A few times. |
| [+def, -spec] | 7a. Bill: I'm looking for Erik. Is he home? <br> Rick: Yes, but he is on the phone. It's an important business matter. He is talking to (a, the, ø) owner of his company! I don't know who that person is - but I know that this conversation is important to Erik. |
| [+def, +spec] | 1b. Conversation between two police officers <br> Police Officer Clark: I haven't seen you in a long time. You must be very busy <br> Police Officer Smith: Yes. Did you hear about Miss Sarah Adrews, a famous lawyer who was murdered several weeks ago? We are trying to find (a, the, $\emptyset$ ) murderer of Miss Andrews - his name is Roger Williams, and he is a well-known criminal. |


| [-gib, +gr] | 5. - What would you do if you lost your job? - I have no idea. I have been here for 20 years. |
| :---: | :---: |
| [-def, - spec] | 6a. Gertrude: Guess what? My cousin Claudia is in Washington, D. C. this week. <br> Richard: That's great. What's she doing there? <br> Gertrude: She is doing some interviews for her newspaper. She is interviewing (a, the, ø) politician; I'm afraid I don't know who, exactly. Ill find out when I read her article! |
| [+def, +spec] | 4a. At the end of a chess tournament <br> Laura: Are you ready to leave? <br> Betsy: No, not yet. First, I need to talk to (a, the, ø) winner of this tournament - she is my good friend, and I want to congratulate her! |
| gen [+def, +spec] | 6 c . Cutdown of wilderness affects some species massively. Tiger is in danger of becoming extinct. |
| [+def, +spec] | 5a. Paul: Do you have time for lunch? <br> Sheila: No, I'm very busy. I am meeting with (a, the, $\varnothing$ ) president of our university, Dr. McKinley, it’s an important meeting. |
| [+def, +spec] | 6a. Meeting in a park <br> Andrew: Hi, Nora. What are you doing here in Chicago? Are you here for work? <br> Nora: No, for family reasons. I am visiting (a, the, $\varnothing$ ) father of my fiancé - he is really nice, and he is paying for our wedding! |
| gen [-def, -spec] | 5a. Usually at school children learn such things about animals as a whale is a mammal. |
| [-def, +spec] | 5c. Reporter 1: Hi! I haven't seen you in weeks. Do you have time for lunch? <br> Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing (a, the, ø) doctor from Bright Star Children`s Hospital - he is a very famous pediatrician, and he doesn't have much time for interviews. So, I should run! |
| [-gib, +gr] | 6. - What are you babbling there? - I'm just trying to learn this poem by heart. |
| [-def, +spec] | 6a. Gary: I heard that you just started college. How do you like it? Melissa: It's great! My classes are very interesting. Gary: That's wonderful. And do you have fun outside of class? <br> Melissa: Yes. In fact, today I'm having dinner with (a, the, ø) girl from my class - her name is Angela, and she is really nice. |
| [+pp, -ps] | 5c. It's my birthday today. My sister had just made a big chocolate cake. |
| [+pp, -ps] | 6b. - How far are you in the homework for the reading class? - Up to now, I read the third chapter, the second volume of "The War and Peace". |
| [+gib, -gr] | 6b. Henry got a puppy for Christmas that became his best friend. Bobby the was dog called. |
| gen [-def, -spec] | 6a. - Do you know my friend Mary? - No. - She is a student at London School. |

## List 2

| CONDITION | ITEM |
| :---: | :---: |
| gen [-def, -spec] | 1a. Eric: My friend Tom was in his office at the university, but he really didn't want to work. Bill: So, what did he do? <br> Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to (a, the, $\varnothing$ ) student. |
| [-def, +spec] | 1b. In an airport, in a crowd of people who are meeting arriving passengers <br> Man: Excuse me, do you work here? Security guard: Yes. <br> Man: In that case, perhaps you could help me. I am trying to find (a, the, <br> $\varnothing$ ) red-haired girl; I think that she flew in on Flight 239. |
| [-pp, +ps] | 1a. - When did your family move to New Zealand? -They moved there 7 years ago. |
| gen [-def, -spec] | 2a. Judy: Last Saturday, I didn't have anywhere to go, and it was raining. <br> Samantha: So, what did you do? Judy: First, I cleaned my apartment. Then I ate lunch. And then I read (a, the, $\varnothing$ ) book. |
| [+pp, -ps] | 1b.It was 4 hours since we came here! Let`s go grab a bite! \\ \hline gen [+def, +spec] & \begin{tabular}{l} 1a. Vicky: Where were you yesterday? I tried to call you, but you weren't home \\ Rachel: I went to a bookstore yesterday. \\ Vicky: Oh, what did you get? Rachel: I got lots of things - several magazines, two red pens, and an interesting new book. I really liked (a, the, \(\varnothing\) ) book. \end{tabular} \\ \hline [-gib, +gr] & 1. - What did the doctor say? - He thinks I have too much stress. \\ \hline [+pp, -ps] & 2c. Brandon: Had you bought Dayna`s birthday present yet? Fin: Not yet. |
| [+gib, -gr] | 1a. The deadline is only in a week but yesterday I will deliver my final assignment. |
| gen [+def, +spec] | 2b. Sarah: Yesterday, I took my granddaughter Becky for a walk in the park. <br> Claudia: How did she like it? Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to (a, the, ø) girl. |
| [-def, - spec] | 1a. In a children`s library \\ Child: I'd like to get something to read, but I don't know what myself. \\ Librarian: Well, what are some of your interests? We have books on any subject. \\ Child: Well, I like all sorts of things that move - cars, trains ... I know! I would like to get (a, the, ø) book about airplanes! I like to read about flying! \end{tabular} \\ \hline [-gib, +gr] & 2. I have tried to quit smoking so many times but I don't have enough will power. - Ypi have to believe in yourself. \\ \hline [+gib, -gr] & 2 a . My fiancé and me went to visit my family. We all eat the fish and then made dessert. \\ \hline \end{tabular} \begin{tabular}{\|c|c|} \hline [-def, - spec] & \begin{tabular}{l} 2c. In a clothing store \\ Clerk: May I help you? \\ Customer: Yes, please! 「 ve rummaged through every stall, without any success. I am looking for (a, the, ø) warm hat. It's getting rather cold outside. \end{tabular} \\ \hline [-gib, +gr] & 3. - I got a ticket for \(140 \$\) yesterday. - Were you speeding? - No, I parked at the wrong place. \\ \hline [-pp, +ps] & 2a.- For how long have you known each other? - I think I met her in 1986. \\ \hline [-def, +spec] & \begin{tabular}{l} 8b. Meeting on a street \\ Roberta: Hi, William! It’s nice to see you again. I didn't know that you were in Boston. William: I am here for a week. I am visiting (a, the, \(\varnothing\) ) friend from college - his name is Sam Brown, and he lives in Cambridge now. \end{tabular} \\ \hline [+def, -spec] & \begin{tabular}{l} 1a. Conversation between a police officer and a reporter Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder? \\ Police officer: Yes. We are trying to find (a, the, \(\varnothing\) ) murderer of Mr. Peterson - but we still don \({ }^{\prime}\) know who he is. \end{tabular} \\ \hline [+gib, -gr] & 3 b . My mom was going to bake a cake. So, the store to I walked and milk bought. \\ \hline [-def, - spec] & \begin{tabular}{l} 3a. In a school \\ Student: I am new in this school. This is my first day. \\ Teacher: Welcome! Are you going to be at the school party tonight? \\ Student: Yes. Id like to get to know my classmates. I am hoping to find (a, the, ø) new good friend! I don't like being all alone. \end{tabular} \\ \hline [+def, -spec] & \begin{tabular}{l} 2c. At a supermarket \\ Sales clerk: May I help you, sir? \\ Customer: Yes! I am very angry. I bought some meat from this store, but it is completely spoiled! I want to talk to (a, the, \(\varnothing\) ) owner of this store. I don't know who he is, but I want to see him right now! \end{tabular} \\ \hline [+def, +spec] & \begin{tabular}{l} 2a. Eric: I really liked that book you gave me for my birthday. It was very interesting! \\ Laura: Thanks! I like it too. I would like to meet (a, the, ø) author of that book someday. I saw an interview with her on TV, and I really liked her! \end{tabular} \\ \hline [-pp, +ps] & 3c. - What is that on your shoulder? - Yesterday I had crashed my car and had hurt my shoulder pretty bad. \\ \hline [+def, -spec] & \begin{tabular}{l} 3a. After a woman`s running race <br> Reporter: Excuse me! Can you please let me in? <br> Guard: What do you need? <br> Reporter: I'm a reporter. I need to talk to ( a , the, $\varnothing$ ) winner of this race. I don't know who she is, so can you please help me? |
| gen [-def, -spec] | 3a. Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Roger: Yes! It was great. He got lots of gifts books, toys. And best of all - he got (a, the, ø) puppy. \\ \hline [-def, - spec] & \begin{tabular}{l} 4c. Sam: Im having some difficulties with my citizenship application. Julie: What are you going to do? \\ Sam: Well, I need some advice. I am trying to find (a, the, ø) lawyer with lots of experience. I think that's the right thing to do. \end{tabular} \\ \hline \end{tabular} \(\left.\begin{array}{\|ll|}\hline \text { [-def, -spec] } & \begin{array}{l}\text { 8a. Karen: Where`s Beth? Is she coming home for dinner? } |
|  Anne: No. She is eating dinner with (a, the,  \varnothing  ) colleague; she didn't tell  |  |
|  me who it is. \end{array} |  |
|  [+def, -spec]  | $\begin{array}{l}\text { 4a. At a gallery } \\ \text { Sarah: Do you see that beautiful landscape painting? } \\ \text { Mary: Yes, it's wonderful. }\end{array}$   Sarah: I would like to meet (a, the,  \varnothing  ) author of thar painting.    Unfortunately, I have no idea who it is, since the painting is not signed.    3a. In a restaurant    Waiter: Are you ready to order, sir? Or are you waiting for someone?    Client: Can you please come back in about twenty minutes? You see, I    am waiting. I am planning to eat with (a, the,  \varnothing  ) colleague from work.    She will be here soon. \end{array}\right]\)[+def, -spec] 8c. Rose: Let's go out to dinner with your brother Samuel tonight. Alex: No, he is busy. He is having dinner with (a, the, $\varnothing$ ) manager of his office; I don't know who that is, but I'm sure that Samuel can`t cancel this dinner. \\ \hline [ \(+\mathrm{pp},-\mathrm{ps}]\) & \begin{tabular}{l} 4b. - Were you ever in Australia? \\ Yes. A few times. \end{tabular} \\ \hline [+def, -spec] & 7b. Bill: I m looking for Erik. Is he home? Rick: Yes, but he is on the phone. It's an important business matter. He is talking to ( a , the, ø) owner of his company! I don't know who that person is - but I know that this conversation is important to Erik. \\ \hline [+def, +spec] & \begin{tabular}{l} 1a. Conversation between two police officers \\ Police Officer Clark: I haven't seen you in a long time. You must be very busy \\ Police Officer Smith: Yes. Did you hear about Miss Sarah Adrews, a famous lawyer who was murdered several weeks ago? We are trying to find (a, the, ø) murderer of Miss Andrews - his name is Roger Williams, and he is a well-known criminal. \end{tabular} \\ \hline [-gib, +gr] & 5. - What would you do if you lost your job? - I have no idea. I have been here for 20 years. \\ \hline [-def, - spec] & \begin{tabular}{l} 6b. Gertrude: Guess what? My cousin Claudia is in Washington, D. C. this week. \\ Richard: That's great. What's she doing there? \\ Gertrude: She is doing some interviews for her newspaper. She is interviewing (a, the, ø) politician; I'm afraid I don't know who, exactly. I'll find out when I read her article! \end{tabular} \\ \hline [+def, +spec] & \begin{tabular}{l} 4c. At the end of a chess tournament \\ Laura: Are you ready to leave? \\ Betsy: No, not yet. First, I need to talk to (a, the, \(\varnothing\) ) winner of this tournament - she is my good friend, and I want to congratulate her! \end{tabular} \\ \hline gen [+def, +spec] & 6a. Cutdown of wilderness affects some species massively. The tiger is in danger of becoming extinct. \\ \hline [+def, +spec] & \begin{tabular}{l} 5b. Paul: Do you have time for lunch? \\ Sheila: No, I'm very busy. I am meeting with (a, the, \(\varnothing\) ) president of our university, Dr. McKinley, it’s an important meeting. \end{tabular} \\ \hline [+def, +spec] & \begin{tabular}{l} 6b. Meeting in a park \\ Andrew: Hi, Nora. What are you doing here in Chicago? Are you here for work? \\ Nora: No, for family reasons. I am visiting (a, the, ø) father of my fiancé - he is really nice, and he is paying for our wedding! \end{tabular} \\ \hline gen [-def, -spec] & 5 b. Usually at school children learn such things about animals as the whale is the mammal. \\ \hline [-def, +spec] & \begin{tabular}{l} 5a. Reporter 1: Hi! I haven't seen you in weeks. Do you have time for lunch? \\ Reporter 2: Sorry, no. I’m busy with a story about local medicine. Today, I am interviewing (a, the, ø) doctor from Bright Star Children`s Hospital - he is a very famous pediatrician, and he doesn't have much time for interviews. So, I should run! |
| [-gib, +gr] | 6. - What are you babbling there? - I'm just trying to learn this poem by heart. |


