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Tense or Aspect? Effects of L1 Prominence in L2 Acquisition

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EFFECTS OF L1 TENSE/ASPECT PROMINENCE IN L2 ACQUISITION

by

Aida Martinovic-Zic

A Dissertation Submitted in
Partial Fulfillment of the
Requirements for the Degree of

Doctor of Philosophy

in English

at

The University of Wisconsin-Milwaukee

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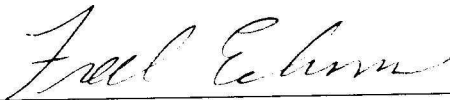
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Major Professor

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ABSTRACT

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by

Aida Martinovic-Zic

The University of Wisconsin-Milwaukee, 2009
Under the Supervision of Dr. Fred Eckman

This study introduces a typological model of the *conceptual language-specific approach* to the L2 research on the acquisition of tense-aspect. The model is based on the typological notion of prominence, classifying languages into tense-prominent and aspect-prominent (Bhat 1999) and the L1 research proposal that language-specific lexicalization patterns have a role in shaping form-function mappings in child language (Berman and Slobin 1994, Slobin 1991, 1996a, 1996b). The study represents an attempt to investigate language-specific L1 effects (Odlin 2005) in the L2 acquisition of complex form-function grammatical domains, such as tense-aspect. The most influential L2 tense-aspect research has focused on the acquisition of verb morphology (form-to-function analysis) and the acquisition of temporality (function-to-form-analysis), respectively (Bardovi-Harlig 2000). The research investigated the Aspect Hypothesis (Andersen 1991, Andersen and Shirai 1994, Bardovi-Harlig 1992), the Discourse Hypothesis (Bardovi-Harlig 1995), and the Prototype Hypothesis (Shirai 1991, Li and Shirai 2000). Based on Vendler (1967), these studies explore the L2 acquisition of inherent verb aspect in comparison to grammatical aspect and tense. L2 research on specific L1/L2 contexts has not been of major interest to the L2 scholars. Turning to the specific L1/L2 features of *tense-*

prominence and *aspect-prominence*, this bi-directional study tests the Grammatical Domain Hypothesis (GDH) with two groups of intermediate-high-intermediate instructed L2 learners: L1 English (tense-prominent)/L2 Russian (n=21) and L1 Russian (aspect-prominent)/L2 English (n=11). The L2 data were elicited on two written tasks: a cloze task and a Frog Story task, with the native speaker responses as the baseline for both tasks. The results are categorized as follows: target/non-target use of tense-aspect (task 1); non-target morphological forms, tense-aspect substitutions, lexical aspectual means, and idiosyncratic clausal strategies (task 2). The findings reveal L2 tendencies supporting the GDH: L1 English/L2 Russian learners show ‘tense-bias’ while limiting the aspectual choices; conversely, L1 Russian/L2 English learners show ‘aspect-bias’ while inconsistently mixing L2 tenses. Potential methodological and interpretation problems are presented in the conclusion, followed by the pedagogical implications the study may have on the instructional methods in teaching tense-aspect to L2 learners from typologically mismatching L1’s.



Major Professor



Date

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To Zoran, Borjan, Alice, MOM, Edith,

and

in the loving memory of Ilija Martinovic

and

the inerasable memory of Michael Noonan, Teacher and Friend

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List of Coding Abbreviations:

1	first person
2	second person
3	third person
ACC	accusative
ART	article
ATEL	atelic
AUX	auxiliary
COMPL	completive
DAT	dative
DEF	definite
DO	direct object
DUR	durative
FEM	feminine
FUT	future
GEN	genitive
HAB	habitual
IMP	imperative
IMPF	imperfective
INCH	inchoative (inceptive)
INF	infinitive
IO	indirect object
INSTR	instrumental
ITER	iterative
L2E	L2 English
L2R	L2 Russian
LOC	locative
MASC	masculine
NEUT	neuter
NEG	negative
NOM	nominative
P	person
PART	particle
PASS	passive
PAST	past
PERF	perfective
PF	perfect
PL	plural
PRES	present
PRO	pronoun
PROG	progressive
REFLEX	reflexive
SG	singular
STAT	stative

TEL telic
V-ing; V-ed/V-en non-finite (present participle or gerund; past participle)

Chapter 1

Introduction

1.1. Preliminaries

Much of the research on second language (L2) acquisition of tense-aspect has focused on the emergence of morphological forms and the meanings expressed by them. In most studies, the primary research question is whether lexical, i. e. inherent aspect is acquired before tense and prior to grammatical aspect (reviewed in detail in Bardovi-Harlig 2000). A number of meaning-oriented studies, however, have addressed the stages of acquisition from the conceptual or functional perspective (von Steutterheim 1991, Dietrich et al. 1995). In other words, while the form-oriented studies have analyzed L2 tense-aspect data across verb lexical categories (Vendler 1967), i.e. as form-to-meaning analysis, the concept-based studies have analyzed L2 tense-aspect within the semantic category of temporality, as the meaning-to-form line of analysis (Bardovi-Harlig 2000).

The dominant research paradigm in form-oriented studies, which focus on verbal morphology, has been the Lexical Aspect Hypothesis (Andersen 1991), which claims that both L1 and L2 learners will initially be influenced by the inherent verb aspect in the acquisition of tense-aspect markers on verbs (Andersen and Shirai 1994:133). The exact predictions of the Aspect Hypothesis will be further discussed later in the chapter. Recent studies have re-examined the Lexical Aspect Hypothesis (Andersen and Shirai 1996; Shirai 2003), and some of these studies have attempted to relate the hypothesis to the role of L1 in acquiring tense-aspect (Collins 2002, Salaberry and Shirai 2002). In addition, a number of relevant studies have analyzed

the relationship between typology and the acquisition of tense-aspect (Shirai 1998, Li and Shirai 2000, see Giacalone-Ramat 2003).

In general, L2 acquisition of tense-aspect has been largely researched as an acquisition phenomenon across first language (L1) backgrounds, primarily focusing on inherent aspect and the development of morpho-syntactic forms in obligatory contexts for grammatical aspect. However, with the exception of studies exploring in part the role of the differences between the L1 and L2 typology (Shirai and Nishi 2003, Giacalone-Ramat 2003 for other domains of grammar) and the L1 influence in the L2 acquisition of tense-aspect (Collins 2002), language-specific effects have not been sufficiently addressed by the second language acquisition (SLA) researchers working in this area.

In fact, Shirai and Nishi (2003) point out that "...crosslinguistic variation also has important implications in the acquisition of tense/aspect morphology among second language learners, which so far has been completely neglected in this area (267).

Taking the position that tense-aspect is a complex grammatical-conceptual domain, language-specific as much as universal, in this study I examine whether and how language-specific features can affect the acquisition of tense-aspect by second language learners. As mentioned above, numerous L2 studies of tense-aspect have focused mainly on inherent/lexical aspect, i. e. semantic properties of the verb, and the development of form-meaning relationships as evidenced by the emergence of tense-aspect morphology; only a small number of published studies have isolated L1 influence and language-specific typology as a relevant variable in L2 tense-aspect acquisition (for instance, Flashner 1989 for L1 Russian/L2 English, Giacalone-Ramat

and Banfi 1990 for L1 Chinese/L2 Italian, Quick 1997 for three L1 groups, Chinese, Japanese, and Spanish, /L2 English, Collins 2002 for L1 French/L2 English, Rocca 2002, a bidirectional child L2 study for L1 Italian/L2 English and L1 English/L2 Italian).

Even though some L2 studies, either longitudinal or cross-sectional, draw on L2 learners from specific individual L1's, the research questions in these studies center on the emergence of aspect and whether the morphological verb marking in early and later stages of L2 acquisition indicates aspect or tense. L1 effects typically have not been separately discussed or researched in greater detail.

Rather than focusing on lexical aspect, this study's research questions are directed at grammatical variation in tense-aspect marking beyond verb semantics. The study explores whether and how language-specific mismatches in tense-aspect systems, specifically between the first language (L1) and the second language (L2), can affect the L2 tense-aspect acquisition in instructed adult L2 learners. Does a mismatch between the corresponding features in the grammatical categorization of a semantic domain such as tense-aspect specifically affect the L2 acquisition of the domain? For instance, are L2 learners guided by the L1 grammatical markings and salience of tense over aspect, if the language prominently organizes its tense-aspect system in one way or the other (Bhat 1999). If that is the case, how do such specific, systematic differences between the L1 and the L2 affect the L2 acquisition of tense-aspect?

