

CASE-MARKING ERRORS IN L2 RUSSIAN AND PRODUCTION RULES

by

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(Under the Direction of Don R. McCreary)

ABSTRACT

This paper analyzes the phenomenon of case-marking errors in L2 Russian from the standpoint of the psycholinguistic theory called Incremental Procedural Grammar. The main concepts of this theory are: (1) parts of a sentence are processed incrementally, relatively independently and simultaneously; (2) articulation of the sentence may start when the whole sentence has not been processed yet to insure fluency; (3) speech production is lexically driven. The paper shows how Second Language Acquisition (SLA) concepts, such as interlanguage, language transfer and error analysis fit into this relatively new theoretical approach. The research, supported by examples from the spontaneous, oral speech of one L2 learner, shows that the errors in case-marking in L2 Russian are caused by the transfer of the L1 production rules, interlanguage production rules and slowness in the usage of 'newly developed' production rules of L2 within a speech production system as outlined in Incremental Procedural Grammar.

INDEX WORDS: Second Language Acquisition, Errors, Russian cases, Language production, Incremental Procedural Grammar, Inflections, L2

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DEDICATION

To my husband, Steve, who encouraged me in my work and gave me the love and support I needed.

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CHAPTER 1

PROBLEM STATEMENT AND RESEARCH OUTLINE

Literature Review and Problem Statement

The Russian language poses many problems for those native English speakers who attempt to master it. A review of the literature on the topic of errors made by learners of Russian in assigning appropriate case endings shows that linguists find it difficult to explain why even advanced learners of Russian, regardless of how much time they spent studying, or what instructions they received, continue to make such mistakes. As Thompson puts it in her study of this phenomenon, "...some cases are more difficult to learn than others and this difficulty persists over relatively long periods of time and despite additional instruction" (Thompson, 1980, p. 45).

The studies on case-marking in the acquisition of Russian by non-native speakers are few. In fact, the author of this research found only three. Two of these studies fall into the category of so-called 'morpheme studies' which were started by Brown (1973) and carried out by other scholars such as Dulay and Burt (1974), and Larsen-Freeman (1976, 1978). Their main claim was that there is a predictable order of acquisition of grammatical morphemes in each language which is essentially the same for all learners regardless of their language background, manner of instruction or other factors (Lightbown, 1983, p. 217). The acquisition order in these studies is mainly equated with the accuracy order based on the calculation of errors made in obligatory contexts.

Therefore some authors preferred the latter term in describing the phenomenon (e.g. Larsen – Freeman, 1978)¹.

Thompson (1980) and Rubinstein (1995) in their studies tested the hypothesis of the above mentioned ‘morpheme studies’ in regard to Russian, which as an inflectional language is rich in grammatical morphemes. Their main goal was to discern the acquisition order of case inflections for Russian nouns. Both of the studies relied on oral data collected from native English speakers who received formal instruction in Russian. In these studies the students were divided into two groups, based on the length of Russian study. The main differences in the methods of investigation in these two studies are that Thompson used a very small number of subjects (twelve) and employed a method of unstructured topic-oriented interview while Rubinstein tested 136 learners of Russian and used a structured interview technique with the questions designed to elicit the usage of specific cases. Their results were similar. Thus, they both agreed that there is a set order by which Russian case inflections are acquired. This order seems not to be connected with the amount of instruction received, the order of presentation of cases or the morphological complexity/simplicity of cases. Rubinstein concluded that "no evidence of developmental stages in the acquisition of cases...was discovered in the corpus of errors" (Rubinstein, 1995, p.12).

Thompson suggested the following acquisition order: Nominative, Accusative/Prepositional, Genitive, Dative/Instrumental.² Rubinstein repeats this same order in his study with only one exception: Dative was found to be the most difficult case to acquire.

Neither researcher made an attempt to come up with an explanation of the observed acquisition order. At the same time, they noted that a combination of factors such as the semantic complexity of some cases, transfer from L1 English, the frequency of the cases in spoken Russian, as well as the frequency of their use by the students themselves, could explain why some cases are more difficult to acquire than others.³

One more study on the topic of case-marking in Russian is worth mentioning. Catherine Ross, in her research of case acquisition in Russian (Ross, 1999), doubts Rubinstein's conclusion that L2 Russian students do not demonstrate qualitative improvements in their case-marking errors. She also questions the use of quantitative methods in general in trying to explain the acquisition of a case system. Ross used a grammar test designed to justify the chosen case for nouns. She also had the students draw their own model of the Russian case system as they conceptualized it. With the help of these cognitive linguistic methods she was able to find evidence of the conceptual changes in students' interlanguage systems in the process of acquisition⁴. Although she called her research only "exploratory in nature" (Ross, 1999, p. 2), its value is that she was able to prove the necessity of qualitative analysis and new approaches in the study of the acquisition of the Russian case system.

It is necessary to point out that the 'morpheme studies', to which the research by Thompson and Rubinstein is related, have received criticism in the literature. One of their weaknesses lies in the neglect of individual differences in errors produced by different learners. Also, the method of error classification itself poses other problems because many grammatical morphemes tend to show syncretism and, therefore, it is

sometimes hard to conclude what case the student tried to mark in particular instances of errors.⁵

Another weakness of the 'morpheme studies' in the acquisition of Russian cases is the equation of learners' production with their knowledge of grammar⁶. In other words, errors in marking a particular case made by students during their speech were interpreted as lack of knowledge of that case. That is, these errors were interpreted as an indicator that the case has not been fully acquired. This assumption goes against a well-established notion in linguistics that it is important to distinguish between a learner's competence and performance. As Chomsky puts it, competence is "the speaker-hearer's knowledge of his language", while performance is "the actual use of language in concrete situations" (Chomsky, 1965, p.4). Although tightly interconnected, these two should not be equated.

The theory of Universal Grammar (UG) which is primarily based on the works of Chomsky, focuses only on the competence of the speaker-hearer and traditionally attributes performance errors to such factors as "tiredness, boredom, drunkenness, drugs, external distractions, and so forth" (Radford, 1998, p. 2). This underestimation of the importance of the learner's output was proven wrong by a number of recent studies in the field of second language acquisition. Thus, Swain introduced the notion of "comprehensible output", which "...may stimulate learners to move from the semantic, open-ended, non-deterministic, strategic processing prevalent in comprehension to the complete grammatical processing needed for accurate production. Output, thus, would seem to have a potentially significant role in the development of syntax and morphology" (Swain, 1995, p. 128).

Case-marking falls precisely into the area where morphology and syntax work together to produce a comprehensible output. Therefore, studies on the acquisition of cases should pay attention not only to morphemes, as was done in the previous research mentioned earlier, but to the rules of the production system, which combines their morphological properties with their syntactic and semantic functions.

Incremental Procedural Grammar

Gerard Kempen and Edward Hoenkamp (1987) proposed such a universal language production system which they called Incremental Procedural Grammar (IPG). Despite what one might assume from the name of this theory, it is not another theory of grammar. It is rather a model of a universal language processor that not only accounts for implementation of certain grammar rules, but it also accounts for language production in real time and within human psychological constraints, e.g. human memory. IPG emulates much of Merrill Garrett's work on developing a cognitive and production system as well as the research done in computational linguistics (e.g. McDonald's MUMBLE program). The structure of the grammar expressed in IPG is similar to ideas proposed in Lexical Functional Grammar (e.g. Kaplan & Brasnan) and Anderson's Extended Word-and-Paradigm theory. At the same time, Kempen and Hoenkamp emphasize the uniqueness of their approach and point out that they "are not aware of any type of grammar which satisfies all basic criteria developed" in their proposal (Kempen & Hoenkamp, p. 205). Unfortunately, because Kempen and Hoenkamp both work in the Netherlands and, therefore, publish their work in Europe, it was impossible to get access to their current publications and to track the further development of IPG. The available

literature showed that some ideas of Incremental Procedural Grammar were further developed mainly by Levelt (1989) who focused on word access in her studies.

The psycholinguistic plausibility of IPG relies on the concept of a three-level cognitive processing system. The first level is responsible for constructing a conceptual structure, hence the mechanism responsible for it called the *conceptualizer*. The second level is where the lexicalization of conceptual messages takes place together with the construction of a syntactic tree. This is the responsibility of the *formulator*. The last level is the level on which various phonological rules apply and the sentence is finally articulated. The *articulator* is responsible for the last level of speech production.

The main concepts of IPG could be summarized as follows: (1) sentences are constructed not by a central production mechanism but by a group of procedures that work in parallel and are responsible only for the application of limited rules (e.g. the procedure Noun Phrase is responsible only for building Noun Phrases, while the procedure SUBJECT applies only the rules responsible for constructing subjects); (2) parts of a sentence are processed incrementally and simultaneously; (3) pronunciation of a sentence can start before a speaker develops a conceptual meaning and processes syntactic information; and (4) speech production is lexically driven. Kempen and Hoenkamp used these concepts to explain not only lexical, syntactical and morphological errors that speakers make, but also such linguistic ideas as transformation, "unbounded dependencies, cross-serial dependencies and coordination phenomena such as gapping and conjunction reduction" (Kempen & Hoenkamp, 1987, p. 201).

Let's consider the following example, originally taken by Kempen and Hoenkamp from Garrett (1976), to demonstrate the advantages of IPG in explaining certain errors that occur in spontaneous speech:

- (1) I'm not in the read for mooding.
= *I am not in the mood for reading.*

According to IPG, this mistake was possible because *the formulator* simultaneously retrieved both lexemes 'read' and 'mood' from the lexicon and proceeded to work on constructing both phrases *simultaneously* and relatively *independently* while trying to come up with a grammatical syntactic structure for the whole sentence. During this stage *the formulator* processed all the necessary syntactic information that requires the use of function words and inflections. Since both phrases were constructed simultaneously, *the articulator* also treats them simultaneously while assigning them the required morphological functors. Therefore, due to computational simultaneity, it is easy to see how the exchange between lexemes that are to be articulated almost at the same time can occur.