| [-def, +spec] | 6c. Gary: I heard that you just started college. How do you like it? <br> Melissa: It's great! My classes are very interesting. Gary: That's <br> wonderful. And do you have fun outside of class? <br> Melissa: Yes. In fact, today Im having dinner with (a, the, $\varnothing$ ) girl from <br> my class - her name is Angela, and she is really nice. |
| :--- | :--- |
| [+pp, -ps] | 5a. Its my birthday today. My sister has just made a big chocolate cake. |
| $[+\mathrm{pp},-\mathrm{ps}]$ | 6a. - How far are you in the homework for the reading class? - Up to <br> now, I have read the third chapter, the second volume of "The War and <br> Peace". |
| [+gib, -gr] | 6a. Henry got a puppy for Christmas that became his best friend. The <br> dog will called Bobby. |
| gen [-def, -spec] | 6c. - Do you know my friend Mary? - No. - She is student at London <br> School. |

## Appendix 3: The participants` background data

| Participants | Age | Country of <br> origin | L1 | L2, L3, L4 | AoE | Prof |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: |
| Ger | 25 | Germany | German | English,French,Spanish | 10 | 4.33 |
| Ger | 25 | Germany | German | English,Norwegian,French | 8 | 5 |
| Ger | 26 | Germany | German | English | 11 | 3.66 |
| Ger | 26 | Germany | German | English,Norwegia | 10 | 3.33 |
| Ger | 26 | Vietnam | German | English,Norwegian | 7 | 5 |
| Ger | 27 | Germany | German | English | 10 | 4.33 |
| Ger | 34 | Germany | German | English | 11 | 3.66 |
| Ger | 21 | Germany | German | English | 10 | 4 |
| Ger | 42 | Germany | German | English | 10 | 5 |
| Ger | 36 | Germany | German | English,Spanish | 10 | 3 |
| Ger | 26 | Germany | German | English,Spanish | 10 | 4.33 |
| Ger | 22 | Germany | German | English,French | 7 | 4 |
| Ger | 27 | Germany | German | English,Spanish | 9 | 4 |
| Ger | 32 | Germany | German | English,Norwegian,French | 10 | 5 |
| Ger | 46 | Germany | German | English,Russian | 14 | 5 |
| Ger | 32 | Germany | German | English,Russian,French,G | 10 | 4.66 |
| Ger | 32 | Germany | German | erman Sign Language |  |  |
| Ger | 21 | Germany | German | English | 11 | 4.66 |
| Ger | 22 | Germany | German, | English,Norwegian,Japane | 8 | 3.33 |
| Ger | 25 | Germany | Greek | German | English,French, Spanish | 4.66 |
| Ger | 22 | Germany | German | French,Spanish,English | 9 | 4 |
| Ger | 24 | Germany | German | English | 5 |  |
| Ger | 32 | Germany | German | English,Norwegian | 10 | 4.33 |


| Ger | 21 | Germany | German | English,French,Norwegian <br> ,Chinese | 9 | 4.33 |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: |
| Ger | 26 | Germany | German | English,Portuguese,Spanis <br> h | 6 | 4.66 |
| Ger | 39 | Germany | German | English,French,Spanish,N <br> orwegian | 10 | 5 |
| Ger | 20 | Germany | German,Tur <br> kish | English | 8 | 3 |
| Ger | 29 | Germany | German | English | 9 | 4.66 |
| Ger | 26 | Germany | German | English | 7 | 4.33 |
| Ger | 31 | Germany | German | English,French | 6 | 3 |
| Ger | 26 | Germany | German | English,Norwegian | 8 | 5 |
| Ger | 18 | Germany | German | English,French, Latin | 5 | 4 |
| Ger | 24 | Germany | German | English,French,Norwegian | 6 | 4.66 |
| Ger | 23 | Germany | German | English,French,Spanish,Ita <br> lian,Polish | 8 | 5 |


| Nor | 20 | Norway | Norwegian | English | 5 | 3.66 |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: |
| Nor | 23 | Norway | Norwegian | English | 6 | 5 |
| Nor | 20 | Norway | Norwegian | English,German | 6 | 5 |
| Nor | 30 | Norway | Norwegian | English | 8 | 3.66 |
| Nor | 26 | Norway | Norwegian | English | 4 | 4.33 |
| Nor | 25 | Norway | Norwegian | English | 7 | 3.66 |
| Nor | 26 | Norway | Norwegian | English | 5 | 5 |
| Nor | 27 | Norway | Norwegian | English | 8 | 4 |
| Nor | 30 | Norway | Norwegian | English | 5 | 4.33 |
| Nor | 35 | Norway | Norwegian | English,Spanish,Swedish | 5 | 5 |
| Nor | 31 | Norway | Norwegian | English,Spanish | 8 | 4.33 |
| Nor | 27 | Norway | Norwegian | English | 4 | 4.66 |
| Nor | 47 | Colombia | Norwegian | Spanish | 8 | 2.66 |
| Nor | 25 | Norway | Norwegian | English | 9 | 3 |
| Nor | 25 | Norway | Norwegian, | English,German | 8 | 4.66 |
| Nor | 25 | Norway | Swedish | Norwegian | English | 6 |
| Nor | 29 | Norway | Norwegian | English,Swedish,Danish | 5 | 5 |
| Nor | 29 | Norway | Norwegian | English | 6 | 5 |
| Nor | 19 | Norway | Norwegian | English,German,Japanese | 5 | 5 |
| Nor | 44 | Norway | Norwegian | English | 9 | 4.33 |
| Nor | 36 | Norway | Norwegian | English | 10 | 5 |
| Nor | 30 | Norway | Norwegian | Swedish,Danish,Chech,En | 6 | 5 |
| Nor | 19 | Norway | Norwegian | English,Spanish | 6 | 5 |
| Nor | 21 | Norway | Norwegian | English,Spanish | 6 | 4.33 |


| Nor | 30 | Norway | Norwegian, <br> English | Danish,Swedish,Spanish | 6 | 5 |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: |
| Nor | 28 | Norway | Norwegian | English,Swedish,Danish | 8 | 5 |
| Nor | 20 | Norway | Norwegian | Swedish,Danish,English | 5 | 5 |
| Nor | 21 | Norway | Norwegian | English | 10 | 3.33 |
| Nor | 25 | Vietnam | Norwegian | English | 5 | 4.33 |
| Nor | 26 | Norway | Norwegian | English,Italian,French | 4 | 5 |
| Nor | 24 | Norway | Norwegian | English | 6 | 4.33 |
| Nor | 18 | Norway | Norwegian | English | 5 | 4.33 |
| Nor | 30 | Norway | Norwegian | English,French | 4 | 5 |
| Nor | 23 | Norway | Norwegian | English | 13 | 5 |
| Nor | 27 | Norway | Norwegian | English | 7 | 4.66 |
| Nor | 19 | Norway | Norwegian | English,German | 7 | 4.66 |
| Nor | 50 | Norway | Norwegian | English | 9 | 3 |