This question will be addressed bi-directionally for English and Russian as examples of languages with identifiable specific differences in tense-aspect systems.

The data were collected and analyzed in a cross-sectional study of instructed intermediate level L2 learners in the following way: (1) with L1 English learners of L2 Russian, and (2) with L1 Russian learners of L2 English.

1.2. Organization of the Study

The study is organized as follows: (Chapter 1) Introduction with the brief rationale for research questions and the proposed hypotheses; (Chapter 2) Overview of the SLA literature on tense-aspect, the theoretical models of tense or aspect-prominence (Bhat 1999) and “thinking for speaking” (Slobin 1991, 1996); (Chapter 3) The relevant typological features of English and Russian tense-aspect systems; (Chapter 4) Methodology; (Chapter 5) Results and Discussion of the Results; (Chapter 6) Conclusions and Potential Implications of the Study for Second Language Pedagogy.

In more detail, the chapters have the following content. In Chapter 1, I review the accepted linguistic definitions of tense-aspect and examine the major theoretical outcomes in the study of tense-aspect in L2 acquisition. The introduction ends with the rationale for this study of L2 acquisition of tense-aspect and explains the research questions that the study will pursue.

The introduction is followed by Chapter 2, which provides a detailed overview of research on the L2 acquisition of tense-aspect, focusing on the most influential proposals. In this chapter, I also argue for the position that language-specific form-function mappings serve as the lexical and grammatical ‘filter’ in the L2 learning of tense-aspect. In Chapter 3, I start by discussing the relevant tense-

aspect features of English and Russian, the two typologically different L1's and L2's in this study of the L2 tense-aspect acquisition. Next, taking typological specificity of tense-prominent and aspect-prominent languages as the point of departure, I further review the theoretical work underlying my research effort to study L2 acquisition of tense-aspect by focusing on such specificity (Bhat 1999). Related to this theoretical proposal, I present a detailed rationale for *a language-specific approach* to the study of L2 acquisition of tense-aspect and for the theoretical role of tense-prominence and aspect-prominence.

Chapter 4 presents the methodology I used in this cross-sectional study. The chapter is divided into subsections introducing the materials, the subjects, the tasks, and the coding of the data. The subjects are adult college-instructed low-intermediate and intermediate learners of L2 English (L1 Russian) and L2 Russian (L1 English). The data were elicited by using two comparable, modified written tasks in both English and Russian: a cloze passage, where the verb forms were filled in by the subjects, and a picture-book narrative Frog Story (Mayer 1969), previously used as the elicitation task in Berman and Slobin (1994). The coding method followed Berman and Slobin (1994), where a clause was used as a unit of analysis. This allowed for the evaluation of the results to go beyond verb type/token analysis and examine the effects of the clausal elements other than the predicate; thus, the analysis was extended to the clausal and inter-clausal levels, suggesting predicate/clausal connectivity and building toward discourse level (Givón 1984).

Chapter 5 reviews the results by L1/L2 group, by each individual task, and by

both tasks combined. I discuss the results relative to the research questions and the proposed hypotheses. In the final chapter, Chapter 6, I summarize the study, its conclusions and the implications it may have for further research on the L2 acquisition of tense-aspect. I end the concluding chapter by discussing the pedagogical implications of the language-specific approach in the L2 teaching of tense-prominent and aspect-prominent languages.

1.3. L2 Tense-aspect research and the language-specific approach

As mentioned in the preliminaries, tense-aspect has been primarily studied in the context of universal semantic properties expressed through linguistic forms, primarily verbs. Similarly, in L2 tense-aspect acquisition, research on the acquisition of lexical aspect regardless of the L2 learners' L1, or the language-specific L1-L2 tense-aspect contrasts, has dominated the field.

As a fairly recent research endeavor, starting in the mid 1980s (Bardovi-Harlig 2000), L2 acquisition of tense-aspect relations (L2 English, Spanish, French, German, Dutch, Russian) primarily investigates research questions related to: (a) universally shared order of acquisition of lexical/inherent aspect by learners across L2's; (b) differential tense-aspect marking in narrative discourse, where, regardless of the aspectual class, verbs in the foreground typically get morphologically marked for the past, while the verbs in the background remain predominantly in base forms, i.e. morphologically unmarked. The research hypotheses underlying this body of research have come to be known as the Primacy of Aspect (the Aspect Hypothesis) and the Discourse Hypothesis, respectively (Andersen 1991, 1994, Andersen and Shirai

1996), Bardovi-Harlig 1994a, 1994b, 1995, 1998, Bardovi-Harlig and Reynolds 1995, Flashner 1989, Robison 1990, 1995). The research agenda in these studies and, generally, linguistic studies on aspect, shows that "...the scope of the analysis has extended from the domain of (lexical) word morphology to the sentential domain and the domain of discourse" (Verkuyl et al. 2005:1).

While these L2 studies analyze the universal semantic notions and the tense-aspect devices used across languages, they do not take into account the ways in which specific L1 form-function mappings may influence L2 learners. Language-specific nuances have not been sufficiently isolated or analyzed in L2 research.

As already mentioned, a small number of recent L1 studies on semantic domains and the L2 research on L1 effects in L2 tense-aspect acquisition have looked more closely at specific languages. In order to gain a more complete understanding of the specific language mappings that may make a difference for an L2 learner, the descriptions of specific tense-aspect differences need to be an alternative starting point in the L2 tense-aspect research.

Arguing for broadening the study of aspectual encoding across languages and for contrastive acquisition studies, for instance, Verkuyl, De Swart, and Van Hout (2005) state, "Crosslinguistic variation raises the fundamental question how much of aspectuality is universal, if anything, and how much of it is language-specific" (2005:9). They further argue that "Answers to the questions related to universality and *crosslinguistic variation* are needed in order to develop aspect acquisition theories to explain the processes of first language acquisition by children or *second language acquisition by children and adults*" (2005:10) [emphasis mine].

Within the context of the arguments above, the need for language-specific research is reflected in this study. My main goal is to turn to the relevant question of *how* crosslinguistic variation may affect second language acquisition of tense-aspect, an issue not sufficiently addressed in the L2 research (Shirai and Nishi 2003).

Following this research goal, I argue that the studies on lexical aspect and universal features relevant in researching L2 tense-aspect acquisition do not address the equally important question of the language-specific effects, the lexical and grammatical nuances of the L1 and the L2. Thus, this study shifts the L2 tense-aspect acquisition research effort to include language-specific features. I contend that expanding the L2 research on tense-aspect in this way is necessary for a full understanding of tense-aspect as a semantic domain and of the components relevant for its L2 acquisition.

I begin by reviewing the major research on tense-aspect in general and the most relevant studies on the L2 acquisition of tense-aspect. The review will demonstrate that the language-specific differences have not been sufficiently treated and analyzed as an important dimension in L2 learning. In the study, I will adopt the theoretical notion of L1 *prominence* of tense or aspect (Bhat 1999, also related to *thinking for speaking* in Slobin 1991, 1996) as a specific contrast relevant in the L2 acquisition of languages, categorized as tense-prominent or aspect-prominent.

My research questions and hypotheses will address tense-aspect contrasts in English (tense-prominent, i. e. based on Bhat 1999, tense is obligatory, grammaticalized, systematic and pervasive) and Russian (aspect-prominent, i.e. based

on Bhat 1999, aspect is obligatory, grammaticalized, systematic, and pervasive¹); my goal is to show that the L2 tense-aspect acquisition can not be analyzed solely in the context of lexical aspect and universal semantic categories, but that it also has to include specific forms and meanings L2 learners need to acquire as they learn to express temporal relations and aspectual contouring in another language.

With this goal in mind, in this bi-directional study, I investigate the written L2 data by instructed intermediate-high intermediate L1 English learners of L2 Russian and L1 Russian learners of L2 English. While L1 *tense* or *aspect prominence* is going to be the key notion defining the L1 influence in L2 acquisition, *prominence* in the L2 data will be defined as the forms-functions reflecting the tense-prominence or aspect-prominence of the L1 in the target L2.