The advantage of the application of IPG can be also illustrated by referring to an introspective observation. Looking at one's own production of an utterance in a foreign language, one often observes the occurrence of mistakes whose nature is impossible to explain by the lack of L2 knowledge. Very often L2 learners are able to correct their mistakes once attention is drawn to them. IPG is able to explain such mistakes based on the concepts which will be described in more detail in Chapter III.

In general, the main advantage of IPG is that it "does try to account for natural language data (including hesitations, false starts, lexical repair, and syntactic repair)" (Hatch, 1983, p. 87).

Initially developed for explaining production rules of L1 and applied to Dutch and English, IPG was successfully used by Peter Jordens in analyzing second language acquisition data. His work, titled *Production Rules in Interlanguage: Evidence from Case Errors in L2 German* (1986), showed how certain case-marking errors could be predicted if we assume that L1 production rules are transferred into L2. Jordens also established the notion of an 'interlanguage production system' which, according to him, should replace the concept of interlanguage as a grammar rule system. The weakness of this particular research is that it focuses mainly on transfer. He does not try to further expand the ideas of IPG in terms of concepts related to the field of Second Language Acquisition (SLA). This is especially important because, although IPG is designed as a universal production system, Kempen and Hoenkamp do not address many issues which are of importance for SLA research such as the lexicon of a bilingual person. It is also not clear if L2 learners develop a separate production system for their second language or the procedures within the L1 language system 'learn' to handle other rules. Chapter III of this paper will try to address these and other theoretical issues connected with the application of IPG in explaining SLA phenomena.

In sum, the literature review showed that there is an extreme lack of research, and especially qualitative research, in one of the areas of L2 Russian acquisition which causes major problems for students, the acquisition of the Russian case system. The question that seems to be repeated by all the linguists continues to be "why they make errors even

though they know the rules" (Thompson, 1980, p. 50). Although all the studies conducted on this topic used production data as the basis for their analysis, none of them focused on the production rules as possible causes of the mistakes. Therefore, the incorporation of the theory of language production, Incremental Procedural Grammar, in the study of second language acquisition brings a new approach in explaining the nature of case-marking errors in L2 Russian.

Research Outline and Subject of the Research

To address the questions outlined in the first sub-chapter, the author of this research decided to conduct qualitative, descriptive research to explore the nature of the errors⁷ in case-marking on nominal parts of speech (nouns, pronouns, adjectives, numerals) in L2 Russian made by an adult native English speaker and to apply the theory of language production, Incremental Procedural Grammar in particular, to explain this phenomenon.⁸

Spontaneous, free, oral speech was chosen as the material to be analyzed, for as Thompson (1980) points out in her article, "the speech elicited in free, oral production with attention focused on communication, rather than form, would provide a more valid sample for studying acquisition of cases" (Thompson, 1980, p. 44).

The only subject of this case study is a 35 year old male native English speaker who had no previous experience with the Russian language before taking an eleven month Basic Russian course at the Defense Language Institute at Monterey, California. According to the information he provided, he at one time had a good command of Spanish. He studied Spanish in high school and at the United States Military Academy

but he never practiced it after that. He also claims to have some very basic knowledge of Italian which was spoken in his family by his grandparents when he was a child.

The subject's Russian course lasted 47 weeks (1645 contact hours) and was the same as the one described in the article by Rubinstein (1995). It was conducted by native Russian speakers. Most of the activities were performed orally so the amount of language input in terms of listening comprehension, speaking and reading was considerable. Lexicon and grammar presentation were topically oriented. Cases were presented in an orderly manner in two cycles: Nominative (in both singular and plural forms), Prepositional, Accusative, Genitive, Dative, Instrumental for nouns of all genders in singular forms; and then Genitive, Accusative, Instrumental, Prepositional, Dative for the plural forms.

Throughout the course oral proficiency interviews were periodically conducted by the teachers. Each interview was divided into several parts. The first part usually consisted of the student talking about a specific topic. These topics were prepared ahead of time and usually memorized by the students. The second part consisted of the teacher asking unprepared questions about the topic and a role-playing activity. The teacher neither made corrections, nor provided help during the interviews. The data for this research was collected only from the second part of the interviews to ensure the spontaneity of speech samples.

Although the goal of this study is not to present definite conclusions, but rather investigate a new approach in explaining the phenomenon of case-marking errors in L2 Russian, the main hypothesis of the research is that the errors found in the oral speech of L2 Russian learners are not due to their lack of knowledge of Russian grammar and case

endings in particular, but are caused by the universal production rules as presented in the theory of Incremental Procedural Grammar.

The following tasks were identified for the purpose of the research:

- Investigate the possibility of the incorporation of such notions of second language acquisition as interlanguage, language transfer and error analysis into the psycholinguistic theory of Incremental Procedural Grammar;
- Transcribe sentences or phrases in which the cases were marked incorrectly from the 14 recordings of the oral proficiency interviews (each approximately 10 minutes long);
- Classify the errors/mistakes according to the following formula: Case Used vs. Case Intended.
- Interview the subject of the research in order to identify the causes of specific errors and the difficulties he had in using a specific case and what he intended to say in particular instances of speech production.
- Provide a possible explanation of the errors/mistakes made by applying the theory of Incremental Procedural Grammar .

CHAPTER 2

THE RUSSIAN CASE SYSTEM

In order to understand the nature of the case-marking errors in L2 Russian, it is essential to understand the rather complex case system of the Russian language. This complexity is characteristic of highly inflectional languages, which rely on morphological case rather than word order in signaling the semantic case, or semantic role. This allows Russian and other similar languages to have a comparatively flexible word order.

The nominal parts of speech (nouns, pronouns, adjectives and numerals) do not only show distinctions of case but also of number (except for numerals) and gender. This distinction is achieved with the help of inflectional endings, stress change or stem change. In Russian, as in many other inflectional languages, inflectional endings tend to encode more than one meaning. For instance, the dictionary entry for the Russian word *korova* (korova) 'cow' consists of a stem *korov* - and an affix - *a* which denotes feminine gender, singular number and the Nominative case⁹.

The number of cases in Russian, as well as the order in which they should be cited, has long been a topic of discussion among linguists¹⁰. In this study it is assumed that there are six primary cases in Russian and two secondary cases (Second Genitive and Second Locative, which are available for a small number of masculine nouns)¹¹. The following order of cases will be used in the study: Nominative, Accusative, Genitive, Prepositional, Dative and Instrumental. This order appears in recent works on the

Russian language. Timberlake points out, in his article on Russian grammar, that with this order, "all instances of syncretism within a paradigm select continuous intervals" (Timberlake, 1993, p. 836).

Case Functions

The following is a summary of the major functions or 'meanings' which are expressed by each case. This summary is from Cubberley, whose account of Russian grammar is one of the most detailed and recent reference books on the Russian language (Cubberley, 2002, p. 109):

- (1) Nominative: expresses the subject or unconnected, parenthetic reference, including dictionary form.
- (2) Accusative: expresses the direct object; in temporal contexts extent of time ('for how long'); in prepositional phrases motion and destination or goal ('to'), in temporal contexts limitation of time ('in how long', 'projected for how long').
- (3) Genitive: expresses possession ('of'); negation, separation or absence (cf. 'none of', 'out of', 'away from'); and partitive ('some of'). In the last meaning a small number of nouns have an extra (singular) form, which we may call G(S)¹².
- (4) Dative: expresses the indirect object ('to') or recipient ('for'); in prepositional phrases movement in a general direction ('towards').
- (5) Prepositional/Locative: used only with prepositions, virtually all with locational meaning, but not exclusively, hence the currently preferred name of Prepositional, at least in pedagogical usage; linguists tend to prefer Locative, as this is the more 'meaningful' name. A small number of nouns make a formal distinction between locative and non-locative, with a special (singular) locative form we may call L(S)¹³.
- (6) Instrumental: expresses instrument or means; in prepositional phrases accompaniment ('with') and some location ('above', 'below').

It is necessary also to mention that the use of the cases in Russian is complicated by certain verbs assigning or 'governing' certain cases regardless of their primary

semantic meaning. For instance, the word *opera* (opera) has an almost identical semantic meaning of an object of one's feelings in the following phrases. Yet different verbs assign different cases to it:

I [bi t; oper-u (ljubit' operu) – to love opera (Acc.)

vosxi] at; sq oper-oj (voskhishchat'sja operoj) – to admire opera (Instr.)

Nouns

Nouns in Russian have one of three inherent genders in the singular form: masculine, feminine and neuter. However, gender is neutralized in the plural.¹⁴ Gender is expressed through agreement with adjectives, the past tense of verbs and pronouns. There is a relatively small group of nouns that have common gender. This means that they may be used with either feminine or masculine agreement in modifiers and verbs depending on reference.

Declension Groups

Gender is one of the basic criteria for the classification of nouns into three declensional patterns. The endings within a declension group depend upon whether the stem ends in a hard or soft consonant and rely on normal phonological processes found in Russian.

Declension I includes nouns of masculine or neuter gender that have a zero ending, or *-o*, *-e* in the Nominative singular. This declension group also includes a small number of nouns which, according to Cubberley "are beginning to become common gender – accompanying past tense verbs show agreement by natural gender, but accompanying adjectives must still be masculine" (Cubberley, 2002, p. 119). Declension II consists mainly of the feminine nouns that end in *-a*, *-ja* in the Nominative singular as

well as common gender and a few masculine gender nouns (e.g. *dqdaq* (djadja) – ‘uncle’(masc.)). Feminine nouns, which have no ending in the Nominative singular, and a stem ending in a soft consonant or a palatal (hard or soft), as well as some neuter nouns which end in *-a*, constitute Declension III. The neuter nouns in Declension III have a suffix *-on’-* (>hard *-on-* in plural) between the root (all soft final) and the ending, in the oblique cases only (Cubberley, 2002, p. 114). The case endings for the different declensions are represented in Table 2, 3 and 4 respectively (pp. 47-49).