| Rus | 67 | Russia | Russian | English, French, Danish, <br> Serbian | 5 | 5 |
| :--- | ---: | :--- | :--- | :--- | ---: | ---: |
| Rus | 38 | Russia | Russian | English, French | 11 | 4.66 |
| Rus | 48 | Russia | Russian | English | 10 | 3.66 |
| Rus | 36 | Russia | Russian | English,German | 10 | 4 |
| Rus | 38 | Russia | Russian | English | 10 | 4 |
| Rus | 55 | Russia | Russian | English | 10 | 3.66 |
| Rus | 44 | Russia | Russian | English | 11 | 4.33 |
| Rus | 39 | Russia | Russian | English,Greek,German | 14 | 3.33 |
| Rus | 44 | Russia | Russian | English | 10 | 3 |
| Rus | 47 | Russia | Russian | English,Spanish,German | 10 | 4 |
| Rus | 28 | Russia | Russian | English,German | 7 | 3.66 |
| Rus | 26 | Russia | Russian | English | 6 | 3.33 |
| Rus | 31 | Russia | Russian | English,Korean | 12 | 3 |
| Rus | 51 | Russia | Russian | English | 7 | 3.33 |
| Rus | 43 | Russia | Russian | English | 11 | 3 |
| Rus | 28 | Russia | Russian | English,French,Japanese | 4 | 4.33 |
| Rus | 60 | Russia | Russian | English,German | 10 | 5 |
| Rus | 30 | Russia | Russian | English | 15 | 3.66 |
| Rus | 58 | Russia | Russian | English,German | 18 | 3.66 |
| Rus | 49 | Russia | Russian | English | 10 | 3 |
| Rus | 27 | Russia | Russian | English | 12 | 3.33 |
| Rus | 35 | Russia | Russian | English,German | 8 | 4.66 |
| Rus | 29 | Russia | Russian | English | 8 | 4.33 |
| Rus | 42 | Russia | Russian | English | 11 | 3 |
| Rus | 54 | Russia | Russian | English,German,Italian | 20 | 3.33 |
| Rus | 29 | Russia | Russian | English | 12 | 3 |
| Rus | 32 | Russia | Russian | English | 11 | 4 |
| Rus | 25 | Russia | Russian | English,Italian | 10 | 4 |


| Rus | 31 | Russia | Russian | English | 7 | 3.66 |
| :--- | ---: | :--- | :--- | :--- | :--- | ---: |
| Rus | 32 | Russia | Russian | English, French | 7 | 5 |


| Eng | 48 | US | English | none | 0 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Eng | 39 | US | English | Spanish | 0 | 6 |
| Eng | 32 | US | English | Norwegian,Japanese,Arabi c,Latin | 0 | 6 |
| Eng | 32 | South Africa | English | Afrikaans | 0 | 6 |
| Eng | 30 | US | English | Spanish | 0 | 6 |
| Eng | 25 | Canada | English | French | 0 | 6 |
| Eng | 30 | US | English | Spanish,French,Norwegian | 0 | 6 |
| Eng | 31 | US | English | French | 0 | 6 |
| Eng | 33 | UK | English | Norwegian,French,Italian | 0 | 6 |
| Eng | 31 | US | English | Norwegian | 0 | 6 |
| Eng | 26 | Wales | English,Wel <br> sh | German | 0 | 6 |
| Eng | 30 | UK | English | Norwegian | 0 | 6 |
| Eng | 40 | UK | English | Norwegian,French | 0 | 6 |

## Appendix 4: Statistics on the accuracy predicted by condition and language group

```
Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) ['glmerMod']
Family: binomial (logit)
Formula: acc ~ 1 + Cond * Group + Proficiency + (1 + Cond | Participant) + (1 | Stimuli)
    Data: L2_match
Control: glmerControl(optimizer = "bobyqa")
    AIC BIC logLik deviance df.resid
    6106.9 6321.6 -3021.5 6042.9 6028
Scaled residuals:
    Min 1Q Median 3Q Max
-1.8402-0.5469-0.3810-0.1566 5.6743
Random effects:
Groups Name Variance Std.Dev. Corr
Participant (Intercept) 0.275429 0.52481
        Condfillers 0.606878 0.77902-0.07
        Condgen 0.012290 0.11086-0.69 0.69
        Condindef 0.005968 0.07725 0.10-0.94-0.57
        Condpp/ps 0.182593 0.42731 -0.49 0.16 0.69 0.13
Stimuli (Intercept) 0.2164320.46522
Number of obs: 6060, groups: Participant, 101; Stimuli, }6
```

Fixed effects:

```
        Estimate Std. Error z value Pr(> |z|)
\begin{tabular}{lccccc} 
(Intercept) & -1.39542 & 0.43950 & -3.175 & \(0.00150^{* *}\) \\
Condfillers & -0.93379 & 0.35861 & -2.604 & \(0.00922^{* *}\) \\
Condgen & 0.73276 & 0.27737 & 2.642 & \(0.00825^{* *}\) \\
Condindef & 0.63939 & 0.27889 & 2.293 & \(0.02187^{*}\) \\
Condpp/ps & 0.86579 & 0.28584 & 3.029 & \(0.00245^{* *}\) \\
GroupNor & 0.57816 & 0.23392 & 2.472 & \(0.01345^{*}\) \\
GroupRus & 1.88245 & 0.23620 & 7.970 & \(1.59 \mathrm{e}-15^{* * *}\) \\
Proficiency & -0.16560 & 0.08974 & -1.845 & 0.06499.
\end{tabular}
Condfillers:GroupNor 0.02081 0.37606 0.055 0.95588
Condgen:GroupNor -0.47770 0.25974 -1.839 0.06590.
Condindef:GroupNor -0.47320 0.26121 -1.812 0.07005
Condpp/ps:GroupNor -0.71523 0.27880 -2.565 0.01031*
Condfillers:GroupRus -0.57419 0.37278 -1.540 0.12349
Condgen:GroupRus -0.78463 0.25531 -3.073 0.00212 **
Condindef:GroupRus -0.71710 0.25651 -2.796 0.00518 **
Condpp/ps:GroupRus -1.67951 0.27899 -6.020 1.75e-09 ***
Signif. codes: 0'***' 0.001 '**' 0.01 **' 0.05 '.' 0.1 ' ' 1
```


## \$contrasts

Cond = def:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.578 0.234 Inf -2.472 0.0359
Ger - Rus -1.882 0.236 Inf -7.970 <. 0001
Nor - Rus -1.304 0.220 Inf -5.940 <. 0001

Cond = fillers:
contrast estimate SE df z.ratio p.value
Ger - Nor - 0.599 0.341 Inf -1.758 0.1840
Ger - Rus -1.308 0.344 Inf -3.808 0.0004
Nor - Rus -0.709 0.318 Inf -2.231 0.0661

Cond = gen:
contrast estimate SE df z.ratio p.value
Ger - Nor - 0.100 0.202 Inf -0.499 0.8720
Ger - Rus -1.098 0.206 Inf -5.341 <. 0001
Nor - Rus -0.997 0.204 Inf -4.878 <. 0001

Cond = indef:
contrast estimate SE df z.ratio p.value
Ger - Nor - 0.105 0.216 Inf -0.486 0.8782
Ger - Rus -1.165 0.221 Inf -5.283 <. 0001
Nor - Rus -1.060 0.219 Inf -4.835 <. 0001

Cond $=p p / p s$ :
contrast estimate $S E$ df z.ratio p.value
Ger - Nor $0.1370 .206 \operatorname{Inf} 0.6640 .7841$
Ger - Rus -0.203 0.215 Inf -0.946 0.6114
Nor - Rus -0.340 0.217 Inf -1.566 0.2605

# Appendix 5: Statistics on the accuracy predicted by condition, language group, proficiency and their interaction on the $\mathbf{L} 2$ groups matched by proficiency 

[^11]```
Formula: acc ~ 1 + Cond * Group * Proficiency + (1 + Cond | Participant) + (1 | Stimuli)
    Data: L2_match
Control: glmerControl(optimizer = "bobyqa")
    AIC BIC logLik deviance df.resid
    4492.1 4785.1 -2200.0 4400.1 4274
Scaled residuals:
    Min 1Q Median 3Q Max
-1.7756 -0.5607-0.3795 0.7020 5.6761
Random effects:
Groups Name Variance Std.Dev. Corr
Participant (Intercept) 0.272259 0.52178
            Condfillers 0.7673670.87600 0.03
            Condgen 0.0052840.07269-0.87-0.52
            Condindef 0.024171 0.15547 0.14-0.96 0.36
            Condpp/ps 0.0841300.29005 -0.60 0.05 0.48 0.04
Stimuli (Intercept) 0.223621 0.47289
Number of obs: 4320, groups: Participant, 72; Stimuli, 60
Fixed effects:
            Estimate Std. Error z value Pr(>|z|)
(Intercept) 
llllll
Condgen 
Condindef 
Condpp/ps 
GroupNor 
GroupRus 
Proficiency }\quad-0.10871 0.31343-0.347 0.72
Condfillers:GroupNor }\quad0.74820 2.68868 0.278 0.781
Condgen:GroupNor }\quad\begin{array}{lllll}{-0.91442}&{1.79317}&{-0.510}&{0.610}
Condindef:GroupNor }\quad0-0.19548 1.80934-0.108 0.914
Condpp/ps:GroupNor }\quad2.22312 1.87825 1.184 0.237
Condfillers:GroupRus 
Condgen:GroupRus }\quad-1.29272 1.65445 -0.781 0.435
Condindef:GroupRus 
Condpp/ps:GroupRus }\quad-0.74537 1.75534-0.425 0.671
Condfillers:Proficiency 
Condgen:Proficiency 
Condindef:Proficiency 
Condpp/ps:Proficiency 
GroupNor:Proficiency 
GroupRus:Proficiency }\quad0.04692 0.39234 0.120 0.905
Condfillers:GroupNor:Proficiency -0.17875 0.68461 -0.261 0.794
Condgen:GroupNor:Proficiency }0.11205 0.45375 0.247 0.805
Condindef:GroupNor:Proficiency -0.05724 0.45727 -0.125 0.900
Condpp/ps:GroupNor:Proficiency -0.71600 0.47589 -1.505 0.132
Condfillers:GroupRus:Proficiency 0.14417 0.65590 0.220 0.826
Condgen:GroupRus:Proficiency }0.0837
Condindef:GroupRus:Proficiency -0.20395 0.43343-0.471 0.638
Condpp/ps:GroupRus:Proficiency -0.24411 0.45260-0.539 0.590
$contrasts
Cond = def:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.5570 0.284 Inf -1.964 0.1212
Ger - Rus -2.0522 0.274 Inf -7.496 <.0001
Nor - Rus -1.4951 0.254 Inf -5.886 <.0001
Cond = fillers:
contrast estimate SE df z.ratio p.value
```