As already stated earlier, I will look for answers to the following research questions:

- (A) Do L1 English learners of L2 Russian use tense *more prominently*, i.e. more target-like than aspect ? (English is categorized as a tense-prominent language).
- (B) Do L1 Russian learners of L2 English use *aspect more prominently*, i. e. more target-like than tense? (Russian is categorized as an aspect-prominent language).

In order to address these research questions, I will analyze the L2 data against the predictions of what I have termed the *Grammatical Domain Hypothesis (GDH)*;

¹ Bhat's (1999) criteria for prominence will be defined in the later section providing the theoretical rationale for the approach used in this study. I will adopt the term 'grammaticalization' and 'grammaticalized' rather than 'grammaticized' or 'grammaticization'; the two are used interchangeably in the literature (c.f. Bybee 1985).

(tense-aspect is the grammatical domain):

- (1) L1 English learners of L2 Russian will use *tense* more *prominently*, i. e. *more target-like* than aspect. There will be *more non-target* L2 *aspectual* choices, and they will be limited or over-generalized.
- (2) L1 Russian learners of L2 English will use *aspect* more *prominently*, i. e. *more target-like* than tense. There will be *more non-target* L2 *tense* choices, and they will be limited or over-generalized.

The following general predictions will falsify the GDH:

- (1) L1 English learners of L2 Russian will not use tense more prominently, i. e. more frequently and accurately than aspect. There will be no clear prominence pattern in the use of tense relative to aspect.
- (2) L1 Russian learners of L2 English will not use aspect more prominently, i. e. more frequently and accurately than tense. There will be no clear prominence pattern in the use of aspect relative to tense.

Following the GDH prediction (1), an example of non-target use by the L1 English learners of L2 Russian is the case when tense is used consistently, but imperfective/perfective aspectual pairs are not fully used, i.e. only one verb form is used or substituted for the other; for instance, in the aspectual pair *gulyat* '*po-gulyat*', 'walk, take a walk' only imperfective *guljat* is used for both the imperfective and perfective meanings; or, in the aspectual pair *kričat* '*za-kričat*', 'shout, start to shout', only *za-kričat* is used for both meanings. (Examples from Task 1)

Following the GDH prediction (2), an example of non-target use by L1 Russian learners of L2 English is the case when aspect (progressive, perfect, lexical

aspectual expressions) is used consistently but tenses are used in a mixed, non-target pattern. For instance, progressive is used instead of a simple form and is marked by the present instead of past, as in *is searching* instead of *searched*; or perfect is used in the present instead of the past form to indicate anteriority, as in *(I) have studied before (I) came here*. (Examples from Tasks 1 and 2)

I will address the research questions and the GDH in more detail in section 1.5. Now, I turn to the brief discussion of the main research questions in this study of the L2 acquisition of tense-aspect and of the need to analyze tense-aspect as a complex conceptual-grammatical domain, language-specific as much as universal.

1.4. Tense-aspect as a conceptual-grammatical domain

In this section, first, I briefly summarize the literature on tense-aspect. Next, I present a summary of tense-aspect research in L1 and L2 acquisition. Last, I review the research on language-specific effects. This discussion will lead into the final section of the Chapter, where I review my research questions and the GDH in more detail.

Cross-linguistically, temporal relations are commonly expressed through the grammatical system of tense-aspect. While tense markings serve to place situations on the timeline relative to the speech time and present them as present, past, and future, aspect marks the internal contouring of an event (Comrie 1976), which can be bounded or unbounded, process or result, etc. Aspectual contouring can be contained in the lexical meaning of the verb, which is known as *lexical aspect* or *Aktionsart*; it can also be *grammatically marked*, hence the term *grammatical aspect* or *viewpoint aspect*.

To clarify the widely-accepted distinction, I cite the definitions and examples from Li and Shirai (2000). They say, “Lexical aspect (also known as inherent aspect, situation aspect or Aktionsart) refers to the semantic characteristics inherent in the lexical content of words, usually verbs and verb phrases, that are defined in terms of the temporal properties of given situations that the verbs describe” (2000:14).

Originating in the Aristotelian philosophy, the most widely used theoretical framework for the study of lexical aspect is Vendler’s (1967) classification of verbs by lexical category. Vendler distinguishes four verb types depending on verb semantics, i.e. the inherent aspect of the verb, which includes telicity or boundedness (Comrie 1976)²: *states*, such as ‘need’, ‘want’, ‘be’, ‘seem’, ‘know’; these verbs refer to continuous states, have no inherent duration and imply no change of state, which makes them unbounded or atelic. *Activities* are atelics with inherent durativity and are, therefore, dynamic. Some examples of activities are ‘run’, ‘sleep’, ‘eat’, ‘sing’, ‘write’. The next lexical aspect category, *accomplishments*, includes verbs that refer to completed dynamic situations, are telic, and indicate results. For instance, ‘sing a song’, ‘write a poem’, ‘eat dinner’ illustrate accomplishments. The fourth aspectual class, *achievements*, consists of verbs that are telic and refer to the beginnings or endings of events, i.e. can be reduced to a point and are, as a result, punctual. Some examples are ‘arrive’, ‘leave’, ‘begin’, ‘drop’, ‘notice’, etc. A more detailed description of Vendler’s classification will be given in Chapter 2, where I review

² According to Comrie (1976), if a sentence referring to a situation with imperfective meaning (such as the English Progressive) implies the same situation with perfect meaning (such as the English Perfect), then the situation is atelic such that from “*John is singing* one can deduce *John has sung* (atelic), but from *John is making a chair* one cannot deduce *John has made a chair*. Thus, a telic situation is one that involves a process that leads up to a well-defined terminal point, beyond which the process cannot continue” (Comrie 1976:44-45).

research on L2 acquisition of tense-aspect.

Linguistic encoding of aspectual contouring, or grammatical (*viewpoint*) aspect, can take different forms cross-linguistically. As noted by Li and Shirai (2000) in their review of theories of tense/aspect, grammatical aspect can be linguistically marked “through the use of inflectional morphology, derivational morphology, auxiliary, or periphrastic constructions” (2000:11). Other than through verb grammar, aspect is also shaped by clausal elements such as adverbials, in which case it is analyzed as sentential aspect; it can also be traced across sentences by expanding the analysis to its discourse functions (Givón 1991). Because the grammatical means are employed to mark the speaker’s view of a situation, grammatical aspect is also referred to as viewpoint aspect.

The most influential typological studies of tense-aspect have identified shared patterns of aspectual markings across languages (Comrie 1976; Bybee, 1985; Dahl 1985; Bybee and Dahl 1989; Bybee, Perkins and Pagliuca 1994). Typological variation in the grammatical markings of tense-aspect, however, has also been addressed in a language-particular way in the theoretical proposals based on the language-specific differences. One such proposal is to group languages into two major categories based on prominence of tense or aspect: tense-prominent languages and aspect-prominent languages (Bhat 1999, similar proposals about language-specific lexicalization patterns can be found in Berman and Slobin 1994, Slobin 1996a, 1996b).

As noted above, the most basic theoretical classification of grammatical aspect is the division between perfective, or external view of a situation, and

imperfective, which gives an internal view of a situation (Comrie 1976). For instance, simple past and progressive in English correspond to the external and internal views of a situation, respectively:

(1) Mary wrote a book.

(2) Mary was writing a book.

Whereas in sentence (1), the event of writing a book is viewed externally, as completed (perfective), in sentence (2), the same event is viewed internally, not specifying the beginning or end points (imperfective). According to Bybee, Perkins, and Pagliuca (1994), resultative and completive markers tend to grammaticize into perfect aspectual markers, i.e. perfective or simple past ; a progressive marker tends to grammaticize into an imperfective marker, which further refers to habitual and stative situations (Comrie 1976). Putting the two aspectual categorizations together, Vendler's (1967) states and activities are generally expressed by the imperfective, whereas perfective marks accomplishments and achievements.

The presence or absence of the criterion of *duration* allows or disallows the viewpoint of the imperfective. Such is the case of achievements, for instance, when "focusing on the preliminary stages of an event" (Li and Shirai 2000: 20), or when duration becomes implied through repetitive instances of otherwise punctual achievements. A sentence like "John is winning the race" (Li and Shirai 2000:20) is an example of the imperfective being used in the stage preceding the actual point of winning the race; "John is jumping" (Li and Shirai 2000:20) is an example of a repetitive punctual event which implies durativity and allows the imperfective internal view of the situation.