Furthermore, the distinction between animate and inanimate nouns plays a very important role in case-marking, hence animate masculine singular, as well as all animate plural nouns have an identical form for Accusative and Genitive while inanimate nouns tend to have an identical form for Accusative and Nominative. The purpose of this distinction is to avoid confusion between a subject and an object in the sentence, since Russian has a flexible word order. For instance, if an animate noun *brat* – ‘brother’ had an identical form for both Accusative and Nominative cases, then it would be problematic to figure out who killed whom in the following sentence:

<i>I van</i>	<i>ubi I</i>	<i>brat.</i>
Ivan	ubil	brat.
Ivan (Nom.) killed (past, sing., masc.) brother (Nom., sing., masc.)		
<i>Ivan killed his brother/The brother killed Ivan.</i>		

In the correct Russian sentence there is no ambiguity due to the lack of syncretism mentioned in the previous paragraph even if the word ‘brother’ comes first in the sentence.

<i>Brat-a</i>	<i>ubi I</i>	<i>I van.</i>
Brat-a	ubil	Ivan
Brother (Acc., sing., masc.) killed (past, sing., masc.) Ivan (Nom.)		
<i>Ivan killed his brother.</i>		

]

There are a number of exceptions and peculiarities in each of the declension types, one of which deserves a brief explanation¹⁵. For instance, nouns borrowed from other languages, ending in a consonant and referring to females, as well as words ending in vowels other than *o/e/a* (e.g. *madam* (madam) – ‘madam’, *taksi* (taksi) – ‘taxi’, *kenguru* (kenguru) – ‘kangaroo’) do not decline. Also borrowed words with endings in *o/e* and referring to a person (e.g. *attawe* (attashe) – ‘attache’) as well as nouns ending in *o/e* (e.g. *pal ; to* (pal'to) – ‘coat’, *kino* (kino) – ‘cinema’), do not decline (Cubberley, 2002, p. 118).

Pronouns

The Russian linguistic school traditionally distinguishes between nine groups of pronouns: personal, reflexive, possessive, demonstrative, definitive, interrogative, relative, negative and indefinite. All of them are declined according to different patterns.

Adjectives

Adjectives in Russian change according to gender, number and case depending on the noun they modify. The declension patterns are more or less simple and they have fewer exceptions than other nominal parts of speech. One of the interesting morphological characteristics of adjectives in Russian is that they can appear either in a short or long form. As Cubberley states in his book "in function, the long form is used in the regular attributive position, where the short is impossible; the short form is usable in the predicative position only, where the long is also possible" (Cubberley, 2002, p. 133).

Numerals

Besides having cardinal and ordinal numerals, Russian also possesses a small number of collective numerals. Ordinal numerals follow the adjectival declension while collectives and most cardinals follow the noun declension pattern. All elements of compound cardinal numerals are declined in parallel exactly as if they were used separately, while in compound ordinal numerals only the final element is declined. In fact only the final element is in its ordinal form while the rest of the compound ordinal numeral retains the form of the cardinal numeral in the Nominative case. An explanation of these rules can be found in any standard reference book on Russian grammar, e.g. Pulkina, I. & Zakhava-Nekrasova, E.,(1997). *Russian: A Practical Grammar with Exercises*.

CHAPTER 3

SECOND LANGUAGE ACQUISITION AND INCREMENTAL PROCEDURAL GRAMMAR

Second language acquisition (SLA) is an extremely complex process. In order to understand it one should look at different aspects of this multifaceted phenomenon.

The research on case-marking in Russian, previously discussed in Chapter I, relied primarily on the methods and approaches of error analysis. Although these scholars did not provide any detailed explanation of the nature of the specific mistakes, the following possible causes were mentioned: transfer from L1 English and interlanguage rules developed by learners who "have a mind of their own" (Thompson, 1980, p. 50).

Therefore, we shall first look at the idea of language transfer in SLA; then we shall explore error analysis and the interlanguage hypothesis; and finally we shall incorporate these ideas into the theory of Incremental Procedural Grammar developed by Kempen and Hoenkamp. As was mentioned in Chapter I, this theory was chosen because it gives a complete picture of language production. It shows how morphological, syntactical and phonological rules work together to produce a correct sentence with the proper case-marking. Its biggest advantage and relevance to the topic of this paper is that it also explains errors in the speech of both native and non-native speakers.

Transfer

There is no doubt that the native language of the learner influences the acquisition of a second language. Nevertheless, the idea of language transfer, which explores and

emphasizes the role of the first language in SLA, has long been a controversial one in linguistics. Although this was initially the dominant approach in research, it is now probably the most criticized. Early studies in SLA focused exclusively on language transfer and relied on the assumption that what is similar between the native language and the target language will be learned with ease (an example of a positive transfer, also known as facilitation). They also believe that what is different in both languages will cause problems for a learner who will tend to transfer features of his L1 into L2 (an example of a negative transfer, also known as interference). This approach became known as the Contrastive Analysis Hypothesis (CAH). It had much in common with the prevailing developmental psychological theory of Behaviorism. The acquisition of L2 was viewed by both theories as being the same as the acquisition of any other habit, e.g. the habit of washing one's hands before dinner.

As research in the SLA field developed, the weaknesses of CAH became obvious. Not all the predictions about the difficulty/simplicity of the acquisition of certain parts of L2 proved to be true. Learners from the same language background seemed to show many individual differences in the process of SLA, while other studies found that "some characteristics of ... simple structures are very similar across learners from a variety of backgrounds, even if the structures of their respective first languages are different from each other and different from the target language" (Lightbown & Spada, 1999, p. 36).

Yet, it is impossible to completely deny that transfer from the first language does play an important part in the acquisition of all the aspects of the second language (e.g. vocabulary, syntax, phonology, discourse, etc.) and does cause some of the problems in the speech production of learners. As far as case-marking is concerned, it is possible to

predict that certain morphological peculiarities (e.g. case-marking bound morphemes) of L1, in our case English, as well as the syntactic features of L1 (e.g. word order, constituent structures, etc.), and mental lexical representations of words and their meanings will interfere or facilitate the acquisition of L2 Russian.

Although some linguists, such as Weinreich (1953/1968), predicted the possibility of the transfer of bound morphemes and other morphological properties from L1 to L2, others argued against it (e.g. Krashen, 1978). Because English distinguishes only one morphologically marked case for nouns (possessive) and only three cases for pronoun (subjective, objective and possessive) it is very unlikely that any of those forms will be transferred to L2 Russian. More likely, because the Russian language possesses six primary cases, each with its own multiple case endings, mastering Russian inflections will be quite a challenge for an English-speaking learner. According to the hierarchy of difficulty, designed by Stockwell, Bowen and Martin (1965) to predict the hierarchy of learning, this example falls into the category of differentiation, which is considered the most difficult.

Error Analysis and Interlanguage

Error analysis, which could be briefly defined as a systematic investigation of second language learners' errors, grew out of the dissatisfaction with the contrastive analysis that, as we saw earlier, could not always accurately predict what would be learned with ease and what would be difficult for a learner to acquire. Pit Corder, in his work *The Significance of Learners' Errors* (1967), pointed out that not all errors originated from the transfer of the mother tongue and that learners' errors were worthy of description and study on their own. Although the works in error analysis that followed

reported different percentages of errors that could be attributed to L1, most of them "showed clearly that the majority of the errors made by second language learners do not come from their first language" (Mitchell & Myles, 1998, p. 30).

The logical conclusion from this finding is that the cause of the learners' mistakes should be internal. Thus, they should be based on the system that a learner develops in the process of L2 acquisition – his/her interlanguage. As Gass and Selinker point out "language came to be seen in terms of structured rules instead of habits. Learning was now seen, not as imitation, but as active rule formation" (Gass & Selinker, 2001, p. 73).

At the same time, the notion of transfer found its own place within the framework of error analysis. Thus, two main types of errors were distinguished: interlingual and intralingual. The interlingual errors were believed to be induced by the interference of the mother tongue, while the intralingual errors were due to the peculiarities of the target language and, therefore, were expected to be found in learners from different language backgrounds who studied the same L2.

Although error analysis gave linguists a better understanding of the process of second language acquisition, it had its weaknesses as well. One of the main criticisms of this approach is that researchers focused only on errors. Thus, they did not get the full, adequate picture of the interlanguage rules.¹⁶ The lack of particular errors might have been due to the avoidance of the particular structure by a learner and not due to the fact that the structure has been fully acquired.

Another difficulty with error analysis, besides finding the cause of a specific error, which is one of the main objectives of that approach, is classifying the error itself. In other words, "there can be a discrepancy between what a researcher determines to be

the targeted structure and what the learner was actually attempting to produce" (Gass & Selinker, 2001, p. 83).

Summing up, error analysis on its own fails to explain the nature and causes of errors in L2 due to the narrowness of its goals and subjects of its research. It is essential to view the production process in broader terms to explain how and why certain mistakes are made. It is necessary to look at other factors that contribute to language production.

Incremental Procedural Grammar and its Application to Second Language Acquisition

One of the main questions in psycholinguistics is "how human beings produce well-formed sentences in a timely fashion" (Nicol & Wilson, 1996, p. 314). The answer to that question is not as simple as it may seem, for we tend to communicate using incomplete sentences, pauses and wrong words even though in our minds we know exactly what we are trying to say.