```
Ger - Nor -0.6200 0.441 Inf -1.405 0.3383
Ger - Rus -1.3074 0.432 Inf -3.028 0.0070
Nor - Rus -0.6874 0.406 Inf -1.695 0.2071
Cond = gen:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.0722 0.243 Inf -0.297 0.9525
Ger - Rus -1.0805 0.236 Inf -4.585 <.0001
Nor - Rus -1.0084 0.234 Inf -4.301 0.0001
Cond = indef:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.1421 0.262 Inf -0.542 0.8503
Ger - Rus -1.0096 0.257 Inf -3.930 0.0003
Nor-Rus -0.8674 0.254 Inf -3.409 0.0019
Cond = pp/ps:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.0355 0.242 Inf -0.147 0.9882
Ger - Rus -0.3711 0.239 Inf -1.554 0.2658
Nor - Rus -0.3356 0.238 Inf -1.410 0.3359
```


# Appendix 6: Statistics on grammatical and ungrammatical trials - accuracy predicted by the sub-conditions ("Article Use" \& "Tense-Aspect"), language group, grammaticality and their interaction 

```
Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) ['glmerMod']
Family: binomial (logit)
Formula: acc ~ 1 + Cond1 * Group * Grammaticality + Proficiency + (1 | Participant) + (1 | Stimuli)
    Data: L2 match
Control: glmerControl(optimizer = "bobyqa")
    AIC BIC logLik deviance df.resid
    5747.1 5888.0-2852.6 5705.1 6039
Scaled residuals:
    Min 1Q Median 3Q Max
-2.5446-0.5198-0.3553-0.1471 6.7363
Random effects:
Groups Name Variance Std.Dev.
Participant (Intercept) 0.2690 0.5187
Stimuli (Intercept) 0.2313 0.4810
Number of obs: 6060, groups: Participant, 101; Stimuli, }6
Fixed effects:
    Estimate Std. Error z value Pr(> |z|)
(Intercept) -1.44326 0.44270 -3.260 0.001114***
Cond1Fillers
Cond1Tense-Asp
GroupNor
GroupRus
Grammaticalityungram
Proficiency
Cond1Fillers:GroupNor
Cond1Tense-Asp:GroupNor -0.22449 0.34629-0.648 0.516800
```