This is not necessarily the case with states. As noted by Li and Shirai (2000), “ ‘progress’ presupposes the dynamic development of a situation. Thus, progressive aspect combines naturally with activity and accomplishment verbs, but not with stative verbs” (20-21). In contrast, imperfective generally marks stative meanings, highlighting the semantic and grammatical difference between the imperfective and the progressive.

Perfective aspect, on the other hand, denotes an external view of a situation, viewing it as a whole, and refers to punctual events, i. e. achievements and accomplishments. Thus, perfective includes the notion of the starting point (inchoative) or endpoint (completive), as semantically contained in achievements and accomplishments. Perfective is not compatible with states due to their inherent non-dynamic meaning; it also lacks the sense of completion when referring to activities since they do not indicate endpoints, as in ‘Tom talked’, where the use of the simple past for perfective meaning does not specify whether Tom finished talking or not. Clearly, “there are combinatorial constraints or compatibility between certain functions of grammatical aspect and certain lexical aspect” (Li and Shirai 2000: 23). Comrie (1976) defined this relationship as ‘the naturalness of combination’ principle.

Lexical-grammatical links of the imperfective and the perfective do not, however, reduce the importance of cross-linguistic variation in grammaticalization of the temporal-aspectual semantics. Li and Shirai (2000) point out two basic types of variation, “in the *pattern* of grammaticization and in the *degree* of grammaticization” (23). [emphasis mine]. Referring to the first characteristic, Li and Shirai give examples of languages without grammatical aspect, such as Hebrew and Finnish; they

also illustrate the variation in tense-aspect relationships, as, for instance, in Romance languages, which have the perfective-imperfective distinction only in the past, or Slavic languages, which do not mark perfective in the present (Li and Shirai 2000:23). As an example of another typological variation, Li and Shirai (2000) mention that the Chinese perfective marker *-le* does not always indicate completion with telic verbs (24).

The degree of grammaticalization can be understood as the frequency, presence, or prominence of an aspectual form. For example, progressive is highly grammaticized in English, whereas it retains only its unmarked action-in-progress meaning in Chinese, Malay, and Thai (Li and Shirai 2000). Together with the well-documented tense-aspect commonalities (Dahl 1985, Bybee, Perkins and Pagliuca 1994), cross-linguistic variation remains an important and interesting area of inquiry into time talk (Smith 1997, Li and Shirai 2000). This line of research is further expanded by the theoretical proposals that look at the degree of prominence of tense as opposed to aspect in the typological distribution of tense-aspect markers (Bhat 1999). It becomes, therefore, clear that research on L2 acquisition of tense-aspect should include language-specific variation in the L1 and L2 tense-aspect systems, which can influence L2 learning.

While L2 acquisition of tense-aspect is the primary focus of this study, it is necessary to point out that the theoretical interest and empirical findings in L2 acquisition originate in and parallel those in the L1 tense-aspect acquisition research. Two distinct theoretical positions have been employed in the discussion of tense-aspect acquisition both in L1 and L2: the nativist approach and the functional

approach (Li and Shirai 2000). Among the nativist proposals relevant for child language acquisition, Bickerton's Creole-based Bioprogram Hypothesis (1981, 1984) and Chomsky's theory of Universal Grammar (UG) (1981, 1984) have been the most influential.

Unlike the researchers that subscribe to the biologically pre-determined language faculty, those working under the functionalist approach contend that language should be viewed together with the rest of cognitive development, not as a separate innate capacity, but as "a communicative device in its social and pragmatic environment" (Li and Shirai 2000:30). The work on L1 acquisition of tense-aspect reflects this debate and directly informs research on L2 acquisition of tense-aspect. I will return briefly to this debate and its implications for the study of tense-aspect acquisition in Chapter 2, which reviews the research on L2 acquisition of tense-aspect in more detail.

In L2 research, the center of analysis has been 'learner language' or 'interlanguage'(IL). While the question of innateness has been mainly redefined as the availability of UG in L2 acquisition, and as such debated (see Eckman 2004), interlanguage has been described from other linguistic perspectives, such as sociolinguistics, pidgin-creole linguistics, functional linguistics, and linguistic typology (citations in Li and Shirai 2000:33). Focusing their interest on the universal characteristics of L2 acquisition, the researchers working in this area have looked at a variety of contributing factors, such as "saliency, frequency, processing cost, and form-function mapping" (Li and Shirai 2000:33).

Similar to the general interlanguage research in L2 acquisition, studies on L2

acquisition of temporal relationships also followed from L1 acquisition research. The research questions have dominantly centered on the L2 acquisition of aspect, attempting to determine whether the early emergence of verb morphology indicates tense or aspect. Both longitudinal and cross-sectional studies have searched for the universally shared linguistic manifestations of lexical aspect, grammatical aspect, and tense, with the greatest attention being given to lexical aspect as semantically inherent to the verb regardless of the language being acquired.

The original study of basic aspectual notions in L1 acquisition research includes Brown's (1973) early work on the acquisition of the progressive marker *-ing* in child English, Bickerton's Bio-program Hypothesis (1981), and Slobin's (1985) work on the basic division of temporal perspectives into processes and results. According to Brown's research (1973), children mark inherently dynamic activity verbs with the *-ing* morpheme and do not over-generalize it to states. Bickerton's work on Creole grammars (1981, 1984) led him to conclude that the basic aspectual distinctions are between states and processes and punctual and non-punctual.

These findings and theoretical interpretations prompted research on L2 acquisition of tense-aspect, starting in the mid 80's with Andersen's work on lexical aspectual categories in L2 Spanish (1985, 1989, 1991). Following Vendler's (1967) verb categorization into states, achievements, achievements and accomplishments, Andersen postulated and supported with the research data the spread of past perfective from achievements to accomplishments to activities to states, and the spread of past imperfective from states to activities to accomplishments to achievements. Such L2 developmental path underscored the importance of inherent

aspect in L2 acquisition and contributed to the formulation of the Aspect Hypothesis, which provided the theoretical backbone for L2 studies on cross-linguistic similarities in the L2 acquisition of tense-aspect and has been pivotal in L2 research on temporal relations (Andersen and Shirai 1994, Bardovi-Harlig 1995, 2000), Robison 1995, Shirai 1991, Bardovi-Harlig and Bergström 1996, Andersen and Shirai 1996).

In order to provide the context for the current state of analysis of L2 tense-aspect acquisition, I cite the major statements of the Aspect Hypothesis as quoted in Li and Shirai (2000:49), (see Shirai 1991: 9-10, Bardovi-Harlig and Reynolds 1995, Bardovi-Harlig and Bergstrom 1996: 312, Andersen and Shirai 1996:533).

- (1) Learners use (perfective) past marking on achievement and accomplishment verbs, eventually extending use to activity and state verbs.
- (2) In languages that encode the perfective/imperfective distinction morphologically, imperfective past appears later than perfective past, and imperfective past marking begins with stative and activity (i.e. atelic) verbs, and then extends to accomplishment and achievement (i.e. telic verbs).
- (3) In languages that have progressive aspect, progressive marking begins with activity verbs, and then extends to accomplishment/achievement verbs.
- (4) Progressive marking is rarely incorrectly overextended to states.

As mentioned in the Preliminaries, while the research questions triggered by the Aspect Hypothesis have shaped the general inquiry into the role of the universal verb properties in L2 acquisition of tense-aspect, L2 research on tense-aspect can be divided into two general groups of studies based on the approach they use (Bardovi-Harlig 2000): (1) form-oriented studies, carried out primarily in the United States and

focusing on verb morphology in L2 tense-aspect acquisition; (2) meaning-oriented studies, mainly done in Europe and attempting to isolate pragmatic, lexical, and grammatical means that L2 learners use to express tense-aspect relationships. Related differences between the two groups of studies are summarized in Bardovi-Harlig (2000). They include the scope of research of the linguistic means.