Several researchers (e.g. Fromkin, 1971, Garrett, 1975, 1982, Bock, K. 1987) tried to develop a model of the production process that would explain the mistakes made by native speakers and nonnative speakers alike in their spontaneous, oral speech as well as in writing. Like the proponents of error analysis in SLA, they also believed that errors must represent fundamental features of the internal system. They argue for more than just a system of grammar rules known in SLA research as interlanguage, but rather for a universal system of language production.

One such model which represents recent ideas in linguistics, as well as in psycholinguistics, was developed by Kempen and Hoenkamp. They called it Incremental Procedural Grammar (IPG). This model is based on the idea of speech production

process which assumes to have three main parts: *the conceptualizer*, which is responsible for preparing the conceptual (semantic) content of the future utterance, and which carries no syntactic information; *the formulator*, which lexicalizes the concept; in other words, which retrieves the necessary word from the mental lexicon and starts building the syntactic tree based on the word order and constituent structure rules of a specific language; and, finally, *the articulator*, which within the IPG theory is responsible for not only applying the necessary phonological rules while producing the utterance but also for handling inflectional morphology.

The entire process of speech production within the framework of IPG is both conceptually and lexically driven. This assumes that the lexical items in the mental lexicon are listed with all the information needed for the building of the syntactic structures. This hypothesis is currently supported by recent linguistic theories such as the minimalist platform within UG. It is interesting to point out, though, that Kempen and Hoenkamp expanded Chomsky's original idea of *competence*. Competence, within the UG theory, is understood as a tacit knowledge about one's language, which is represented separately from the syntactic processor in the language user's cognitive system. Kempen and Hoenkamp believe that their procedural grammar mechanism incorporates both the "format of grammar rules and structure and functioning of the syntactic processor" (Kempen & Hoenkamp, 1987, p. 209).

The main claim of IPG is that each constituent of the sentence is processed incrementally, hence the term incremental in the name of the theory, and "not by a central constructing agency which overlooks the whole process but by a team of syntactic procedures (modules) which work, in parallel, on small parts of the sentence" (Kempen &

Hoenkamp, 1987, p. 201). The procedures are divided into the category procedures, which build syntactic constituents such as Noun Phrases (NP), Prepositional Phrases (PP), etc. and the functional procedures, which govern the relationships among the syntactic structures (e.g. subject, modifier, etc.). The following passage from the article by Kempen and Hoenkamp (1987) explains this process in more detail:

For example, procedure NP knows how to build noun phrases; procedure PP can deliver prepositional phrases; procedure SUBJECT is responsible for the shape of subject phrases in main and subordinate clauses. Like the procedures or routines of ordinary computer programs, syntactic procedures are permitted to call on each other as subprocedures ("subroutines"). Procedure S, for instance, may decide to delegate portions of its sentence formation job to SUBJECT and OBJECT as subprocedures. OBJECT need not necessarily wait for SUBJECT to finish: they can get started simultaneously and run in parallel (Kempen and Hoenkamp, 1987, p. 210).

In other words, the parts of the sentence are processed simultaneously and relatively independently from one another. This independence is limited because the units of the sentence, which are processed later, have to fit into the syntactic structure produced up to that point. This idea is directly connected with another main claim of IPG, namely, that every constituent of the sentence tries to be placed in the left-most position in the syntactic tree structure.

Kempen and Hoenkamp also incorporate the idea of a monitor into their theory. Within the framework of IPG, the monitor inspects the output of the three main levels of production: conceptualization, formulation and articulation. "If the monitor notices that the output of one of the modules is inappropriate or detects a violation of some prevailing constraint, any ongoing activity may be interrupted and backtracking to an earlier point in the production process may be forced" (Kempen & De Smedt, 1987, p.366).

The evidence for the non-existence of one central production agency is that speakers usually do not recast the complete sentence when they run into a problem while uttering it. Speakers tend to repair only the last part of the sentence in which the problem occurred. Hesitation does not only occur in the beginning of sentences, which might be expected if the utterances were produced by the centralized unit. It also occurs in other parts of the sentence while the speaker is attempting to produce it.

Kempen and Hoenkamp also suggested that "overt pronunciation of a sentence can be initiated before the speaker has completely worked out the meaning content he or she is going to express in that sentence" (Kempen & Hoenkamp, 1987, p. 201). This view is different from the traditional perspective on the sub-processes of speaking:

conceptualizing (presenting conceptual fragments), formulating (lexicalizing conceptual fragments and building syntactic structures), and articulating (saying the sentence), which order them consecutively in time. According to IPG, due to the parallel and simultaneous processing of parts of the sentence by various procedures within the system, while one fragment is being articulated, the work of the conceptualizer and formulator continues on other fragments of the sentence. The advantage of this model is that it explains the fluency of our speech production as well as the errors we make while trying to express our thoughts (e.g. false starts, lexical repair, hesitation, etc.).

As for linguistic theories which are similar to the one embodied in IPG, Kempen and Hoenkamp distinguish Lexical Functional Grammar (Kaplan & Bresnan). The main difference between the two lies in their approach to transformations. Kempen and Hoenkamp argue for the existence of transformational operations on syntactic trees while

"in Lexical Functional Grammar, surface trees are base generated and no transformational component is needed" (Kempen & Hoenkamp, 1982, p. 155).

Inflectional Morphology and IPG

Let us now look at how the main topic of this study, case marking and inflection, is treated within the theory of Incremental Procedural Grammar. Within the framework of IPG inflectional morphemes are grouped together with other function words (articles, prepositions, auxiliaries, etc.) under a category 'functor'. The process of inserting functors is called functorization and follows the Functorization Rules described below.

As mentioned earlier, this theory assumes that the lexeme retrieved from the mental lexicon will possess all the necessary information for building syntactic trees and this information will be processed by the syntactic procedures. Syntactic procedures will then apply the Functorizations Rules if the lexeme's information tells them so.

This may happen in two different ways, corresponding to the distinction between inflections and function words. The refinement either affects the synspec list of a procedure call by inserting a new function there, or it supplements the current set of subprocedure calls with an additional member. In the former case, the synspec function will influence the inflectional shape of the resulting constituent; in the latter, a separate function word will emerge (Kempen & Hoenkamp, 1987, p. 218).

Thus, the syntactic procedures handle the case-assigning within the utterance and ensure that the specific rules provided by some of the lexemes are executed. The final morpho-phonological stage will then assign the needed case ending based on the information computed by syntactic procedures.

The IPG approach regarding inflectional morphology is similar to Anderson's 'Extended Word-and-Paradigm' theory. The main idea of both theories is that paradigms

are constructed by a set of rules, and, therefore, inflection should be treated as a process rather than arrangement of morphemes. Both theories also view inflection as essentially belonging to syntax. Anderson, as Kempen and Hoenkamp, believes that "the inflection rule system has to apply after the syntax, in the PF [Phonological Form] component" (Spencer, 2000, p. 221). Both theories also propose that morpho-syntactic features of a lexeme are treated separately from the phonological spell out that they trigger.

Second Language Acquisition and IPG

Now let us consider the application of Incremental Procedural Grammar to the field of second language acquisition, specifically to language transfer, interlanguage rules and error analysis, and most important for this research, to case marking errors in L2 Russian.

According to IPG, there is no need to postulate that the system of grammar rules of any natural language, which would include interlanguage, is represented separately in our minds from the system of language production. The production system should incorporate them and any model of the production system should be able to explain the construction of any language and the interaction between its lexical, phonological, syntactic or morphological rules – the goal successfully achieved by IPG. As Jorden puts it "just like all other linguistic rules, interlanguage rules are an abstraction from the observable performance data. Since interlanguage output data are performance data, they can only be accounted for in terms of a model of language production" (Jordens, 1986, p.91). Later he proposes a new term – ‘interlanguage production system’ to better capture the idea of a L2 learner’s system. Having adapted this idea to this research, the author proposes the first hypothesis called the *Interlanguage Production System*

Hypothesis. According to this hypothesis one should expect to find individual differences in case-marking errors of L2 Russian students which are systematic and rely on specific rules created by the learner himself. This hypothesis is connected to another idea that comes from the application of IPG to the second language acquisition process. Since the fluency of speech is one of the goals of every speaker, according to IPG, one will benefit from all kinds of speech formulae and memorized chunks of words (Kempen and Hoenkamp, 1987, p. 255). This claim supports the well-known fact in SLA that L2 learners tend to use not only prefabricated phrases, but even whole sentences. In terms of case-marking, that means that we might expect the appearance of such formulae in L2 learner's speech. Since some of them will be in the form of phrases, we might expect that the learner will fail to always modify the case inflections within that prefabricated phrase to fit the structure of the sentence in which he uses it. Such errors, therefore, could be attributed to peculiarities of a learner's mental lexicon. Furthermore, it is possible to predict that this group of errors will include words which were memorized with an incorrect gender, phonological form or semantic meaning.

According to IPG our speech is conceptually and lexically driven. That would mean that a L2 learner is more likely to use only content words in the sentence and omit the functors (functional words and inflections) entirely since they usually lack any content information.¹⁷ Thus, the second hypothesis is that L2 Russian learners will tend to use the nominative form of the noun instead of other cases, hence the *Nominative Case Hypothesis*. The logic under this assumption is connected with the topic of the mental lexicon of a learner. The forms that learners of Russian are often presented with are not bare stems (except for the masculine nouns of Declension I and female nouns of

Declension III), they are a form of the word with a Nominative inflection (e.g. in dictionaries etc.). For L2 Russian learners the nominative form of a noun, therefore, is associated with the "uninflected", stem-like form of a noun which would be listed in the mental lexicon.

IPG predicts that the omission of inflections is more likely to happen: (a) when the fluency and speed of speech are the goal of the speaker; and (b) when he does not possess all the syntactically relevant information that a certain word has in L2. It is possible to predict that the learner in the latter case will transfer these features, including other features which possess syntactic information, (e.g. if a verb is transitive or intransitive) of a word, which he considers to be semantically similar in his L1 to L2. This leads us to the third hypothesis, *Transfer of L1 Production Rules*.