```
Cond1Fillers:GroupRus 0.04442 0.34502 0.129 0.897551
Cond1Tense-Asp:GroupRus -0.64625 0.35276 -1.832 0.066955
Cond1Fillers:Grammaticalityungram -1.86312 0.52590 -3.543 0.000396***
Cond1Tense-Asp:Grammaticalityungram 0.64237 0.32066 2.003 0.045145 *
GroupNor:Grammaticalityungram -0.46292 0.21454 -2.158 0.030946 *
GroupRus:Grammaticalityungram }\quad0.81363 0.21473 3.789 0.000151****
Cond1Fillers:GroupNor:Grammaticalityungram -0.40095 0.60316 -0.665 0.506217
Cond1Tense-Asp:GroupNor:Grammaticalityungram -0.19307 0.43126-0.448 0.654373
Cond1Fillers:GroupRus:Grammaticalityungram -0.28665 0.53804 -0.533 0.594201
Cond1Tense-Asp:GroupRus:Grammaticalityungram -0.94463 0.43920-2.151 0.031492 *
Signif. codes: 0 '***'0.001 *** 0.01 **'0.05 '.' 0.1 ' ' }
$contrasts
Cond1 = Article_Use, Grammaticality = gram:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.5330 0.210 Inf -2.534 0.0303
Ger - Rus -0.9888 0.216 Inf -4.575 <.0001
Nor-Rus -0.4558 0.205 Inf -2.220 0.0679
Cond1 = Fillers, Grammaticality = gram:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.7984 0.327 Inf -2.441 0.0389
Ger - Rus -1.0332 0.333 Inf -3.100 0.0055
Nor - Rus -0.2349 0.294 Inf -0.800 0.7030
Cond1 = Tense-Asp, Grammaticality = gram:
contrast estimate SE df z.ratio p.value
Ger - Nor -0.3085 0.329 Inf -0.939 0.6156
Ger - Rus -0.3426 0.341 Inf -1.003 0.5747
Nor - Rus -0.0340 0.322 Inf -0.106 0.9939
Cond1 = Article_Use, Grammaticality = ungram
contrast estimate SE df z.ratio p.value
Ger - Nor -0.0701 0.183 Inf -0.384 0.9221
Ger - Rus -1.8024 0.194 Inf -9.310< < 0001
Nor - Rus -1.7323 0.195 Inf -8.900<0001
Cond1 = Fillers, Grammaticality = ungram:
contrast estimate SE df z.ratio p.value
Ger - Nor 0.0655 0.493 Inf 0.133 0.9903
Ger - Rus -1.5602 0.414 Inf -3.771 0.0005
Nor - Rus -1.6257 0.415 Inf -3.916 0.0003
Cond1 = Tense-Asp, Grammaticality = ungram:
contrast estimate SE df z.ratio p.value
Ger - Nor 0.3475 0.252 Inf 1.378 0.3524
Ger - Rus -0.2116 0.262 Inf -0.808 0.6980
Nor - Rus -0.5590 0.266 Inf -2.105 0.0888
```


## Appendix 7: Native control group results in the AJT by conditions and trials

Note that grammatical trials are in bold and of an option (a). The participants were asked to judge each trial based on the part in italics.

Table 23. Native control group acceptability judgments at the trials level in [+pp,-ps]

| Trials pairs in the [+pp, - ps] condition | Grammatical? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 5(a) It has been 4 hours since we came here. Let's go grab a bite! | 75\% | 25\% |
| 5(b) It was 4 hours since we came here. Let`s go grab a bite! & NA & 100\% \\ \hline \begin{tabular}{l} 8(a) Brandon: Have you bought Dayna`s birthday present yet? |  |  |
| Fin: Not yet. |  |  |
| 8(c) Brandon: Had you bought Dayna`s birthday present yet? \\ Fin: Not yet. \end{tabular} & \(88 \%\) \(40 \%\) & \(12 \%\) \(60 \%\) \\ \hline \begin{tabular}{l} 35(a) Have you ever drunk Turkish coffee? \\ - Unfortunately, no. \\ 35(b)Did you ever drink Turkish coffee? \\ - Unfortunately, no. \end{tabular} & \(40 \%\) \(75 \%\) & \(60 \%\) \(25 \%\) \\ \hline \begin{tabular}{l} 44(a) Have you ever been to Australia? Yes, a few times. \\ 44(b) Were you ever in Australia? \\ Yes, a few times \end{tabular} & \(100 \%\) \(60 \%\) & NA \(40 \%\) \\ \hline \begin{tabular}{l} 57(a) It's my birthday today. My sister has just made a big chocolate cake. \\ 57(c) It`s my birthday today. My sister had just made a big chocolate cake. |  |  | \& $80 \%$

NA \& $20 \%$
$100 \%$ <br>

\hline | 58(a) How far are you in the homework for the reading class? |
| :--- |
| Up to now, I have read the third chapter, the second volume of "The War and Peace". |
| 58(b) How far are you in the homework for the reading class? |
| Up to now, I read the third chapter, the second volume of "The War and Peace". | \& 20\% \& $80 \%$

$75 \%$ <br>
\hline
\end{tabular}

Table 24. Native control group acceptability judgments at the trials level in [+def, -spec]
Trials pairs in the [+def, - spec] condition

## Grammatical?

Yes No

18(a) Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?
Police officer: Yes. We are trying to find the murderer of Mr. Peterson, but we still don't know who he is.
18(c) Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?
Police officer: Yes. We are trying to find murderer of Mr. Peterson, but we still don't know who he is.

43(a) Rose: Let's go out to dinner with your brother Samuel tonight.
Alex: No. he is busy. He is having dinner with the manager of his office. I don't know who that is, but I'm sure that Samuel can't cancel this dinner.
43(c) Rose: Let's go out to dinner with your brother Samuel tonight.
Alex: No. he is busy. He is having dinner with the manager of his office. I don't know who that is, but I'm sure that Samuel can't cancel this dinner.

21(a) At a supermarket
Sales clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it`s completely spoiled! I want to talk the owner of this store. I don't know who he is, but I want to see him right now! 21(c) At a supermarket Sales clerk: May I help you, sir? Customer: Yes! I am very angry! I bought some meat from this store, but it`s completely spoiled! I want to talk owner of this store. I don't know who he is, but I want to see him right now!
24(a) After a woman`s running race Reporter: Excuse me! Can you please let me in? Guard: What do you need? Reporter: I am a reporter. I need to talk to the winner of this race. I don't know who she is, so can you please help me? 24(b) After a woman`s running race
Reporter: Excuse me! Can you please let me in?
Guard: What do you need?
Reporter: I am a reporter. I need to talk to a winner of this race. I don't know who she is, so can you please help me?
28(a) At a gallery
Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful!
Sarah: I would like to meet the author of that painting. Unfortunately, I have no idea who it is since the painting is not signed.

80\% 20\%

NA $\mathbf{1 0 0 \%}$
$100 \%$ NA

NA $\mathbf{1 0 0 \%}$
$100 \%$ NA

60\% 40\%
$100 \%$ NA

25\% 75\%

NA $\mathbf{1 0 0 \%}$

28(c) At a gallery
Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful!
Sarah: I would like to meet author of that painting. Unfortunately, I have no idea who it is since the painting is not signed.
45(a) Bill: I'm looking for Erik. Is he home?
Rick: Yes, but he is on the phone. It's an important business matter.
He is talking to the owner of his company! I don't know who that person is, but I know that this conversation is important to Erik. 45(b)Bill: I'm looking for Erik. Is he home?
Rick: Yes, but he is on the phone. It's an important business matter. He is talking to an owner of his company! I don't know who that person is, but I know that this conversation is important to Erik.

NA $\mathbf{1 0 0 \%}$
$100 \%$ NA

NA $\mathbf{1 0 0 \%}$

Table 25. Native control group acceptability judgments at the trials level in gen [-def, -spec]

Trials pairs in the gen [-def, -spec] condition

1(a) Eric: My friend Tom was in his office at the university, but he really didn't want to work.
Bill: So what did he do?
Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to a student.
1(c) Eric: My friend Tom was in his office at the university, but he really didn't want to work.
Bill: So what did he do?
Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to student.

[^12]
## Grammatical

Yes No

## $60 \% \quad 40 \%$

NA $100 \%$
$60 \% \quad 40 \%$

NA $\mathbf{1 0 0 \%}$
$60 \% \quad 40 \%$

\begin{tabular}{|c|c|c|}
\hline 25(b) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? \& 50\% \& 50\% <br>
\hline Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got the puppy. \& \& <br>
\hline 32(a) Tom: How was your trip to New York? \& 88\% \& 12\% <br>

\hline | Susan: Great! I went to many museums and ate in lots of wonderful restaurants. I also visited many friends. And I saw a play. |
| :--- |
| 32(c) Tom: How was your trip to New York? | \& NA \& 100\% <br>

\hline Susan: Great! I went to many museums and ate in lots of wonderful restaurants. I also visited many friends. And I saw play. \& \& <br>
\hline 53(a) Usually at school children learn such facts about animals as $a$ whale is a mammal. \& 50\% \& 50\% <br>
\hline 53(b) Usually at school children learn such facts about animals as the whale is the mammal. \& NA \& 100\% <br>
\hline 60(a) Do you know my friend Mary? \& 100\% \& NA <br>
\hline No. \& \& <br>
\hline She is a student at London School. \& \& <br>
\hline 60(c) Do you know my friend Mary? \& \& <br>
\hline No. \& \& <br>
\hline She is student at London School. \& NA \& 100\% <br>
\hline
\end{tabular}

## Appendix 8: The German group results in the AJT by conditions and trials

Table 26. German group acceptability judgments at the trials level in [+pp, -ps]

| Trials pairs in the [+pp, - ps] condition | Grammatical? |  |
| :--- | :--- | :--- |
|  | Yes | No |
| 5(a) It has been 4 hours since we came here. Let's go grab a bite! | $\mathbf{9 3 \%}$ | $\mathbf{7 \%}$ |
| 5(b) It was 4 hours since we came here. Let's go grab a bite! | $\mathbf{1 1 \%}$ | $\mathbf{8 9 \%}$ |
| 8(a) Brandon: Have you bought Dayna`s birthday present yet? \\ Fin: Not yet. \\ 8(c) Brandon: Had you bought Dayna`s birthday present yet? <br> Fin: Not yet. | $\mathbf{9 3 \%}$ | $\mathbf{7 \%}$ |



Table 27. German group acceptability judgments at the trials level in $[-p p,+p s]$

| Trials pairs in the [-pp, +ps] condition | Grammatical? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 3(a) When did your family move to New Zealand? | 89\% | 11\% |
| They moved there 7 years ago. |  |  |
| 3(c) When did your family move to New Zealand? They had moved there 7 years ago. | 27\% | 73\% |
| 16(a) For how long have you known each other? | 78\% | 22\% |
| I think I have met her in 1986. |  |  |
| 16(b) For how long have you known each other? I think I have met her in 1986. | 100\% | NA |
|  |  |  |
| 23(a) What is that on your shoulder? | 80\% | 20\% |
| Yesterday I crashed my car and hurt my shoulder pretty bad. |  |  |
| 23(b) What is that on your shoulder? |  |  |
| 37(a) Where were you last weekend? | 93\% | 7\% |
| I went to a karaoke bar and sang with some friends on Saturday. |  |  |
| 37(b) Where have you been last weekend? | 11\% | 89\% |

38(a) Do you know anything about Shakespeare?
$100 \%$ NA
Yes, Shakespeare wrote more than 30 plays.
38(c) Do you know anything about Shakespeare?
Yes, Shakespeare was writing more than 30 plays.
40(a) I had so much to do for the university that I fell asleep right at my desk this afternoon.
40(c) I had so much to do for the university that I had fallen asleep right at my desk this afternoon.
$20 \% \quad \mathbf{8 0 \%}$

93\% 7\%

44\% 56\%

Table 28. German group acceptability judgments at the trials level in [-def, +spec]

| Trials pairs in the [-def, +spec] condition | Grammatical? |  |
| :--- | :--- | :--- |
| 2(a)In an airport, in a crowd of people who are meeting arriving <br> passengers <br> Man: Excuse me, do you work here? <br> Security guard: Yes. <br> Man: In that case, perhaps you could help me. I am trying to find a red- <br> haired girl; I think that she flew in on Flight 239. <br> 2(b) In an airport, in a crowd of people who are meeting arriving passengers <br> Man: Excuse me, do you work here? | $\mathbf{7 \%}$ |  |
| Security guard: Yes. <br> Man: In that case, perhaps you could help me. I am trying to find the red- <br> haired girl; I think that she flew in on Flight 239. | $\mathbf{7 8 \%}$ | $\mathbf{5 2 \%}$ |
| 17(a) Meeting on a street. <br> Roberta: Hi, William! It's nice to see you again. I didn't know that you <br> were in Boston. <br> William: I am here for a week. I am visiting a friend from college, his <br> name is Sam Brown, and he lives in Cambridge now. <br> 17(b) Meeting on a street. <br> Roberta: Hi, William! It's nice to see you again. I didn't know that you <br> were in Boston. <br> William: I am here for a week. I am visiting the friend from college, his | $\mathbf{4 4 \%}$ | $\mathbf{5 6 \%}$ |
| name is Sam Brown, and he lives in Cambridge now. | NA |  |
| 29(a) In a restaurant <br> Waiter: Are you ready to order, sir? Or are you waiting for someone? <br> Client: Can you please come back in about twenty minutes? You see, I <br> am waiting. I am planning to eat with a colleague from work. She will <br> be here soon. <br> 29(b) In a restaurant <br> Waiter: Are you ready to order, sir? Or are you waiting for someone? | $\mathbf{4 4 \%}$ | $\mathbf{5 6 \%}$ |

Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with the colleague from work. She will be here soon.
31(a) In a "Lost and Found"
Clerk: Can I help you? Are you looking for something you lost? Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for a green scarf. I think that I lost it here last week.
31(b) In a "Lost and Found"
Clerk: Can I help you? Are you looking for something you lost?
Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for the green scarf. I think that I lost it here last week.
54(a) Reporter 1: Hi! I haven't seen you in weeks. Do you have time for lunch?
Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing a doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews. 54(c) Reporter 1: Hi! I haven't seen you in weeks. Do you have time for lunch? Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews.
56(a) Gary: I heard that you just started college. How do you like it? Melissa: It's great! My classes are very interesting.
Gary: That's wonderful. And do you have fun outside of class?
Melissa: Yes. In fact, today I'm having dinner with a girl from my class, her name is Angela, and she is really nice.
56(c) Gary: I heard that you just started college. How do you like it?
Melissa: It's great! My classes are very interesting.
Gary: That's wonderful. And do you have fun outside of class?