The conceptual approach starts from the forms used to express the temporal meanings, and not other uses or meanings of the same form. On the other hand, as pointed out by Bardovi-Harlig, "...using a form-oriented approach requires that we identify an emerging morpheme and track it in all its instantiations in the interlanguage sample" (2000:185). Thus, the two approaches take opposite directions in terms of form-function associations. In meaning-oriented studies, semantic content of the temporal concept is pre-defined, whereas in form-oriented studies, temporal concepts are observed as they emerge from the distribution of forms. Bardovi-Harlig contends that this type of investigation limits the area of analysis, especially if a temporal concept is complex and has a number of theoretical interpretations, such as, for instance, the present perfect in English (Bardovi-Harlig 2000:185).

As already noted earlier, numerous form-directed studies have largely researched L2 acquisition of tense-aspect under the framework of the Aspect Hypothesis, following Andersen (1991) and examining verb morphology that marks Vendler's (1967) verb categories. Although cross-linguistic evidence in most of these studies supports the Aspect Hypothesis, a few have pointed out counter-evidence as well. Bergstrom (1995, 1997), Bardovi-Harlig and Bergstrom (1996) have found a lower use of past perfective on accomplishments than on activities in instructed

learners of L2 French. Related to this finding, Hasbún (1995) and Salaberry (1997, 1999) concluded in their studies of L2 Spanish learners that the form-function mappings between perfective past and achievements and imperfective past with activities is not strongly supported in the data by lower proficiency L2 learners but becomes stronger in higher-level L2 learners.

Such findings have contributed to further testing of the Aspect Hypothesis and initiated the debate on whether L2 learners' early verb morphology marks tense or aspect. For instance, following the conceptual approach, in their large longitudinal study, Klein (1995), Klein, Dietrich and Noyau (1995) argued that the untutored L2 learners of a number of languages use verb morphology to mark tense rather than aspect. Similar claims have been made in Perdue (1993), Salaberry (1999), Rohde (1996), and Buczowska and Weist (1991). In other words, "An important task for us is to account for why these variations arise" (Li and Shirai 2000:52).

One of the strongest theoretical models for both L1 and L2 acquisition of tense-aspect was developed from the work on the Lexical Aspect Hypothesis and the Prototype theory (Shirai 1991, 1994, Shirai and Andersen 1995, Rosch 1973). According to this proposal, based on the principles of cognitive categorization, "...the prototype theory assumes a graded category membership on the basis of characteristic, but not defining, features" (Li and Shirai 2000: 66).

Related to the acquisition of tense-aspect, the prototype account defines some form-function associations as prototypical and acquired first, extended to similar examples of such associations, and moving on to the least prototypical items (Li and Shirai 2000:67). For instance, the prototypical meaning for the progressive aspect is

'action in progress'; prototypically, achievements are marked by past morphology first, as in English, where the prototypical features are [+telic +punctual +result] (Li and Shirai 2000: 67-68). In the case of L2 English, which has been researched extensively, these associations become stronger with increased proficiency (Li and Shirai 2000: 84).

I find it important to emphasize that while most L2 findings in this line of research support the Prototype Hypothesis, L2 acquisition patterns do not regularly mirror prototype spread in L1 acquisition. As the more recent L2 studies suggest (Salaberry and Shirai 2002), L2 acquisition of tense-aspect needs to be viewed in its full complexity, taking into account universally shared as well as L1 and L2 language-specific features; research on L2 acquisition of tense-aspect should include the influence of both learner-external and learner-internal factors as well as the effects that research methodology and instruction can have on L2 learners' development of tense-aspect form-function relationships.

Extending the debate on the Aspect Hypothesis to discourse, recent work on L2 acquisition of tense-aspect has examined the relationship between verb morphology and foregrounding/backgrounding in L2 narratives (Flashner 1989, Kumpf 1984, von Stutterheim 1991, Bardovi-Harlig 1992, 1995, 1998, Veronique 1987). In her important cross-sectional study on L2 English, Bardovi-Harlig (1998) proposed the Discourse Hypothesis, which relates to past verb semantics and discourse functions. The Hypothesis is supported if foreground verbs are marked with past tense (perfective) regardless of the aspectual category, but background verbs are not; if, on the other hand, telic verbs (achievements and accomplishments) are marked

with past regardless of grounding, and atelic verbs (activities, states) are not, that would falsify the Discourse Hypothesis and support the Aspect Hypothesis (1998:479).

Her findings suggest that both the Aspect Hypothesis and the Discourse Hypothesis are necessary to explain temporal relations in L2 narratives. As predicted by the Aspect Hypothesis, achievements are most frequently marked by simple past regardless of grounding; accomplishments are the next aspectual class marked by the past simple but more those in the foreground than in the background; activities appear the least often in past simple forms, more commonly in the foreground than in the background. Activities also show the use of progressive but limited to the background (Bardovi-Harlig 1988:479). Thus, the study of discourse functions expanded the analysis of L2 tense-aspect acquisition, raising more questions regarding theory and methodology in L2 research on tense-aspect.

Another variable that has been included only in some L2 studies, primarily with the goal to test the Aspect Hypothesis, is the effect of the L1 on the L2 learner tense-aspect system.

In a number of longitudinal (Bardovi-Harlig 2000), as well as cross-sectional studies (Collins 2002³), no significant L1 influence has been identified. Similar results were found in the European Science Foundation (ESF) study (Klein, Dietrich, et al. 1995) of untutored L2 learners of five L2's. According to Bardovi-Harlig (2000), L1 effects are rare and inconsistent. The question of L1 influence, however, has not been settled. While very few studies have been set up to test L1 transfer

³ Collins (2002) interpreted the use of the present perfect in past contexts by her L1 French/L2 English subjects as the L1 effect, i.e. L1 influence or transfer.

effects per se (Quick 1997), more recent theoretical inquiries emphasize the need for a multiple-factor approach to analyzing L2 acquisition of tense-aspect, including language-specific effects of L1 and L2 (Jarvis 1998, Salaberry and Shirai 2002, Shirai and Nishi 2003, Shirai 2003, Odlin 2005, Jarvis and Pavlenko 2008).

This research direction highlights the complexities in the L2 acquisition of tense-aspect system and all its relevant components. The proposal by Giacalone-Ramat (2002), for example, emphasizes the need for a functional theoretical approach to the analysis of (developmental) verb morphology data that includes universal semantic-conceptual features such as lexical aspect and L2 learning strategies as well as language-specific influences, morphological typology and L1 transfer among them.

Similarly, in her study on the role of tense-aspect grammaticalization and discourse in L2 learner varieties, Noyau (2002) argues for the conceptual analysis of adverbials as temporal loci in the developmental L2 tense-aspect data, easing the transition from L1 to L2 target tense-aspect use. Housen (2002) also points out the significance of crosslinguistic influence in the L2 acquisition of temporal expressions. Another related proposal is to include L1-L2 combination as a factor in acquiring tense-aspect in L2 (Rohde 2002), which partly explains the L1 effect in late L2 acquisition in a bi-directional study of L2 English and Italian (Rocca 2002).

Similarly, Polinsky's (2008) recent study on the use of aspect in Russian heritage learners introduces findings on a different set of L1-L2 effects, those that might drive language maintenance in adult bilinguals/heritage learners, a heterogeneous category of speakers of a heritage language. Polinsky found, with some variation, that adult Russian heritage speakers, i.e. Russian/English bilinguals,

had impoverished aspectual morphology, reflected in the loss of perfective/imperfective aspectual pairs; specifically, past/present stem distinction is weakened or lost, regular derivation of imperfectives is lost or overgeneralized; and heritage speakers tend to avoid irregular forms. In addition, Russian heritage speakers in Polinsky's study had fewer prefixed perfective forms, with variation across speakers; they compensated for the lack of grammatical aspectual distinctions by using other, concept-driven linguistic means (Polinsky 2008:279-280). Polinsky's study (2008), thus, introduces language dominance as a variable in language learning and adds the question of inter-related effects two languages can have on a bilingual/heritage speaker.

These studies emphasize the need for theoretical and methodological modifications that will address more closely the crosslinguistic influence in the L2 acquisition of tense-aspect, the role of L1 conceptual-grammatical links, and examine a broader range of form-function associations related to these factors. L2 research has to address specific L1s and L2s with relevant differences in tense-aspect grammar. Within this context, I turn to a detailed account of my research questions and the GDH predictions, in an attempt to focus on the role of the language-specific tense-aspect grammar in L2 acquisition.