IPG, in its present form, does not tell us if the same syntactic procedures used for sentence formation in L1 would handle the sentence formation of L2. Two assumptions are possible: (1) L1 production procedures adapt to handle L2 rules; and (2) new procedures are developed in a learner's production system to handle L2 production rules. If the first assumption is true, then we can predict a great deal of errors due to transfer of L1 rules in all spheres of language production. This contradicts the findings of some SLA studies mentioned in Chapter I which found that the majority of learners' errors cannot be explained by L1 transfer. Therefore, the second idea of developing procedures for L2 seems to be more plausible. Based on this assumption, it is possible to predict that if certain L2 procedures have not been developed yet, the *formulator* will use the available L1 procedures. Therefore, the hypothesis on *Transfer of L1 Production Rules* suggests that especially during the first stages of second language acquisition, a learner is

more likely to use the word order rules and syntactic procedures from his native language, while trying to incorporate the new rules of L2 into his language production system. Thus, it is very likely that the transfer of not only L1 word order is possible but also of the rules which govern the formation of sentence constituents (e.g. NP, PP procedures, etc.) as well as procedures responsible for relationships between syntactic parts, some of which, by the way, assign the appropriate case to the parts of the structure (e.g. Subject, Object, etc.). Furthermore, according to IPG, each part of the utterance tries to take the left-most position in the sentence during the production process. Since word order in Russian is relatively free¹⁸, the learners of L2 Russian are more likely to place the part that they would like to emphasize in the beginning of the sentence¹⁹. This means that the strict SVO word order of English is not likely to be followed in L2 Russian. At the same time, we might predict some problems because of this. When the word order is relatively free, case-markers are basically the only means by which we recognize the syntactic relationships between the parts of the sentence. So, when the native English speaker starts to use free word order in the sentence, unless he has an excellent command of the Russian case system, he will have difficulty with assigning the right case-markers to the right constituents and even with identifying syntactic parts of the sentence (e.g. subject, object, indirect object, etc.).

Since the inflectional morphemes, according to IPG, are added during the last stage of language production, which is also responsible for the application of phonological rules, it is possible to predict that some mistakes in pronouncing the intended inflection are also possible and should be viewed as slips of the tongue rather than errors in case

marking. Thus, the author proposes '*Slips of the Tongue*' Hypothesis which predicts mistakes in case-marking due to phonological rules.

According to IPG, all parts of the sentence are treated incrementally and simultaneously. When the formulator lexicalizes a particular concept, it may retrieve several lexical items (consecutively or simultaneously) which are similar in the meaning but are associated with different syntactic structures. Based on this assumption it is possible to expect sentences in which both of these lexical items are articulated. The result would be a sentence, which will have a 'fused' syntactic structure, and which most likely will be ungrammatical. This hypothesis is called '*Fused*' Syntactic Structures Hypothesis.

CHAPTER 4

CASE STUDY: PRODUCTION RULES AND THEIR ROLE IN CASE MARKING

ERRORS IN L2 RUSSIAN

Qualitative Classification of Case-Marking Errors

As outlined in the first chapter of this study, the research by Thompson and Rubinstein, which constitute the major studies on case-marking errors in L2 Russian found in the literature, lacked qualitative analysis of the data to justify their goal of establishing the acquisition order of Russian cases. The authors provide only the case that should have been used. They do not provide any information about what case form was selected instead of the one that should have been used in obligatory contexts. There is also no mention of which syntactic environments certain case-marking mistakes tended to appear in. Without this information it is nearly impossible to make conclusions regarding the nature of those errors. And as Ross pointed out in her research, it is also impossible to see that "the mistakes students make ... are not random, and show a rather predictable interlanguage development" (Ross, 1999, p.4).

As one of the goals of this study is to explore the nature of the errors made by learners of Russian as a second language, it makes sense to present a qualitative classification of the errors made by the subject of this research. The samples of speech presented in Table 5 were recorded during different stages of the course of his study of Russian and are not meant to represent the development in case acquisition in any way.

Rather, they are provided as an example of the types of the errors made by an adult native English speaker of L2 Russian.

The table does not reflect all his errors/mistakes. It was impossible to classify some of them according to the criteria of the classification used. They will be analyzed separately in the following sub-chapters as they are important in the application of the IPG theory. The number of occurrences of an error/mistake in the marking of a particular case should not be interpreted as an indication that the case has not been acquired by a learner, or that the learner had more difficulties with it. This is because some cases in Russian are used more frequently than others. Besides, this is not a quantitative study. Instead, this study focuses on trying to offer a unique explanation for why the L2 Russian speaker makes and continues to make errors/mistakes that otherwise are difficult to explain using existing linguistic theories.

Several conclusions can be drawn from the data presented:

1. It is sometimes difficult to classify the errors made due to the syncretism of case marking inflections in Russian.
2. It is possible to predict a high rate of errors in case-marking in L2 Russian due to the multiple differences between the morphology and syntax of Russian and English. Yet, errors in L2 Russian do not happen too often. This conclusion is supported by the accuracy rate provided in the studies of the case morpheme accuracy order in L2 Russian by Thompson (1980) and Rubinstein (1995). Thus, the lowest accuracy rate recorded by Thompson was 55% for the Dative case. The accuracy rates for other cases fluctuated from 74% to 95%.

3. Some errors occurred only once and, therefore, could be interpreted as mistakes based on the definition provided earlier in this work.
4. Nominative prevails as the case most likely to be used instead of other cases required in the context. Thus, one of our hypothesis, *The Nominative Case Hypothesis*, has been confirmed.
5. Despite the claim made by Ross (1999) that the learners did not make mistakes in the usage of the Nominative case, the data collected in this study shows that a learner can make a mistake in assigning a wrong case instead of the Nominative.

Based on the theoretical predictions and conclusions made in the previous chapter and the data collected, the following types of case-marking errors can be identified: errors due to transfer of L1 production rules, errors specific to the learner's lexicon, errors due to the learner's interlanguage production rules, case-marking mistakes due to the incremental procedural nature of speech production, and errors/mistakes due to development of L2 production rules.

Errors due to Transfer of L1 Production Rules

A few errors in case marking found in the data could be explained by the transfer of production rules of L1 English predicted in our analysis of IPG application to second language learning. Two of them are connected with the use of the Dative case, which according to the authors of research on case-marking errors in Russian (Thompson, 1980, Rubinstein, 1995) is the hardest case to acquire.

The first type of sentence in L2 Russian where the Dative case was required and the learner failed to produce it is often called a Dative sentence or impersonal sentence.

Russian is one of the languages that has a special set of sentences in which a semantic subject (which usually has the semantic role of an experiencer) is in the Dative case while the grammatical subject is not present. For instance, in L1 Russian the following constructions are used: *emu pl oxo* (emu plokho)/he (Dat.) not well — ‘he is not well’; *emu vi dno wkol u* (emu vidno shkolu)/he (Dat.) sees the school (Acc.) — ‘he sees the school’. This type of construction is absolutely absent in English. English requires the subject of the sentence to be always present, with the Nominative case assigned to it automatically. English is also a language with a strict SVO word order and, therefore, the English speaker always assumes that the first noun or pronoun in the sentence is a subject. An example of this type of error from the data analyzed is provided below. This error was recorded twice in the same type of construction.

L2 Russian (the error is underlined)

Ona *tri* *goda*
 Ona tri goda.
She (Nom.) three (Nom.) years (Gen., pl.).

Standard Russian

Ej *tri* *goda*
 Ej tri goda.
She (Dat.) three (Nom.) years (Gen., pl.)

English Translation

She is three years old.

The second type of error in assigning the Dative case could be attributed to the lack of an overt differentiation between an indirect and direct object of a transitive verb in English. In Russian, the direct object should be marked with the Accusative inflection while the indirect object is always marked with the Dative case. The English learner tends to treat both types of objects in the same way, thus using the Accusative for both.

This error occurred two times in the data. Example:

L2 Russian (the error is underlined)

St[ardessa da\ t helovek-a ' urnal y, odeql o.
Stjuardessa daet chelovek-a zhurnaly, odejalo.
Stewardess (Nom.) gives man(Acc. or Gen.) journals (Acc.), blanket (Acc.)

Standard Russian

St[ardessa da\ t helovek-u ' urnal y, odeql o.
Stjuardessa daet chelovek-u zhurnaly, odejalo.
Stewardess (Nom) gives man (Dat.) journals (Acc.), blanket (Acc.)

English translation

The stewardess gives journals, a blanket to a man.

In this particular example the form used could be attributed either to the Genitive case or to the Accusative case because of the rule discussed in Chapter II concerning the declension of animate masculine nouns in the singular. The correctness of our explanation of the error is supported by the same conclusion that Ross makes in her study (Ross, 1999).

Another type of error is connected with the differences between syntactic structures employed in English and in Russian to demonstrate possession. Although Russian has a verb *i met*; (imet') which has the same meaning and syntactic structure as 'to have' in English, it is possible to express possession in Russian by using the following construction: the preposition *y* plus Genitive. This construction is used to denote a possessor and usually comes first in the sentence. The object of possession is in the Nominative case and usually is the final element in the sentence. The verb *est*; (est') which is somewhat equivalent to the English 'to be' is used in such sentences, but it is omitted when possession is understood or assumed, and the focus is on description (what kind, how many, etc.). An example of this type of error was found four times in the data:

L2 Russian (the error is underlined)

on krugl oe l i co
on krugloe litso

he (Nom.) round (Nom.) face (Nom.)

Standard Russian

U nego krugl oe l i t co
U nego krugloe litso
Next to he (Gen.) round (Nom.) face (Nom.)²⁰

English translation

He has a round face.