Melissa: Yes. In fact, today I'm having dinner with girl from my class, her name is Angela, and she is really nice.
$78 \% \quad 40 \%$
$\mathbf{4 0 \%} \quad \mathbf{6 0 \%}$
$\mathbf{5 0 \%} \quad \mathbf{5 0 \%}$

45\% 55\%
$68 \% \quad 32 \%$
$\mathbf{5 0 \%} \quad \mathbf{5 0 \%}$

Table 29. German group acceptability judgments at the trials level in gen [+def, +spec]
Trials pairs in the gen $[+d e f,+$ spec] condition
Grammatical?

Yes No

10(a) Sarah: Yesterday, I took my granddaughter Becky for a walk $\mathbf{1 0 0 \%}$ NA in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to the girl.

10(b) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to a girl.
6(a) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked the book.
6(b) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked a book.
30(a) Molly: How`s your grandpa Sam`s farm doing?
Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market.
Molly: Did he find any?
Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought the horse. 30(b) Molly: How`s your grandpa Sam`s farm doing?
Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market.
Molly: Did he find any?
Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought a horse.
33(a) Alice: What did you do last night?
Robin: I went to a video store and got two videos, a German film and a video game. Then, I came home and watched the film.
33(c) Alice: What did you do last night?
Robin: I went to a video store and got two videos, a German film and a video game. Then, I came home and watched film.
42(a) I have been to Paris recently and visited some remarkable places. The Mona Lisa hangs in the Louvre.
42(b) I have been to Paris recently and visited some remarkable places.
A Mona Lisa hangs in a Louvre.
50(a) Cutdown of wilderness affects some species massively. The tiger is in danger of becoming extinct.
50(c) Cutdown of wilderness affects some species massively. Tiger is in danger of becoming extinct.

$\mathbf{4 4 \%} \quad \mathbf{5 6 \%}$
$13 \% \quad 87 \%$

93\% 7\%

56\% 44\%
$60 \% \quad 40 \%$
$22 \% \quad 78 \%$

56\% 44\%
$\mathbf{2 0 \%} \quad \mathbf{8 0 \%}$
$100 \%$ NA

32\% 68\%

## Appendix 9: The Norwegian group results in the AJT by conditions and trials

Table 30. Norwegian group acceptability judgments at the trials level in [+pp, - ps]

| Trials pairs in the [+pp, - ps] condition | Grammatical? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 5(a) It has been 4 hours since we came here. Let's go grab a bite! | 92\% | 8\% |
| 5(b) It was 4 hours since we came here. Let's go grab a bite! | 19\% | 81\% |
| 8(a) Brandon: Have you bought Dayna`s birthday present yet? Fin: Not yet. & 85\% & 15\% \\ \hline 8(c) Brandon: Had you bought Dayna`s birthday present yet? Fin: Not yet. | 18\% | 82\% |
| 35(a) Have you ever drunk Turkish coffee? <br> - Unfortunately, no. | 36\% | 64\% |
| 35(b)Did you ever drink Turkish coffee? <br> - Unfortunately, no. | 69\% | 31\% |
| 44(a) Have you ever been to Australia? Yes, a few times. | 100\% | NA |
| 44(b) Were you ever in Australia? Yes, a few times | 64\% | 36\% |
| 57(a) It's my birthday today. My sister has just made a big chocolate cake. | 45\% | 55\% |
| 57(c) It's my birthday today. My sister had just made a big chocolate cake. | 37\% | 63\% |
| 58(a) How far are you in the homework for the reading class? Up to now, I have read the third chapter, the second volume of "The War and Peace". | 36\% | 64\% |
| 58(b) How far are you in the homework for the reading class? <br> Up to now, I read the third chapter, the second volume of "The War and Peace". | 69\% | 31\% |

Table 31. Norwegian group acceptability judgments at the trials level in [-def, +spec]
Trials pairs in the [-def, + spec] condition
Grammatical?

\begin{tabular}{|c|c|c|}
\hline \& Y \& No \\
\hline \begin{tabular}{l}
2(a)In an airport, in a crowd of people who are meeting arriving passengers \\
Man: Excuse me, do you work here? \\
Security guard: Yes. \\
Man: In that case, perhaps you could help me. I am trying to find a redhaired girl; I think that she flew in on Flight 239. \\
2(b) In an airport, in a crowd of people who are meeting arriving passengers \\
Man: Excuse me, do you work here? \\
Security guard: Yes. \\
Man: In that case, perhaps you could help me. I am trying to find the redhaired girl; I think that she flew in on Flight 239.
\end{tabular} \& \(77 \%\)

$73 \%$ \& $\mathbf{2 3 \%}$

$\mathbf{2 7 \%}$ <br>

\hline | 17(a) Meeting on a street. |
| :--- |
| Roberta: Hi, William! It's nice to see you again. I didn't know that you were in Boston. |
| William: I am here for a week. I am visiting a friend from college, his name is Sam Brown, and he lives in Cambridge now. |
| 17(b) Meeting on a street. |
| Roberta: Hi, William! It's nice to see you again. I didn't know that you were in Boston. |
| William: I am here for a week. I am visiting the friend from college, his name is Sam Brown, and he lives in Cambridge now. | \& $85 \%$

$27 \%$ \& 15\% <br>

\hline | 29(a) In a restaurant |
| :--- |
| Waiter: Are you ready to order, sir? Or are you waiting for someone? Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with a colleague from work. She will be here soon. |
| 29(b) In a restaurant |
| Waiter: Are you ready to order, sir? Or are you waiting for someone? |
| Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with the colleague from work. She will be here soon. | \& $91 \%$

$\mathbf{4 6 \%}$ \& 9\% <br>

\hline | 31(a) In a "Lost and Found" |
| :--- |
| Clerk: Can I help you? Are you looking for something you lost? |
| Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for a green scarf. I think that I lost it here last week. |
| 31(b) In a "Lost and Found" |
| Clerk: Can I help you? Are you looking for something you lost? |
| Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for the green scarf. I think that I lost it here last week. | \& $\mathbf{9 1 \%}$

$\mathbf{4 6 \%}$ \& $\mathbf{9 \%}$ <br>

\hline | 54(a) Reporter 1: Hi! I haven't see you in weeks. Do you have time for lunch? |
| :--- |
| Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing a doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews. | \& 91\% \& 9\% <br>

\hline
\end{tabular}



Table 32. Norwegian group acceptability judgments at the trials level in gen [-def, -spec]

Trials pairs in the [-def, -spec] condition

11(a) In a children`s library Child: I'd like to get something to read, but I don't know what myself. Librarian; Well, what are some of your interests? We have books on any subject. Child: Well, I like all sorts of things that move: cars, trains. I know! I would like to get a book about airplanes! I like to read about flying! 11(c) In a children`s library
Child: I'd like to get something to read, but I don't know what myself.
Librarian; Well, what are some of your interests? We have books on any subject.
Child: Well, I like all sorts of things that move: cars, trains. I know! I would like to get book about airplanes! I like to read about flying!
14(a) In a clothing store
Clerk: May I help you?
Customer: Yes, please. I've rummaged through every stall, without any success. I am looking for a warm hat. It's getting rather cold outside.
14(c) In a clothing store
Clerk: May I help you?
Customer: Yes, please. I've rummaged through every stall, without any success. I am looking for warm hat. It‘s getting rather cold outside.

## Grammatical?

Yes No

91\% 9\%

38\% 62\%

85\% 15\%
$18 \% \quad 82 \%$

20(a) In a school
55\% 45\%
Student: I am new in this school. This is my first day.
Teacher: Welcome! Are you going to be at the school party tonight?
Student: Yes. I'd like to get to know my classmates. I am hoping to find a new good friend. I don't like being alone.
20(c) In a school
Student: I am new in this school. This is my first day.
Teacher: Welcome! Are you going to be at the school party tonight?
Student: Yes. Id like to get to know my classmates. I am hoping to find new good friend. I don't like being alone.
26(a) Sam: I'm having some difficulties with my citizenship application.
Julie: What are you going to do?
Sam: Well, I need some advice. I am trying to find a lawyer with lots of experience.
26(c) Sam: I'm having some difficulties with my citizenship application.
Julie: What are you going to do?
Sam: Well, I need some advice. I am trying to find lawyer with lots of experience.
27(a) Karen: Where`s Beth? Is she coming home for dinner? Anne: No. She is eating dinner with a colleague; she didn't tell me who it is. 27(b) Karen: Where`s Beth? Is she coming home for dinner?
Anne: No. She is eating dinner with the colleague; she didn't tell me who it is.
48(a) Gertrude: Guess what? Mu cousin Claudia is in Washington D.C. this week.
Richard: That's great. What's she doing there?
Gertrude: She is doing some interviews for her newspaper. She is interviewing a politician; I am afraid I don't know who, exactly.
48(b) Gertrude: Guess what? Mu cousin Claudia is in Washington D.C. this week.
Richard: That's great. What's she doing there?
Gertrude: She is doing some interviews for her newspaper. She is interviewing the politician; I am afraid I don't know who, exactly.

Table 33. Norwegian group acceptability judgments at the trials level in [+def, -spec]
Trials pairs in the [+def, - spec] condition

Grammatical?

Yes No

73\% 27\%

18(a) Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?

Police officer: Yes. We are trying to find the murderer of Mr. Peterson, but we still don't know who he is.
18(c) Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?
Police officer: Yes. We are trying to find murderer of Mr. Peterson, but we still don't know who he is.
43(a) Rose: Let's go out to dinner with your brother Samuel tonight.
Alex: No. he is busy. He is having dinner with the manager of his office.
I don't know who that is, but I'm sure that Samuel can`t cancel this dinner. 43(c) Rose: Let's go out to dinner with your brother Samuel tonight. Alex: No. he is busy. He is having dinner with manager of his office. I don't know who that is, but I'm sure that Samuel can`t cancel this dinner.

21(a) At a supermarket
Sales clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it's completely spoiled! I want to talk to the owner of this store. I don't know who he is, but I want to see him right now!
21(c) At a supermarket
Sales clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it's completely spoiled! I want to talk to owner of this store. I don't know who he is, but I want to see him right now!

## 24(a) After a woman`s running race

Reporter: Excuse me! Can you please let me in?
Guard: What do you need?
Reporter: I am a reporter. I need to talk to the winner of this race. I don't know who she is, so can you please help me?
24(b) After a woman`s running race Reporter: Excuse me! Can you please let me in? Guard: What do you need? Reporter: I am a reporter. I need to talk to a winner of this race. I don't know who she is, so can you please help me? 28(a) At a gallery Sarah: Do you see that beautiful landscape painting? Mary: Yes, it`s wonderful!
Sarah: I would like to meet the author of that painting. Unfortunately, I have no idea who it is since the painting is not signed.
28(c) At a gallery
Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful!

Sarah: I would like to meet author of that painting. Unfortunately, I have no idea who it is since the painting is not signed.

45(a) Bill: I'm looking for Erik. Is he home?
$\mathbf{8 5 \%} \quad 15 \%$
Rick: Yes, but he is on the phone. It's an important business matter.
He is talking to the owner of his company! I don't know who that person is, but I know that this conversation is important to Erik. 45(b)Bill: I'm looking for Erik. Is he home?
Rick: Yes, but he is on the phone. It's an important business matter. He is talking to an owner of his company! I don't know who that person is, but I know that this conversation is important to Erik.

Table 34. Norwegian group acceptability judgments at the trials level in gen [+def, +spec]

Trials pairs in the gen $[+$ def, + spec] condition

10(a) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to the girl.
10(b) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to a girl.
6(a) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked the book.
6(b) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked a book.
30(a) Molly: How's your grandpa Sam`s farm doing?
Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market.
Molly: Did he find any?
Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought the horse.

Grammatical?

Yes
No
$69 \%$
31\%

64\% 36\%

91\% 9\%
$\mathbf{8 \%} \quad \mathbf{9 2 \%}$
$\mathbf{8 5 \%} \quad 15 \%$
30(b) Molly: How`s your grandpa Sam`s farm doing? ..... 55\% 45\%Tom: All right, thanks. Last summer, grandpa needed some new animals,so he went to an animal market.
Molly: Did he find any?
Tom: Yes, he found a big cow and a small, friendly horse. But he didn'thave enough money for both. In the end, he bought a horse.33(a) Alice: What did you do last night?Robin: I went to a video store and got two videos, a German film anda video game. Then, I came home and watched the film.
33(c) Alice: What did you do last night?

                    \(\mathbf{9 \%} \quad \mathbf{9 1 \%}\)Robin: I went to a video store and got two videos, a German film and avideo game. Then, I came home and watched film.
    42(a) I have been to Paris recently and visited some remarkable places.36\%64\%
The Mona Lisa hangs in the Louvre.
42(b) I have been to Paris recently and visited some remarkable places. AMona Lisa hangs in a Louvre.
50(a) Cutdown of wilderness affects some species massively. The tiger31\% 69\%
is in danger of becoming extinct.50(c) Cutdown of wilderness affects some species massively. Tiger is indanger of becoming extinct.