1.5. Research Questions

In order to present the rationale for the research position in this study, I will first identify the language-specific factors that can have a role in the L2 acquisition of tense-aspect.

While grammatical categories of tense-aspect commonly express temporal relations and temporal contouring across languages, individual languages can differ in the degree of tense-aspect grammaticalization. Even though typologically close languages often share both the tense and aspect categories and many of their respective functions (as, for instance, Romance or Slavic languages), even within the same group of languages, there may be variation in the grammatical and lexical availability as well as frequency of one temporal specification over another. For example, both English and German have grammaticalized tense, and, to a lesser degree, aspect, but while English has perfect in all tenses, German has it only in the past, and it is less commonly used than in English.

Importantly, some typologies of verbal categories show that languages differ in the typological prominence given to tense, aspect or mood. Such claims have been made in descriptive/typological studies (Bhat 1999), and, in a similar way, in some recent cross-linguistic L1 acquisition research (Berman and Slobin 1994, Slobin 1991, 1996a, 1996b, 1997) According to Bhat's analysis (1999), for instance, languages can be classified as tense-prominent, aspect prominent, and mood prominent. Each of the categories can have a different measure of *prominence*, evidenced in the "degree of grammaticalization, obligatoriness, systematicity, or pervasiveness" (Bhat 1999: 95); a tense-prominent language assigns more prominence to tense than to aspect, whereas in an aspect-prominent language aspectual contouring is more prominent than tense.

Bhat's proposal (1999) follows his previous typological study of the verbal categories of the languages of India (1994); the typological classification based on

prominence that the languages assign to tense, aspect, and mood, also led Bhat to the finding that “languages that give greater prominence to one of these categories appeared to view concepts belonging to the other two categories in terms of their prominent category” (1999:7). Bhat (1999) illustrates the idea with the concept of perfect, which is usually defined as a past event with present relevance, a temporal way of describing the concept. In a language like Mao Naga, which is mood-prominent, perfect “denotes a realis event about something more needs to be done”, thus combining realis and irrealis instead of past and present to express a comparable notion (1999:7)

The four major criteria for prominence are related to one another since “grammaticalized concepts tend to be obligatory and get organized into paradigms” (Bhat 1999:96), thus fulfilling the criteria of grammaticalization, obligatoriness, and systematicity. Defining a related criterion of pervasiveness, Bhat points out that “Concepts that are restricted to a small area in the grammar are less prominent than the ones that have scope over a larger area” (Bhat 1999:96). However, Bhat (1999) also cautions that grouping languages into aspect-prominent, tense-prominent, and mood-prominent based on the defined criteria includes “gradations of one kind or another”, due to which “the classification is not expected to group all the languages in the world, exhaustively, into one or the other of these three language types” (97).

Some notable correlations are that tense-prominent languages tend to have more active verbs than stative verbs, to have adjectives as a separate grammatical category, or to group adjectives with nouns rather than verbs; the most prominent verbal category is used in foregrounding (Bhat 1999). As Bhat explains, the linguistic

factors are interdependent such that the most grammaticalized category in a language will also be the most obligatory, systematic, and pervasive, which makes it prominent (95-140). While using the example of the Dravidian languages as tense-prominent, Bhat also points out English, German and Finnish as examples of the Indo-European tense-prominent languages (120).

Arguing that the L1/L2 tense-aspect contrasts have a role in L2 acquisition, my proposal in this study focuses on *prominence* as an important distinction in the L2 acquisition of tense-aspect. The study looks for evidence in L1English/L2 Russian and L1Russian/L2 English, languages that exhibit this distinction.

As Bhat (1999:120) points out, in English, tense is grammaticalized more than aspect and mood. English has the basic inflectional distinction between past and present (or non-past); aspect and mood, on the other hand, are not grammaticalized to the same degree as tense and are formed only by an auxiliary verb attached to the past or present participle, as, for instance, in the present perfect or progressive aspects. Furthermore, tense is an obligatory category in English, which often presents a problem in translating into English verbal forms from non-tense prominent languages (Bhat 1999).

In contrast, aspect-prominent languages are characterized by promoting aspect along all four linguistic criteria; aspect is fully grammaticalized, obligatory, systematically distributed, and pervasive (Bhat 1999:120). In his analysis, Bhat (1999) gives examples from Sanskrit and Lango (quotes from Noonan 1992), showing obligatoriness of aspect in Lango. The quotes from Noonan (1992) describe Lango as a language where “verbs are inflected for perfective, progressive, and

habitual aspects, but if out of context, perfective can be interpreted as past, habitual as present, and progressive as future; they can be assigned to any tense (except that the perfective can not be present) through the use of appropriate temporal adverbials” (Bhat 1999:125).

Bhat (1999) also emphasizes the basic distinction between verbal markers for perfective and imperfective as typical of aspect-prominent languages (Bhat 121). Based on the given criteria, its grammaticalized, obligatory, systematic, and pervasive perfective/imperfective distinction puts Russian in the group of aspect-prominent languages (for language categorization based on lexicalization patterns see also Berman and Slobin 1994, Slobin 1996a, 1997, 2003, 2004a). I will return to the discussion of the typological characteristics of English and Russian in Chapter 3, after the review of tense-aspect research in L2 acquisition in Chapter 2, and both chapters will provide the framework for this study.

If linguistic prominence is considered in the context of second language (L2) learning, it can be expected that it will have consequences for the L2 learner. When an L2 learner with a tense-prominent L1 is learning an aspect-prominent language, the degree of prominence assigned to the temporal reference in contrast to aspectual contouring in L1 needs to be modified to the corresponding one in L2 as L2 gets acquired. This language-specific variability suggests a potential L2 learning difficulty, or, minimally, a grammatical and conceptual ‘disorientation’ for the L2 learner. In the process of L2 acquisition, then, the following form-function mapping conditions need to be met:

(a) L2 linguistic re-mapping of the prominent L1 grammatical form-function links;

(b) L1 conceptual restructuring of the specific components relevant in talking about time in L2. (See, for instance, Slobin 1991, 1996a, 1997, 2000, 2003, 2009, Jarvis and Pavlenko 2008).

In this study, I posit that it is necessary to investigate L2 tense-aspect acquisition from the language-specific perspective and account for any findings that shed light on its manifestations.

Russian and English are examples of distinct grammatical contrasts in tense-aspect prominence. Whereas the primary tenses of present, past, and future are grammaticalized in both languages, English relies mostly on tenses to express temporal relations; progressive and perfect aspects in English combine with secondary tenses to create aspectual distinctions. In contrast, aspect is fully grammaticalized by the imperfective and perfective in Russian, giving prevalence to aspectual contouring and making Russian an aspect-prominent rather than a tense-prominent language. It can be predicted that this asymmetry will have an effect on the L2 learner; L2 tense-aspect acquisition will be characterized by this asymmetry in L1 Russian/L2 English and L1 English/L2 Russian.

Since these predictions follow from the general prediction that a contrast in temporal or aspectual prominence between the L1 and L2 will be problematic for the L2 learner, the underlying research question echoes Lado's Contrastive Analysis Hypothesis (1957) and the theoretical construct of transfer (Odlin 1989). However, within the framework of current L2 research, this study argues for a specific perspective on the L1/L2 contrasts. In other words, I contend that the linguistic prominence in both the L1 and L2 will lead the L2 learner through the processes of

selecting, restructuring, and acquiring the relevant features of the L2 tense-aspect system (Slobin 1996a, 1997, 2004a). Thus, I propose that while the L2 prominence in the input will gradually promote L2 tense-aspect choices, L1 prominence will act as *the initial conceptual-grammatical constraint* in the (adult) L2 tense-aspect acquisition. In other words, L1 may initially “filter” the L2 grammar as the prominent L2 forms and functions get acquired.

In order to look at tense-prominence and aspect-prominence as the factors in L2 acquisition, I will now address in more detail the research questions that need to be answered.

(A) Do L1 English learners of L2 Russian use *tense* more *prominently* (target-like, with fewer non-target errors) than aspect? This question implies the following:

- (1) Which *aspect* forms characterize the L1 English/L2 Russian data and in which contexts?
- (2) Which *tense* forms characterize the L1 English/L2 Russian data and in which contexts?
- (3) Is *tense* more *prominent* than *aspect* in L1 English/L2 Russian?