Another error predicted in our *Transfer of L2 Production Rules Hypothesis* could be attributed to the transfer of the syntactic structures associated with specific verbs. For instance, the verbs in the following example is transitive in English and takes direct object. The role of an object is associated for English learners with the Accusative case. In Russian, verbs with similar meanings do not necessarily follow that rule. In the following sentence the verbs take a prepositional phrase as their argument.

L2 Russian (the error is underlined)

Q I etal na sam-yj mal en; k-i j samol \ t.
Ja letal na sam-yj malen'k-ij samolet.
I(Nom.) flew on very smallest (Acc. or Nom.) plane (Acc. or Nom.)

Standard Russian

Q I etal na sam-om mal en; k-om samol \ t-e.
Ja letal na sam-om malen'k-om samolet-e.
I(Nom.) flew on very smallest (Prep.) plane (Prep..)

English translation

I flew the smallest plane.

It is important to note that the learner actually meant flying the plane, in other words he was a pilot.

Errors Specific to the Learner's Lexicon

One of the predictions in Chapter III was that certain case-marking errors could occur when a learner memorizes certain words incorrectly (e.g. with a wrong gender, or phonological form, etc.). We also predicted that we might expect case-marking errors in

memorized phrases, which a learner would fail to put into the right case. The data analyzed provided several examples of the above-mentioned predictions. Let's consider the following examples:

1)

L2 Russian (the error is underlined)

Q I [bl [nov-yx mest-ax.
 Ja ljublj nov-ykh mest-akh.
 I (Nom) love new (Prep) places (Prep.).

Standard Russian

Q I [bl [nov-ye mest-a.
 Ja ljublj nov-ye mest-a.
 I (Nom) love new (Acc.) places (Acc.).

English translation

I love new places.

2)

L2 Russian (the error is underlined)

Kogda my pose] aem nov-yx mest-ax, q vodi tel ;.
 Kogda my poseshchaem nov-ykh mest-akh ja voditel'.
 When we (Nom) visit new (Prep) places (Prep), I (Nom) driver (Nom).

Standard Russian

Kogda my pose] aem nov-ye mest-a, q vodi tel ;.
 Kogda my poseshchaem nov-ye mest-a ja voditel'
 When we (Nom) visit new (Acc.) places (Acc.), I (Nom) driver (Nom)

English translation

When we visit new places, I am the driver.

In these two examples it is important to analyze the phrase *nov-yx mest-ax* (nov-ykh mest-akh) as one single error, since the learner did not fail to implement the rules of agreement for the adjective 'new' and the noun 'countries' in case and number. Instead, he erred because he used the phrase 'new places' with a Prepositional case ending even though it had the syntactic role of an object. The Accusative case should have been used instead. Usually, English speakers do not have difficulty with identifying

objects in sentences. The data shows that the case most likely to be used instead of the Accusative is Nominative, since only nouns that belong to Declension II and animate nouns in Declension I have the Accusative forms different from the Nominative. Therefore, it is safe to assume that the above phrase ‘new places’ is a memorized chunk, which instead of being memorized in the most unmarked Nominative case, was somehow memorized in the prepositional.

Another interesting error is found in the following sentence.

L2 Russian (the error is underlined)

Q *pokupal* *aboni ment -u*
 Ja *pokupal* aboniment-u
 I(Nom) bought season pass (Acc.)

Standard Russian

Q *pokupal* *aboni ment*
 Ja *pokupal* aboniment.
 I(Nom) bought season pass (Acc.)

English translation

I used to buy a season pass.

‘Season pass’, which in Russian has a masculine gender, in this example could be interpreted as a Dative, and, therefore, incorrect form (the Accusative case is the correct one). But when the subject of this research was shown this error and asked to comment on it, he revealed that he thought the word ‘season pass’ in Russian was of feminine gender and, therefore, had the form *aboni ment -a* (aboniment-a) in the Nominative and *aboni ment -u* (aboniment-u) in Accusative. So, the case and case ending was assigned correctly, it's the word ‘seasonal pass’ that was memorized with the wrong gender.

Summing up, the nature of the errors described here seems to lie in the sphere of the lexicon if we accept the idea that the lexical items are stored with all the information necessary for using them in syntactic structure. Thus, the words and phrases mentioned

here were not memorized by the subject of our research with all the information that they have in the mental lexicon of a native Russian speaker.

Errors due to Interlanguage Production Rules

There are a couple of errors found in the data which could only be explained by the existence of an unique rule developed by the learner himself, or in other words, the rules of his interlanguage production system. It appears as though the subject of this research generalized and over-applied the rule that states that some borrowed words in Russian are not declined. As mentioned in Chapter II, although the majority of borrowed words do decline in Russian, nouns ending in certain phonemes do not decline. Thus, as stated by the learner himself, whenever the learner felt that the word had a foreign origin, he did not decline it in the sentences. Statistical analysis supports this claim. This error was found in nine sentences. It occurred with five different words of foreign origin that decline in Russian (*viza*, *avtobus*, *sport*, *aktsija*, *akademija*). Two of this words (*sport*, *avtobus*) were used incorrectly twice while *akademija* was used incorrectly three times. This analysis does not include errors involving geographical and proper names.

Examples:

1)

L2 Russian (the error is underlined)

Esli zagranica, konehno беру passport, viz-a, ode' du.
Esli zagrantsa konechno беру passport, viz-a odezhdu.
If abroad (Nom.), of course take passport (Acc.), vis-a (Nom), clothes (Acc)

Standard Russian

Esli zagranica, konehno беру passport, viz-u, ode' du.
Esli zagrantsa konechno беру passport, viz-u odezhdu.
If abroad (Nom.), of course take passport (Acc.), visa (Acc.), clothes (Acc)

English translation

When I go abroad, I, of course, take my passport, visa, clothes.

2)

L2 Russian (the error is underlined)

Predstavi tel i Rossi i skazal i ,hto Rossi q protiv akc-i q SWA
Predstaviteli Rossii skazali chto Rossija protiv akts-ija SSHA.
Representatives (Nom) Russia said that Russia (Nom) against action(Nom)

USA.

Standard Russian

Predstavi tel i Rossi i skazal i ,hto Rossi q protiv akc-ii SWA
Predstaviteli Rossii skazali chto Rossija protiv akts-ii SSHA.
Representatives (Nom) Russian said that Russia (Nom.) against action (Gen.)

USA.

English translation

Russian representatives said that Russia is against the USA actions.

3)

L2 Russian (the error is underlined)

~to vozl e ostanovki avtobus.
Eto vozle ostanovki avtobus.
This (Nom.) near stop (Gen.) bus (Nom.)

Standard Russian

~to vozl e ostanovki avtobus-a.
Eto vozle ostanovki avtobus-a.
This (Nom.) near stop (Gen.) bus (Gen..)

English Translation

This is near a bus stop.

The first example demonstrates the interlanguage rule very well. The only word that is not declined is the word *vi za* (viza) – ‘visa’. Two other words, which have the same syntactic function were declined by the learner properly in the Accusative case. One might question though, if the learner declined the word ‘passport’ since it is also a borrowed word, or if he simply got lucky since this noun has the same form for the Nominative and Accusative cases. In general, it is somewhat problematic to analyze this type of error because it is not clear what criteria the learner used in his interlanguage production rule to decide which word had a foreign origin and which did not. The data shows that the learner did decline at least seven words which were borrowed by Russian

from other languages. The limited amount of data collected makes it difficult to make a definite conclusion regarding the interlanguage production rule hypothesis.

Mistakes due to the Incremental Procedural Nature of Speech Production

Mistakes that fall into this category could be explained by the main claims of IPG theory, which are: the parts of sentences are processed incrementally and simultaneously; each of the processed fragments ‘hurries up’ to take the left-most position in the syntactic tree; and, that our language production is lexically and conceptually oriented.

The following example is a great illustration of how these theoretical claims could be applied to interpreting the nature of the case-marking mistakes.

L2 Russian (the mistake is underlined)

U menq byl na otpusk-e.
U menja byl na otpusk-e.
Next to I(Gen) was on vacation (Prep)

Standard Russian (first variant)

Q byl na otpusk-e.
Ja byl na otpusk-e.
I(Nom) was on vacation (Prep)

English translation

I was on vacation.

Standard Russian (second variant)

U menq byl otpusk.
U menja byl otpusk.
Next to I(Gen) was vacation (Prep)

English translation

I had a vacation.

This sentence seems to be a merger of two sentences with basically identical meanings: I had a vacation/I was on vacation. The semantic subject of the first sentence is always in the Genitive case in the Russian language. The word ‘vacation’, which would be treated as an object in English, is the grammatical subject in the Russian

sentence and is in the Nominative. It seems that when the formulator was presented with the concepts, it formulated both syntactic structures simultaneously and independently from each other. It seems as though the part with the Genitive form of the pronoun 'I' was processed earlier than the rest of the sentence. Since IPG suggests that the articulator does not wait for the rest of the sentence to be completed and produces the fragments on a first come first served basis, the constituent 'I (had)' was articulated first and took the position of the subject in the sentence which has also been formulated and submitted to the articulator to be produced.

Here is another example of the same process of malformation:

L2 Russian (the mistake is underlined)

<u>V Moskv-u</u>	neskol ; ko raz	byl .
V Moskv-u	neskol'ko raz	byl.
<u>To Moscow (Acc.)</u>	several	times (Gen) was.

Standard Russian

<u>V Moskv-e</u>	neskol ; ko raz	byl .
V Moskv-e	neskol'ko raz	byl.
<u>In Moscow (Prep.)</u>	several	times (Gen) was.

English translation

I've been to Moscow several times.