```54\% 46\%
55% 45%
```

```
5
                46%
```

$\mathbf{9 1 \%} \quad \mathbf{9 \%}$
$15 \% \quad 85 \%$

## Appendix 10: The Russian group results in the AJT by conditions and trials

Table 35. Russian group acceptability judgments at the trials level in [+def, -spec]

| Trials pairs in the [+def, - spec] condition | Grammatical? |  |
| :--- | :--- | :--- |
|  | Yes | No |
| 18(a) Conversation between a police officer and a reporter. <br> Reporter: Several days ago, Mr. James Peterson, a famous politician, <br> was murdered! Are you investigating his murder? | $\mathbf{7 7 \%}$ | $\mathbf{2 3 \%}$ |

Police officer: Yes. We are trying to find the murderer of Mr. Peterson, but we still don't know who he is.
18(c) Conversation between a police officer and a reporter.
Reporter: Several days ago, Mr. James Peterson, a famous politician, was murdered! Are you investigating his murder?
Police officer: Yes. We are trying to find murderer of Mr. Peterson, but we still don't know who he is.
43(a) Rose: Let's go out to dinner with your brother Samuel tonight.
Alex: No. he is busy. He is having dinner with the manager of his office. I don't know who that is, but I'm sure that Samuel can`t cancel this dinner.
43(c) Rose: Let's go out to dinner with your brother Samuel tonight.
Alex: No. he is busy. He is having dinner with manager of his office. I don't know who that is, but I'm sure that Samuel can’t cancel this dinner.

21(a) At a supermarket
Sales clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it's completely spoiled! I want to talk to the owner of this store. I don't know who he is, but I want to see him right now!
21(c) At a supermarket
Sales clerk: May I help you, sir?
Customer: Yes! I am very angry! I bought some meat from this store, but it’s completely spoiled! I want to talk to owner of this store. I don't know who he is, but I want to see him right now!
24(a) After a woman`s running race Reporter: Excuse me! Can you please let me in? Guard: What do you need? Reporter: I am a reporter. I need to talk to the winner of this race. I don't know who she is, so can you please help me? 24(b) After a woman`s running race
Reporter: Excuse me! Can you please let me in?
Guard: What do you need?
Reporter: I am a reporter. I need to talk to a winner of this race. I don't know who she is, so can you please help me?
28(a) At a gallery
$\mathbf{3 1 \%} \quad \mathbf{6 9 \%}$
Sarah: Do you see that beautiful landscape painting?
Mary: Yes, it`s wonderful! Sarah: I would like to meet the author of that painting. Unfortunately, I have no idea who it is since the painting is not signed. 28(c) At a gallery Sarah: Do you see that beautiful landscape painting? Mary: Yes, it`s wonderful!

Sarah: I would like to meet author of that painting. Unfortunately, I have no idea who it is since the painting is not signed.

45(a) Bill: I'm looking for Erik. Is he home?
Rick: Yes, but he is on the phone. It's an important business matter.
He is talking to the owner of his company! I don't know who that person is, but I know that this conversation is important to Erik. 45(b)Bill: I'm looking for Erik. Is he home?
Rick: Yes, but he is on the phone. It's an important business matter. He is talking to an owner of his company! I don't know who that person is, but I know that this conversation is important to Erik.


Table 36. Russian group acceptability judgments at the trials level in [-def, +spec]

Trials pairs in the $[-d e f,+$ spec $]$ condition passengers
Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find a redhaired girl; I think that she flew in on Flight 239.
2(b) In an airport, in a crowd of people who are meeting arriving passengers Man: Excuse me, do you work here?
Security guard: Yes.
Man: In that case, perhaps you could help me. I am trying to find the redhaired girl; I think that she flew in on Flight 239.
17(a) Meeting on a street.
Roberta: Hi, William! It's nice to see you again. I didn't know that you were in Boston.
William: I am here for a week. I am visiting a friend from college, his name is Sam Brown, and he lives in Cambridge now.
17(b) Meeting on a street.
Roberta: Hi, William! It’s nice to see you again. I didn't know that you were in Boston.
William: I am here for a week. I am visiting the friend from college, his name is Sam Brown, and he lives in Cambridge now.
29(a) In a restaurant
Waiter: Are you ready to order, sir? Or are you waiting for someone?
Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with a colleague from work. She will be here soon.
29(b) In a restaurant
Waiter: Are you ready to order, sir? Or are you waiting for someone?

## Grammatical?

Yes
No
$100 \%$ NA

77\% 23\%
$\mathbf{9 1 \%} \quad 9 \%$

62\% 38\%
$69 \% \quad 31 \%$
$55 \% \quad 45 \%$

Client: Can you please come back in about twenty minutes? You see, I am waiting. I am planning to eat with the colleague from work. She will be here soon.
31(a) In a "Lost and Found"
62\% 38\%
Clerk: Can I help you? Are you looking for something you lost?
Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for a green scarf. I think that I lost it here last week.
31(b) In a "Lost and Found"
Clerk: Can I help you? Are you looking for something you lost?
Customer: Yes, I realize you have a lot of things here, but maybe you have what I need. You see, I am looking for the green scarf. I think that I lost it here last week.
54(a) Reporter 1: Hi! I haven't see you in weeks. Do you have time for lunch?
Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing a doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews. 54(c) Reporter 1: Hi! I haven't see you in weeks. Do you have time for lunch? Reporter 2: Sorry, no. I'm busy with a story about local medicine. Today, I am interviewing doctor from Bright Star Children`s Hospital, he is a very famous pediatrician, and he doesn't have much time for interviews.
56(a) Gary: I heard that you just started college. How do you like it?
Melissa: It's great! My classes are very interesting.
Gary: That's wonderful. And do you have fun outside of class?
Melissa: Yes. In fact, today I'm having dinner with a girl from my class, her name is Angela, and she is really nice.
56(c) Gary: I heard that you just started college. How do you like it?
Melissa: It's great! My classes are very interesting.
Gary: That's wonderful. And do you have fun outside of class?
Melissa: Yes. In fact, today I'm having dinner with girl from my class, her name is Angela, and she is really nice.

Table 37. Russian group acceptability judgments at the trials level in [+def, +spec]

| Trials pairs in the [+def, +spec] condition | Grammatical? |  |
| :--- | :--- | :--- |
|  | Yes | No |
| 22(a) Eric: I really liked that book you gave me for my birthday. I was <br> very interesting. | $\mathbf{8 5 \%}$ | $\mathbf{1 5 \%}$ |
| Laura: Thanks! I like it, too. I would like to meet the author of that book <br> someday. I saw an interview with her on TV, and I really liked her! |  |  |

22(c) Eric: I really liked that book you gave me for my birthday. I was very interesting.
Laura: Thanks! I like it, too. I would like to meet author of that book someday. I saw an interview with her on TV, and I really liked her!
39(a) At a bookstore
Chris: Well, I`ve bought everything that I wanted. Are you ready to go?
Mike: Almost. Can you please wait a few minutes? I want to talk to the owner of this bookstore. She is my old friend.
39(b) At a bookstore
Chris: Well, I've bought everything that I wanted. Are you ready to go?
Mike: Almost. Can you please wait a few minutes? I want to talk to an owner of this bookstore. She is my old friend.
46(a) Conversation between two police officers
Police Officer Clark: I haven't seen you in a long time. You must be very busy.
Police Officer Smith: Yes. Did you hear about Miss Sarah Andrews, a famous lawyer who was murdered several weeks ago? We are trying to find the murderer of Miss Andrews, his name is Roger Williams, and he is a well-known criminal.
46(b) Conversation between two police officers
Police Officer Clark: I haven't seen you in a long time. You must be very busy.
Police Officer Smith: Yes. Did you hear about Miss Sarah Andrews, a famous lawyer who was murdered several weeks ago? We are trying to find a murderer of Miss Andrews, his name is Roger Williams, and he is a wellknown criminal.
49(a) At the end of a chess tournament
Laura: Are you ready to leave?
Betsy: No. not yet. First, I need to talk to the winner of this tournament, she is my good friend and I want to congratulate her.
49(c) At the end of a chess tournament
Laura: Are you ready to leave?
Betsy: No. not yet. First, I need to talk to winner of this tournament, she is my good friend and I want to congratulate her.
51(a) Paul: Do you have time for lunch?
Sheila: No, Im very busy. I am meeting with the president of our university, Dr. McKinley.
51(b) Paul: Do you have time for lunch?
Sheila: No, Гm very busy. I am meeting with a president of our university, Dr. McKinley.
52(a) Meeting in a park
Andrew: Him Nora. What are you doing here in Chicago? Are you here for work?
Nora: No, for family reasons. I am visiting the father of my fiancé. He is really nice, and he is paying for our wedding.
52(b) Meeting in a park
Andrew: Him Nora. What are you doing here in Chicago? Are you here for work?

Nora: No, for family reasons. I am visiting a father of my fiancé. He is really nice, and he is paying for our wedding.

Table 38. Russian group acceptability judgments at the trials level in [-def, -spec]


Sam: Well, I need some advice. I am trying to find lawyer with lots of experience.

27(a) Karen: Where`s Beth? Is she coming home for dinner? Anne: No. She is eating dinner with a colleague; she didn't tell me who it is. 27(b) Karen: Where`s Beth? Is she coming home for dinner?
Anne: No. She is eating dinner with the colleague; she didn't tell me who it is.
48(a) Gertrude: Guess what? Mu cousin Claudia is in Washington D.C.
$62 \% \quad 38 \%$
$64 \% \quad 36 \%$

82\%
$18 \%$

## this week.

Richard: That's great. What's she doing there?
Gertrude: She is doing some interviews for her newspaper. She is interviewing a politician; I am afraid I don't know who, exactly.
48(b) Gertrude: Guess what? Mu cousin Claudia is in Washington D.C. this week.
Richard: That's great. What's she doing there?
Gertrude: She is doing some interviews for her newspaper. She is interviewing the politician; I am afraid I don't know who, exactly.
$\mathbf{3 1 \%} 69 \%$

Table 39. Russian group acceptability judgments at the trials level in [+pp, - ps]