(B) Do L1 Russian learners of L2 English use *aspect* more *prominently* (target-like, with fewer non-target errors than tense? This question implies the following:

- (1) Which *tense* forms characterize the L1 Russian/L2 English data and in which contexts?

(2) Which *aspect* forms characterize the L1 Russian/L2 English data and in which contexts?

(3) Is *aspect more prominent* than tense in L1 Russian/L2 English?

As already stated, in order to examine possible language-specific effects in the L2 acquisition of tense-aspect as a conceptual-grammatical domain, the Grammatical Domain Hypothesis (GDH), makes the following predictions for the L2 acquisition of tense-aspect as a grammatical domain (GD):

(1) Language-specific tense-aspect typology will have an effect in L2 acquisition when the encoding prominence in the L1 does not correspond to the one in L2 (as in tense-prominent English and aspect-prominent Russian). L2 forms (verb morphology and other linguistic means) and functions will tend to promote tense or aspect, respectively.

(1a) L1 English learners (tense-prominent) will have a limited number of aspectual distinctions in L2 Russian. L2 verbs will indicate tense bias instead. L2 aspect will be limited (Polinsky 2008) or overgeneralized (to compensate for the lack of aspectual distinctions).

(1b) L1 Russian learners will have a limited number of tense distinctions in L2 English. L2 verbs will indicate aspectual bias instead (such as progressive and perfect); L2 tense will be limited or overgeneralized (to compensate for the lack of tense distinctions).

Prediction 1 (b) seemingly overlaps with the support for the Lexical Aspect

hypothesis (Andersen 1991) and the Prototype Hypothesis (Li and Shirai 2002), which state that progressive is used to mark activities/processes, while past marks achievements/results. However, this prediction in the GDH is L1-motivated in that it limits the use of the L2 progressive to the L1 imperfective contexts; similarly, the lack of distinction between the L2 past and perfect carries over from the L1 perfective contexts and predicts a restricted use of tense.

The following are the test conditions for the GDH:

(A) L2 Russian

Loss of aspectual pairs/past/present stem weakened or lost; regular derivation of imperfectives lost or overgeneralized; avoiding irregular forms; fewer prefixed perfective forms (Polinsky 2008)

(B) L2 English

Non-target tense use or tense shifting for L2 English; progressive (functions) and perfect (functions) frequency and tense use; lexical expressions for aspect

The following findings will falsify the hypothesis:

- (1) L1 English L2 Russian learners will consistently use L2 aspect showing a tendency toward target distinctions; the use of tense will not be prominent relative to aspect.
- (2) L1 Russian/L2 English learners will consistently use L2 tense showing a tendency toward target distinctions; the use of aspect will not be prominent relative to tense.

Importantly, The Grammatical Domain Hypothesis (GDH) isolates a specific conceptual-grammatical domain where L1 influence *has a potential to occur*.

Grammatical structures are not isolated as form-meaning links, but rather analyzed within the context of a larger semantic domain. This approach to L1 influence in L2 acquisition takes into account form-meaning relationships in larger semantic contexts and posits that the conceptual-grammatical mismatches affect the L2 *probabilistically*, when all the L2 learning conditions are considered: the learner's L1, interlanguage (IL), and the targeted L2.

Chapter 2

L2 Tense-aspect acquisition research

2.1 Introduction

In this chapter, I review the history, major research questions, and findings relevant to the L2 acquisition of tense-aspect. Before reviewing the content of the chapter, I set the context for the approach used in my study by briefly pointing out major trends and studies in L2 tense-aspect acquisition. Then, I present a detailed review of the L2 tense-aspect acquisition literature. Last, I argue for the rationale to study L2 acquisition of tense-aspect by considering language-specific conceptual approach and the influence of L1.

As already mentioned in Chapter 1, the two most notable L2 tense-aspect acquisition proposals have focused on evidence for the Aspect Hypothesis and the Discourse Hypothesis. The Aspect Hypothesis predicts that the inherent verb aspect initially influences L2 learners in marking tense-aspect; the Discourse Hypothesis takes narrative grounding as the main influence in the marking of tense-aspect, predicting that the events in the foreground will be marked by the past, as opposed to back-grounded events, which will typically be in base forms (Bardovi-Harlig 1998, 1999). Both these hypotheses test the linguistic markings of the universal temporal-aspectual features, primarily looking at verb morphology.

While “The investigation of temporal expression includes all linguistic means of reference to time” (Bardovi-Harlig 2000: 1), the L2 researchers in the United States have primarily researched verb morphology. On the other hand, important studies by European researchers have introduced a functional analysis of temporal

reference in L2, known as the ‘conceptual’ approach (Bhardwaj, Dietrich, and Noyau 1988, Stutterheim 1991, Dietrich, Klein, and Noyau 1995); these studies investigate a range of pragmatic devices and grammatical forms used in the expression of tense-aspect. In brief, the main areas of inquiry of L2 tense-aspect research have been lexical aspect and narrative discourse, and the chief methodologies include verb morphology analysis and functional analysis of a variety of forms (Bardovi-Harlig 2000).

In the first sections of the L2 literature review, I follow Bardovi-Harlig’s (2000) comprehensive overview of tense-aspect L2 acquisition research. There are two reasons for this. One is that Bardovi-Harlig has been one of the most significant researchers of the L2 acquisition of tense-aspect in the United States and beyond, and that her review of the relevant research is among the most authoritative in the field. The other reason is that the meaning-oriented studies by the European researchers reviewed in Bardovi-Harlig (2000) investigate conceptual-typological aspects of the L2 acquisition of tense-aspect, which introduces the research background in this study.

I will start by comparing form-oriented studies to meaning-oriented studies. Then, I will review in more detail the most significant L2 research on the Aspect Hypothesis, the Discourse Hypothesis, and the Prototype proposal. In the final section of the literature review, I will address the L2 and (the most relevant) L1 tense-aspect research and the need for a typological grammatical-conceptual approach in L2, as stated in the Grammatical Domain Hypothesis (GDH).

Focusing further on the language-specific tense-aspect markings in the

learners' L1 and L2, I will point out the reasons to consider tense-prominence and aspect-prominence as the relevant criteria in the study of the L2 acquisition of tense-aspect. The discussion of language-specific tense or aspect prominence will lead to the chapter on the typological characteristics of English and Russian, the two L1-L2 pairs investigated in this study.

2.2 Overview of the contributing studies

Bardovi-Harlig's review of research on tense-aspect groups the studies into:

(a) incidental studies, such as morpheme order studies and phonetic constraint studies; and (b) interlanguage analyses, i.e. meaning-oriented and form-oriented studies (2000:12). The latter group of studies specifically research temporal relations from "an interlanguage perspective, describing the interlanguage as a system independent of the target language" (Bardovi-Harlig 200:11). As already noted in the introduction, meaning-oriented studies investigate pragmatic means, lexical means, and morphological means that L2 learners use to express tense-aspect, whereas form-oriented studies investigate the distribution of verbal morphological forms in acquisitional sequences, testing the Aspect Hypothesis, and testing the Discourse Hypothesis (Bardovi-Harlig 2000:12).

Even though this classification of L2 tense-aspect research dates back to 2000, the L2 tense-aspect research interest and methodologies today essentially follow the work in these studies. Most research has focused on the universally shared features of L2 tense-aspect acquisition, as evident in the work on the Aspect Hypothesis, the Prototype Hypothesis, and the interest in the Discourse Hypothesis. Conceptual

studies, however, have investigated the L1 effects but have largely focused on shared pragmatic, lexical, and morphological means in the expression of tense-aspect regardless of the L1 or L2 (Bardovi-Harlig 2000). In other words, the research emphasis has been on the emerging L2 forms and functions universally shared by languages and learners rather than on the effect that cross-linguistic differences may have on the L2 acquisition of tense-aspect.

Incidental investigations of verbal morphology in L2 acquisition are part of the background to L2 tense-aspect research but since they are not directly relevant to this study, I will not discuss them beyond the initial mention above (Bardovi-Harlig 2000). Instead, I will first review the form-oriented studies, expanding on the already introduced studies testing the Aspect Hypothesis and the Discourse Hypothesis. I will follow with a review of the conceptual, i. e. meaning-oriented studies. I will end by discussing more recent work on the L2 acquisition of tense-aspect, which will lead into the discussion of the language-specific constraints, the focus of this study.