Apparently two structures were formulated *v Moskv-e neskol'ko raz byl* 'I've been to Moscow several times', and *v Moskvu neskol'ko raz ezdil* 'I went to Moscow several times'. The concept 'to Moscow (Acc.)' was processed and articulated first, probably because it was the information the learner wanted to emphasize at that moment. Then it was the term 'several times' that needed to be placed within the structure. This does not create any problem in Russian as far as the word order is concerned. Why the verb 'to be' was chosen became clear after the mistake was presented to the learner. He confessed that the verbs of motion in Russian were particularly difficult for him to

acquire and he tried to avoid their use as much as possible. Therefore, when presented with the choice, the formulator decided to process the verb that it was most familiar with in terms of syntactic and lexical properties. Besides, the mistake was not very obvious because the Russian preposition *в* has several meanings: it governs the accusative case when movement is involved and the prepositional when it is necessary to define location where something is happening or situated. Thus, we found support for our ‘*Fused*’ *Syntactic Structure Hypothesis* in the data collected.

Another prediction made in the previous chapter was that because the inflections are added at the last stage of language production and applied simultaneously with the phonological rules, it is possible to expect mispronunciation of some case morphemes. Thus, we postulated the ‘*Slip of the Tongue*’ *Hypothesis*. One sentence could be interpreted as an example of this claim.

L2 Russian (the mistake is underlined)

<u>Zarpl at-u</u>	nexorowi e.
Zarplat-u	nekhoroshie.
<u>Salary (Acc.sing)</u>	bad (Nom., pl.)

Standard Russian

<u>Zarpl at-y</u>	nexorowi e.
Zarplat-y	nekhoroshie.
<u>Salary (Nom., pl.)</u>	bad (Nom., pl.)

English translation

The salaries are bad.

Two things are going on here. One is that the noun and the adjective do not agree in number, which is a requirement in Russian. Second, while the modifying adjective is used in the Nominative case, the noun is in the Accusative. Two possible explanations for this mistake are possible:

- 1) The accusative ending was added instead of the required Nominal plural ending.

This is very unlikely because the noun is in the subject position according to both L1 and L2 rules. Besides, the adjective that modifies it is in the correct Nominative case.

- 2) The correct form of the noun required in this sentence (Nom., pl) was simply mispronounced. The plural form in the Nominative case would be *zarplat-y*. Russian [y] is a high central unrounded vowel, which is not found in English. It falls between [i] and [u] which are similar to English vowels. Therefore, this explanation is very plausible.

Errors/Mistakes due to Development of L2 Production Rules

If we assume that new procedures develop to accommodate the rules of L2, we also need to take into consideration that it will take time and practice to ‘train’ them to work properly and in a timely manner. That means that even when some procedures handling the L2 Russian case system have been developed and L2 Russian case-marking rules acquired, the speaker will continue to make mistakes in case-marking. IPG can provide the reason for this. Because our speech production is lexically and conceptually driven and because as speakers we care a great deal about the fluency of our speech, we choose the structures and words we are most familiar with. That is, we try to make it as easy for ourselves as possible to produce a timely utterance. With this goal in mind, we, as speakers, tend to sacrifice functional words and inflections, which do not bear much content meaning.

The data collected during this research supports this claim. It appears that whenever the learner was hesitant about which case morpheme should be used he used

the unmarked Nominative form of the word to sustain the desirable fluency of his speech.

The support for this claim comes from examples in which the same word was declined correctly in one sentence and in another sentence was not declined. For instance, in the first example the word 'water' is used in the Nominative instead of the correct case–

Accusative:

L2 Russian (the error is underlined)

<i>Moq sem; q</i>	<i>I [bi t <u>vod-a</u></i>
Moja sem'ja	ljubit vod-a
My family (Nom.)	likes <u>water (Nom.)</u>

Standard Russian

<i>Moq sem; q</i>	<i>I [bi t <u>vod-u</u></i>
Moja sem'ja	ljubit vod-u
My family (Nom.)	likes <u>water (Acc.)</u>

English translation

My family likes water.

In the following sentence the word 'water' was correctly assigned the Accusative case and declined with the proper case ending.

L2 Russian identical to standard Russian

<i>Doh;</i>	<i>I [bi t xol odnu[<u>vod-u</u></i>
Doch'	ljubit kholodnuju vod-u
Daughter (Nom.)	likes cold (Acc.) <u>water (Acc.)</u>

English translation

My daughter likes cold water.

The analysis of the data shows that the use of the Nominative case is especially evident in nouns which were used by the learner in prepositional phrases. This is true also for the nouns which the learner declined properly in other syntactic structures. The most likely reason for this is that the same preposition in Russian can govern different cases. For instance, the preposition *po* (po) governs the Prepositional, Dative and Accusative cases; the earlier mentioned preposition *v* governs the Nominative,

Accusative and Prepositional cases. Besides, some meanings of English prepositions do not always correspond to the meanings of equivalent Russian prepositions. For example, the English preposition 'in' depending on the context could be translated into Russian as *v (v) +Prepositional, v (v)+ Accusative, na (na), za (za), herez (cherez), po (po), pri (pri)*. When a learner is faced with all these rules, it is not surprising that he would fail to decline the noun following the preposition properly.

In one of his comments the learner also mentioned that when he knew that a case other than the Nominative should be used with a particular word, he would use the first non-Nominative form of that word that would come to mind. It is possible to assume that such problems should happen less with practice and development of correct L2 production rules.

CHAPTER 5

CONCLUSIONS

The aim of this research has been to show that the approaches used before in studying case-marking errors in L2 Russian were not adequate. They lacked qualitative information necessary to explain the nature of case-marking deviations. They also treated case-marking as a strictly morphological phenomenon. Therefore, this study has focused on trying to offer a unique theoretical explanation for why L2 Russian speakers persist in making certain errors. This aim has been achieved by providing qualitative analysis of spontaneous oral speech of a L2 Russian learner.

The research conducted, and the examples provided, shows that the errors of case-marking in L2 Russian are better explained by applying the theory of Incremental Procedural Grammar. The advantage of this approach is that it gives a wider perspective on how different cognitive and linguistic rules (syntactic, morphological, phonological, etc.) work together within a language production system on assigning and marking cases. It also provides a reasonable theoretical account for errors/mistakes during this process by postulating that speech production is lexically and conceptually driven and is carried out incrementally by a set of specialized rules called procedures. Another important claim of this theory, that the articulation of a sentence might start before the conceptual or syntactical structures have been fully developed, helps to explain false starts, errors in identifying semantic roles within a sentence and, therefore, errors in assigning the correct

case. This is especially true for Russian and other languages which allow a relatively free word order and rely on morphological case in signaling syntactic relationships.

The study supports the idea that during the process of L2 Russian case system acquisition, a new set of language generating procedures is being developed by a learner within his/her language production system to handle the new rules of L2. The analysis of the data has shown that during the process of the development of L2 procedures, the learner tended to transfer some of the production rules of his native language. The errors caused by the transfer were very limited but tended to be very persistent. These errors occurred not just in the first month but also in the eleventh month of study. At the same time, the study has shown that the learner might have developed a unique rule within his interlanguage production system to handle case-marking of a limited number of nouns in Russian. Further statistical analysis of errors is necessary to confirm the interlanguage production rule hypothesis described in the study.

The study has shown how misrepresentation of words and phrases of a second language in the learner's mental lexicon caused case-marking errors.

The analysis of the data has also shown that because of the incremental procedural nature of the language production system the learner produced a number of case-marking mistakes which should not be confused with errors. They are particularly evident in the examples of the slips of the tongue and 'fused' sentences.

Furthermore, the study claims that mistakes in case-marking in L2 Russian happen not because of the lack of knowledge about a particular case, but because it takes time for the newly developed L2 Russian production rules to start working as fast and as productively as the rules of the native language of the learner. These mistakes occur

because the speaker often has to sacrifice the accuracy of his sentence to the fluency of discourse.²¹ In order to sustain the fluency, the speaker often drops inflections and other functional words, leaving only content words in the sentence. The latter also explains why L2 Russian learners tend to use the Nominative case form of a noun where another case form is required. For L2 Russian learners this form apparently represents an uninflected form of a noun. Further statistical analysis of such mistakes is necessary to show what percentage they constitute in comparison to other errors in case-marking.

Furthermore, this study suggests that case-marking errors/mistakes occur because the L2 rules are learnt but not acquired by the learner. The acquisition of case-marking is retarded because of the necessity to sustain the fluency of speech, the misrepresentation in the mental lexicon, the availability of L1 syntactic constructions which the learner uses automatically and the incomplete development of the L2 articulation.

Due to the nature of this research (a case study of the production data of one L2 Russian learner) it is hard to make generalizations. More qualitative research with a greater number of participants is needed to test some of the predictions and conclusions made in the current study regarding the application of IPG to the topic of case-marking errors in L2 Russian. However, this study is the first step towards developing a more comprehensive model of second language acquisition and effectively offers a new explanation of why one L2 Russian speaker made and continued to make mistakes despite having learned the basic rules of Russian grammar.