| Trials pairs in the [+pp, - ps] condition | Grammatical? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 5(a) It has been 4 hours since we came here. Let's go grab a bite! | 73\% | 27\% |
| 5(b) It was 4 hours since we came here. Let`s go grab a bite! & 54\% & 46\% \\ \hline \begin{tabular}{l} 8(a) Brandon: Have you bought Dayna`s birthday present yet? |  |  |
| Fin: Not yet. |  |  | \& 73\% \& $27 \%$ <br>

\hline | 8(c) Brandon: Had you bought Dayna`s birthday present yet? |
| :--- |
| Fin: Not yet. | \& 38\% \& $62 \%$ <br>

\hline | 35(a) Have you ever drunk Turkish coffee? |
| :--- |
| - Unfortunately, no. | \& 69\% \& $31 \%$ <br>


\hline | 35(b)Did you ever drink Turkish coffee? |
| :--- |
| - Unfortunately, no. | \& 82\% \& 18\% <br>

\hline 44(a) Have you ever been to Australia? \& 73\% \& 27\% <br>
\hline Yes, a few times. \& \& <br>

\hline | 44(b) Were you ever in Australia? |
| :--- |
| Yes, a few times | \& 15\% \& 85\% <br>

\hline 57(a) It's my birthday today. My sister has just made a big chocolate cake. \& 92\% \& 8\% <br>
\hline
\end{tabular}

| 57(c) It's my birthday today. My sister had just made a big chocolate cake. | $\mathbf{3 6 \%}$ | $\mathbf{6 4 \%}$ |
| :--- | :--- | :--- |
| 58(a) How far are you in the homework for the reading class? <br> Up to now, I have read the third chapter, the second volume of "The War <br> and Peace". <br> 58(b) How far are you in the homework for the reading class? | $\mathbf{7 7 \%}$ | $\mathbf{2 3 \%}$ |
| Up to now, I read the third chapter, the second volume of "The War and <br> Peace". | $\mathbf{4 5 \%}$ | $\mathbf{5 5 \%}$ |

Table 40. Russian group acceptability judgments at the trials level in [-pp, +ps]

| Trials pairs in the [-pp, +ps] condition | Grammatical? |  |
| :---: | :---: | :---: |
|  | Yes | No |
| 3(a) When did your family move to New Zealand? They moved there 7 years ago. 3(c) When did your family move to New Zealand? They had moved there 7 years ago. | $77 \%$ $36 \%$ | $23 \%$ $64 \%$ |
| 16(a) For how long have you known each other? I think I have met her in 1986. <br> 16(b) For how long have you known each other? I think I have met her in 1986. | $77 \%$ $82 \%$ | $23 \%$ $18 \%$ |
| 23(a) What is that on your shoulder? <br> Yesterday I crashed my car and hurt my shoulder pretty bad. <br> 23(b) What is that on your shoulder? <br> Yesterday I have crashed my car and hurt my shoulder pretty bad. | $\mathbf{9 1 \%}$ $\mathbf{2 3 \%}$ | $\mathbf{9 \%}$ $\mathbf{7 7 \%}$ |
| 37(a) Where were you last weekend? <br> I went to a karaoke bar and sang with some friends on Saturday. <br> 37(b) Where have you been last weekend? <br> I went to a karaoke bar and sang with some friends on Saturday. | $\mathbf{8 2 \%}$ $\mathbf{3 1 \%}$ | $18 \%$ $69 \%$ |
| 38(a) Do you know anything about Shakespeare? Yes, Shakespeare wrote more than 30 plays. 38(c) Do you know anything about Shakespeare? Yes, Shakespeare was writing more than 30 plays. | $100 \%$ $27 \%$ | NA $\mathbf{7 3 \%}$ |
| 40(a) I had so much to do for the university that I fell asleep right at my desk this afternoon. | 100\% | NA |
| 40(c) I had so much to do for the university that I had fallen asleep right at my desk this afternoon. | 31\% | 69\% |

Table 41. Russian group acceptability judgments at the trials level in gen [+def, +spec]

Trials pairs in the gen [+def, +spec] condition

10(a) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to the girl.
10(b) Sarah: Yesterday, I took my granddaughter Becky for a walk in the park.
Claudia: How did she like it?
Sarah: She had a good time. She saw one little girl and two little boys in the park. Becky is a little shy. But finally, she talked to a girl.
6(a) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked the book.
6(b) Vicky: Where were you yesterday? I tried to call you, but you weren't home.
Rachel: I went to a bookstore yesterday.
Vicky: Oh, what did you get?
Rachel: I got lots of things, several magazines, two red pens, and an interesting new book. I really liked a book.
30(a) Molly: How`s your grandpa Sam's farm doing? Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market. Molly: Did he find any? Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought the horse. 30(b) Molly: How`s your grandpa Sam`s farm doing?
Tom: All right, thanks. Last summer, grandpa needed some new animals, so he went to an animal market.
Molly: Did he find any?
Tom: Yes, he found a big cow and a small, friendly horse. But he didn't have enough money for both. In the end, he bought a horse.
33(a) Alice: What did you do last night?
Robin: I went to a video store and got two videos, a German film and a video game. Then, I came home and watched the film.
33(c) Alice: What did you do last night?
Robin: I went to a video store and got two videos, a German film and a video game. Then, I came home and watched film.

Grammatical?
Yes No
$82 \% \quad 18 \%$
$69 \% \quad 31 \%$
$77 \% \quad 23 \%$
$\mathbf{4 5 \%} \quad \mathbf{5 5 \%}$
$91 \% \quad 9 \%$
$77 \% \quad 23 \%$
$82 \% \quad 18 \%$
$62 \% \quad 38 \%$

| 42(a) I have been to Paris recently and visited some remarkable places. | $\mathbf{3 8 \%}$ | $\mathbf{6 2 \%}$ |
| :--- | :---: | :---: |
| The Mona Lisa hangs in the Louvre. |  |  |
| 42(b) I have been to Paris recently and visited some remarkable places. A |  |  |
| Mona Lisa hangs in a Louvre. | $\mathbf{3 6 \%}$ | $\mathbf{6 4 \%}$ |
| 50(a) Cutdown of wilderness affects some species massively. The tiger <br> is in danger of becoming extinct. <br> 50(c) Cutdown of wilderness affects some species massively. Tiger is in <br> danger of becoming extinct. | $\mathbf{3 8 \%}$ | $\mathbf{6 4 \%}$ |

Table 42. Russian group acceptability judgments at the trials level in gen [-def, -spec]

Trials pairs in the gen [-def, -spec] condition

1(a) Eric: My friend was in the office at the university, but he really didn't want to work.
Bill: So, what did he do?
Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to a student.
1(c) Eric: My friend was in the office at the university, but he really didn't want to work.
Bill: So, what did he do?
Eric: Well, he walked around my department. He had some coffee and checked his email. And he talked to the student.
4(a) Judy: Last Saturday, I didn't have anywhere to go, and it was raining.
Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And I read a book.
4(c) Judy: Last Saturday, I didn't have anywhere to go, and it was raining. Samantha: So, what did you do?
Judy: First, I cleaned my apartment. Then I ate lunch. And I read book.
25(a) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got a puppy. 25(b) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got the puppy.
32(a) Tom: How was your trip to New York?
Susan: Great! I went to many museums and ate in lots of wonderful restaurants. I also visited many friends. And I saw a play.

Grammatical?

Yes No
$46 \%$ $54 \%$
$64 \% \quad 36 \%$
$85 \% \quad 15 \%$
$64 \% \quad 36 \%$
$69 \% \quad 31 \%$
$82 \% \quad 18 \%$
$64 \% \quad 36 \%$

| 32(c) Tom: How was your trip to New York? | 31\% | 69\% |
| :---: | :---: | :---: |
| Susan: Great! I went to many museums and ate in lots of wonderful restaurants. I also visited many friends. And I saw play. |  |  |
| 53(a) Usually at school children learn such facts about animals as $a$ whale is a mammal. | 73\% | 27\% |
| 53(b) Usually at school children learn such facts about animals as the whale is the mammal. | 46\% | 54\% |
| 60(a) Do you know my friend Mary? | 73\% | 27\% |
| No. |  |  |
| She is a student at London School. |  |  |
| 60(c) Do you know my friend Mary? | 54\% | 46\% |
| She is student at London School. |  |  |


[^0]:    ${ }^{1}$ Positive transfer is a transfer that leads to accurate acquisition and production of a second language by matching the features of L1 and L2 that is being acquired, while negative transfer is the one that results in the occurrence of errors when learner`s L1 and L2 mismatch in the features that are being learned. (Odlin, 2003)

[^1]:    ${ }^{2}$ In Šimík \& Demian (2020), the hypothesis is that definite descriptions convey uniqueness (if singular), or maximality (if plural).

[^2]:    ${ }^{3}$ Deictic words - their semantic meaning is fixed, but their denoted meaning varies depending on time and/or place.

[^3]:    ${ }^{4}$ Morphological competence is the knowledge that speakers have of the formation of words in their language (word structure).

[^4]:    ${ }^{5}$ When the influence of the L1 (or native language) leads to rapid acquisition or use of a target language.
    ${ }^{6}$ When the influence of the L1 (or native language) leads to errors in the acquisition or use of a target language.

[^5]:    ${ }^{7}$ Priming is a phenomenon where exposure to one stimulus influences a response to a subsequent stimulus, without conscious guidance or intention.

[^6]:    ${ }^{8}$ Generic article use in such contexts as [+def, + spec] and [-def, -spec] stands for the previous-mention definite and first-mention definite respectively. For example: gen [+def, +spec]:

[^7]:    ${ }^{9}$ Signif. codes: $0{ }^{\prime * * * ’} 0.001^{\prime * * \prime} 0.01^{\prime *} 0.05^{\prime} .^{\prime} 0.1^{\prime}{ }^{\prime} 1$

[^8]:    ${ }^{10} 5$ stands for the advanced level of proficiency; 4- upper-intermediate; 3 - intermediate.

[^9]:    ${ }^{11}$ Strong article type - zu dem ('to the'); weak article type - zum ('to the')

[^10]:    ${ }^{12}$ Elsness (2000) suggested three features in which the Norwegian PP differs from its English counterpart. They are a) vaguely defined past-time reference; b) unique past-time reference; and c) inferential past. All these features imply that the Past Simple constructions can be used in the Present Perfect context in Norwegian.

[^11]:    Generalized linear mixed model fit by maximum likelihood (Laplace Approximation) ['glmerMod']
    Family: binomial (logit)

[^12]:    4(a) Judy: Last Saturday I didn't have anywhere to do, and it was raining.
    Samantha: So, what did you do?
    Judy: First, I cleaned my apartment. Then I ate lunch. And then I read a book.
    4(c) Judy: Last Saturday I didn't have anywhere to do, and it was raining. Samantha: So, what did you do?
    Judy: First, I cleaned my apartment. Then I ate lunch. And then I read book. 25(a) Mary: I heard that it was your son Roger`s birthday last week. Did he have a good celebration? Helen: Yes, it was great. He got lots of gifts: books, toys. And best of all: he got a puppy.