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Table 1

Transliteration from Cyrillic

a	a	i	i	s	s	=	'
b	b	j	j	t	t	y	y
v	v	k	k	u	u	;	'
g	g	l	l	f	f	`	e
d	d	m	m	x	kh	[ju
e	e	n	n	c	ts	q	ja
\	e	o	o	h	ch		
'	zh	p	p	w	sh		
z	z	r	r]	shch		

Table 2

Declension I ('hard' stems)²²

	Masculine	Neuter
<u>Singular</u>		
Nominative	Ø	o
Accusative	In. Ø; An. a	o
Genitive	a	a
Locative	e	e
Dative	u	u
Instrumental	om	om
<u>Plural</u>		
Nominative	i	a
Accusative	In. i; An. ov	a
Genitive	ov	Ø
Locative	ax	ax
Dative	am	am
Instrumental	am'í	am'í

SOURCE: Cubberley, P. (2002). *Russian: A Linguistic Introduction*. Cambridge, UK: Cambridge University Press.(p. 112)

Table 3

Declension II ('hard' stems)

Feminine (and Masculine and Common personal)	
<u>Singular</u>	
Nominative	a
Accusative	u
Genitive	i
Locative	e
Dative	e
Instrumental	oj
<u>Plural</u>	
Nominative	i
Accusative	In. i; An. Ø
Genitive	Ø
Locative	ax
Dative	am
Instrumental	ami

SOURCE: Cubberley, P. (2002). *Russian: A Linguistic Introduction*. Cambridge, UK: Cambridge University Press.(p. 113)

Table 4

Declension III

	Feminine	Neuter
<u>Singular</u>		
Nominative	Ø	a
Accusative	Ø	a
Genitive	i	on'-i
Locative	i	on'-i
Dative	i	on'-i
Instrumental	ju	on'-om
<u>Plural</u>		
Nominative	i	on-a
Accusative	i	on-a
Genitive	ej	on-Ø
Locative	ax	on-ax
Dative	am	on-am
Instrumental	ami	on-ami

SOURCE: Cubberley, P. (2002). *Russian: A Linguistic Introduction*. Cambridge, UK: Cambridge University Press.(p. 114)

Table 5

Qualitative Classification of Case-marking Errors in L2 Russian

Case Needed	Case Used	Times Error Found	Examples (L2 Russian sentence with an error underlined, transliteration, word by word translation into English, standard Russian sentence, transliteration, English translation)
Nom.	Acc.	1	<u>Zarpl a-tu</u> nexorowi e Zarpla -tu nekhoroshie. <u>Salary (Acc)</u> not good (Nom.) Zarpl a-ty nexorowi e Zarpla -ty nekhoroshie. (<i>The salaries are not good</i>)
	Gen.	1	<u>U menq</u> byl na otpuske U menja byl na otpuske. <u>Next to I(Gen)</u> was on vacation(Prep.) Q byl na otpuske. Ja byl na otpuske. (<i>I was on vacation</i>)
Acc.	Nom.	6	Moq sem; q I [bi t <u>vod-a</u> Moja sem'ja ljubit vod-a My family (Nom) loves <u>water (Nom)</u> Moq sem; q I [bi t vod-u Moja sem'ja ljubit vod-u (<i>My family loves water</i>)
	Gen.	1	~mbargo- otvet na <u>`to-go vopros-a</u> Embargo- otvet na eto-go vopros-a. Embargo (Nom) – answer(Nom) to <u>this(Gen) question (Gen)</u> ~mbargo- otvet na `tot vopros Embargo- otvet na etot vopros. (<i>Embargo is the answer to this question</i>)
	Prep.	2 (the same phrase)	Q I [bl [<u>nov-yx mest-ax</u> Ja ljublju nov-ykh mest-akh. I (Nom) love <u>new(Prep) places (Prep)</u> Q I [bl [nov-ye mest-a Ja ljublju nov-ye mest-a. (<i>I love new places</i>)

Gen.	Nom.	16	<p>Bez <u>opl at-a</u> Bez opl at-a Without <u>payment(Nom)</u> Bez opl at-y Bez opl at-y <i>(Without a payment)</i></p> <p><u>On</u> krugl oe l i tco On krugloe litso. <u>He (Nom)</u> round (Nom) face (Nom) U nego krugl oe l i tco U nego krugloe litso. <i>(He has a round face)</i></p>
	Acc. or Nom.	4	<p>Net <u>vyezd</u> Net vyezd. No <u>exit (Acc. or Nom.)</u> Net vyezd-a Net vyezd-a <i>(No exit)</i></p> <p>Protiv <u>otvet</u> Protiv otvet. Against <u>answer (Acc. or Nom)</u> Protiv otvet-a Protiv otvet-a. <i>(Against the answer)</i></p>
Dat.	Nom.	2(the same type of structure)	<p><u>Ona</u> tri goda Ona tri goda. <u>She (Nom)</u> three (Nom) years (Gen) Ej tri goda Ej tri goda. <i>(She is three years old)</i></p>
	Acc. or Gen.	2	<p>St[ardessa da\ t <u>hel ovek-a</u> ' urnal y odeql o. Stjuardessa daet chelovek-a zhurnaly, odejalo. Stewardess (Nom) gives <u>man(Acc. or Gen.)</u> journals (Acc.), blanket (Acc.) St[ardessa da\ t hel ovek-u ' urnal y odeql o Stjuardessa daet chelovek-u zhurnaly, odejalo. <i>(The stewardess gives journals, a blanket to a man).</i></p>
Prep.	Nom.	3	<p>Sol daty v <u>Ameri k-a</u> pol uhi l i xorowu[zarpl atu Soldaty v Amerik-a poluchili khoroshuju zarplatu. Soldiers(Nom.) in <u>America (Nom)</u> received good(Acc.) salary (Acc.) Sol daty v Ameri k-e pol uhi l i xorowu[zarpl atu Soldaty v Amerik-e poluchili khoroshuju zarplatu. <i>(Soldiers in America received good salary)</i></p>

	Acc. or Nom.	2	<p>V armi i mo' no byvat; <u>nov-ye</u> stran-y</p> <p>V armii možno byvat' nov-ye stran-y.</p> <p>In army(Prep.) may be <u>new(Acc. or Nom.) countries</u> (Acc. or Nom.)</p> <p>V armi i mo' no byvat; v nov-yx stran-ax)</p> <p>V armii možno byvat' v nov-ykh stran-akh.</p> <p><i>(It is possible to visit new countries in the army)</i></p>
	Acc.	1	<p>V <u>Moskv-u</u> neskol'ko raz byl</p> <p>V Moskv-u neskol'ko raz byl.</p> <p>To Moscow(Acc.) several times(Gen) was</p> <p>V Moskv-e neskol'ko raz byl</p> <p>V Moskv-e neskol'ko raz byl.</p> <p><i>(I've been to Moscow several times)</i></p>
Instr.	Nom.	1	<p>Duma[, hto `to ne budet <u>bol ; w-aq probl em-a</u></p> <p>Dumaju, chto eto ne budet bol'sh-aja problem-a.</p> <p>Think that this (Nom) not be big(Nom) problem (Nom.)</p> <p>Duma[, hto `to ne budet bol ; w-oj probl em-oj</p> <p>Dumaju, chto eto ne budet bol'sh-oj problem-oj.</p> <p><i>(I think that it won't be a big problem)</i></p>
	Gen.	1	<p>On vladeet <u>angl i j sk-ogo qzyk-a</u></p> <p>On vladeet anglijsk-ogo jazyk-a</p> <p>He(Nom.) possesses English (Gen) language (Gen)</p> <p>On vladeet angl i j sk-i m qzyk-om)</p> <p>On vladeet anglijsk-im jazyk-om.</p> <p><i>(He mastered the English Language)</i></p>

¹ The Bilingual Syntax Measure was the primary method of investigation in these studies. For a description one might consult Gass, M. S., & Selinker, L., 2001, p. 105.

² Here and after the following abbreviations will be used for cases: Nom. – Nominative, Acc. – Accusative, Dat. – Dative, Gen. – Genitive, Instr. – Instrumental, Prep. – Prepositional

³ “L1” in this study stands for the first language, (mother tongue, native language) of the learner, while “L2” refers to any language or languages acquired after the first language.

⁴ The term “interlanguage” in this study refers to the learner’s systematic, evolving knowledge of the second language

⁵ For a critique of the morpheme studies see Gass, M. S., & Selinker, L., 2001, p 113-117; Rosansky 1976, p. 320-330

⁶ The terms “production”, “performance” and “output” are used as synonyms throughout this study.

⁷ The traditional definition of the term “error” as a systematic incorrect form produced by learners in their L2 output is accepted in this research. The difference between errors and mistakes lies in the systematic character of the former.

⁸ All the studies that the author of this research found in the literature had native English speakers as subjects of their investigation

⁹ Table 1 presents the transliteration system used in this paper.

¹⁰ For this discussion see Comrie in Brecht, R. & Levine, J. (Eds.), (1985). *Case in Slavic*. Columbus, Ohio: Slavica; or Chvany, C. V. (1982). Hierarchies in the Russian Case System: for NAGPDI, against NGDAIP. *Russian Language Journal* 36, 125, 133-147.

¹¹ In addition two nouns preserve the historical vocative case form.

¹² Second Genitive.

¹³ Second Locative

¹⁴ The following abbreviations will be used throughout the text: masc. – masculine, fem. – feminine, neutr. – neuter, as well as sing. – singular, pl. – plural, in. – inanimate, an – animate.

¹⁵ A detailed description of exceptions can be found in Cubberley, 2002, pp. 115-121 and Offord, D., 1997, pp. 242-258.

¹⁶ An article by Schachter (1974) entitled “An Error in Error Analysis” presents some of the criticisms of the error analysis approach.

¹⁷ This fact is well-described in the studies of agrammatism, e.g. Kolk, Van Grunsven, & Keyser (1985), Kean (1979).

¹⁸ For a detailed discussion of Russian word order see King, T. (1995) *Configuring Topic and Focus in Russian*; Bivon, R. (1971), *Element Order*.

¹⁹ This rule also applies to syntactic structures of the utterances produced by English speakers in their native language. Hence, for example, the choice between the passive or active constructions.

²⁰ The translation of the preposition y (u) is taken from Cubberley, 2002, p. 186.

²¹ In order to decide what is a mistake and what is an error one should look at for the instances of correct usage of a particular case. If they do exist then it is more likely to be a mistake rather than a systematic error.

²² The soft stem endings are basically the same with a few exceptions and could be predicted based on the phonological rules of Russian. Therefore, only hard stem endings are presented