2.2.1. Form-oriented studies vs. Meaning-oriented studies

Form-oriented studies (Bardovi-Harlig 2000) have focused on the L2 acquisition of tense-aspect verb morphology in a number of languages, such as English, Spanish, French, Dutch, German, Italian, and Swedish. Although these studies focus on the emergence of the morphological forms, they vary in design (longitudinal, cross-sectional), investigated verb morphology, and data collection methods. According to Klein et al. (Klein 1993, Dietrich 1995, Dietrich et al. 1995, qtd. in Bardovi-Harlig 2000:111), four general findings in these studies are

significant: (1) the L2 development of the temporal forms is gradual; (2) form often comes before function;

(3) irregular morphology emerges before regular morphology; (4) L2 learners tend to follow a developmental bias, avoiding “discontinuous marking” and relying on inflectional tense-aspect verbal morphemes (Bardovi-Harlig 2000:111-113).

In the overview of methods of research and analysis, Bardovi-Harlig (2000) summarizes a broad variety of methods used in the L2 studies on tense-aspect. In fact, she notes, “Many studies come to the same conclusions even though they draw from different learner populations, study different target languages, or elicit data by different means. On the other hand, differences in research design and analysis can also introduce subtle differences in the findings” (14).

L2 tense-aspect studies have looked at second language (L2) instructed and uninstructed learners as well as foreign language (FL) learners, and have included a number of target languages, such as English, French, German, Italian, Spanish, Swedish, and Japanese (Bardovi-Harlig 2000:14). The studies have varied in design, “ranging from case studies of single learners to longitudinal studies of both small and large groups to small and large cross-sectional studies” (Bardovi-Harlig 2000:15). The L2 data have been elicited in a broad variety of ways, from observation of spoken production to conversational interviews to a film retell task or a story retell task to cloze passages. In other words, researchers working in this area have analyzed primarily free production and, in some studies, more controlled tasks. Analyses have been both qualitative and quantitative (For a more detailed description of the research designs and types of elicitation methods see Bardovi-Harlig 2000:14-16; 206-210; 286-

288; Shirai 2003 for L2 English).

Longitudinal studies of L2 tense-aspect acquisition are designed to follow the emergence and acquisitional order of the relevant forms in the learners' L2. As summarized in Bardovi-Harlig (2000), among the researchers developing these studies, the most prominent are Andersen (1991) on L2 Spanish, Giacalone-Ramat (1995) on L2 Italian, Veronique (1987) on L2 French, Dietrich et al. (1995) on L2 German, Dutch, Swedish and English, and Klein (1995) on L2 English. Regardless of the L2 being acquired, tense-aspect morphology emerges gradually, spanning "at least 2-3 years" (Bardovi-Harlig 2000:120), starting from the base forms. Importantly, "The perfective past emerges as the first past morpheme across languages (Bardovi-Harlig 2000:119).

Focused on accuracy rates across L2 learner levels rather than the emergence of forms, cross-sectional studies represent interlanguage studies in the sense that they compare the target language to the learner language and analyze both tokens (morphological forms) and types (meanings associated with those forms) (Bardovi-Harlig 2000:120-121). In the analysis of past tense morphology in L2 English, for instance, interlanguage forms such as *tooked* and *bringed* are coded as past tense attempts in non-target forms. When a form such as *have brought* is used in a past tense context, it gets coded for accurate form but not mapped onto the target function of the past (examples from Bardovi-Harlig 2000:121). Even though these studies research learners at different L2 levels, rarely true beginners and typically instructed learners, the non-target forms in obligatory contexts reveal important acquisitional tendencies. Consistent errors, as, for instance, the use of present forms in the L2 past

target contexts, indicate the direction of tense-aspect L2 acquisition: present before past.

Importantly, the results reported in some studies confirm the findings of the longitudinal studies, suggesting that the order of acquisition is comparable regardless of the research design (Ramsey 1990, Hasbún 1995, Salaberry 1999, Andersen 1986, 1991 for L2 Spanish). The acquisition of target form-meaning associations is gradual, starting from the learner's prototypical form-meaning mappings. As noted by Bardovi-Harlig, "...for each core form-meaning association, learners also have to learn the contrasts between the form-meaning pairing associated with one morpheme and the others" (2000:126). The development of the L2 tense-aspect system depends on the gradual structuring and restructuring of the target forms and functions.

In her comparison of form and meaning studies, Bardovi-Harlig (2000:184-186) notes that the studies differ in methodology, including the range of linguistic devices and the scope of analysis. Meaning-oriented studies investigate emergence of verbal morphology as a stage in the acquisition of tense-aspect, but also include lexical and discourse devices used to express temporal relations.

Other than the difference in the linguistic devices that are studied, form-oriented studies and meaning-oriented studies differ in that "What is not observed in a meaning-oriented approach is other uses of the form or other meanings" (Bardovi-Harlig 2000:184). This way, meaning-oriented studies do not analyze forms that do not map onto the particular meaning and what other meanings might be used to express the researched temporal concept. The example that clarifies Bardovi-Harlig's (2000) point is the development of the pluperfect, which semantically expresses the

reverse order of events and states. While in the form-oriented approach an emerging morpheme is found and tracked in all the instances in the L2 sample, in the meaning-oriented approach, “Because [...] we follow only the environment of the reverse-order report, we miss the use of the pluperfect in other contexts” (Bardovi-Harlig 2000:185).

In addition, meaning-oriented studies research the acquisition of semantic concepts, which need to be clearly defined to be adequately analyzed; in form-oriented studies, however, temporal concepts are only arrived at in the L2 forms. Bardovi-Harlig (2000) points out the need to focus on forms in the study of the temporal concepts that are not so well-defined, such as the present perfect in English (185). She contends that “...in a form-oriented study the semantics of the interlanguage tense-aspect system are inferred from the distribution of the forms” (185). She concludes that well-defined temporal concepts, such as future, modality, conditionals, are better-suited for the conceptual approach, but that both types of studies lead to the understanding the L2 acquisition of tense-aspect; as a result, she argues for a combined inquiry (186).

2. 2. 2. Overview of the studies on the Aspect Hypothesis

As already noted earlier in the introduction, one of the central theoretical questions in the study of L2 tense-aspect acquisition is the acquisition of lexical aspect in contrast to grammatical aspect and tense. Both form and meaning-oriented studies are descriptive in their general approach; however, form-oriented studies have applied different methodologies, elicitation and quantification techniques specifically

in order to test the Aspect Hypothesis. A variety of tasks and elicitation methods have been used to support the Aspect Hypothesis (Bardovi-Harlig 200:191; 197-205; Table 4.1 on 206-210).

Similarly, although the main linguistic analysis is consistent across the studies, the quantification of the results varies. According to Bardovi-Harlig, two main quantification techniques have been developed (2001:192). Bardovi-Harlig's overview of the studies looks at the quantitative analyses and emphasizes that 'understanding the differences in analysis is crucial to the evaluation of apparent challenges to the Aspect Hypothesis...' (2000:192).

As stated earlier in the introduction to this study, the background for the Aspect Hypothesis lies in the theoretical framework of inherent/lexical aspect, semantically classified by Vendler (1967). In the early tense-aspect L2 research, the hypothesis is also known as the Relative Defective Tense Hypothesis (Andersen 1989); the Defective Tense Hypothesis (Andersen 1991); and the Primacy of Aspect Hypothesis (Robison 1990)⁴.

As reviewed in Chapter 1, Vendler (1967) uses the notion of telicity to categorize verbs semantically as: (a) atelic: states and activities; (b) telic: achievements and accomplishments. Whereas states are non-dynamic, activities are inherently dynamic and durative. On the other hand, being telic events, achievements are punctual, marking the beginning or end of an action, while accomplishments have inherent duration but mark the completion of action (shown in the table below).

⁴ As the study of lexical aspect expanded, the listed hypotheses were generally integrated under the term the Aspect Hypothesis.

Table 1

Semantic features of lexical aspectual categories (based on Anderson 1991 and Collins 2002; examples based on Frog Story, one of the elicitation tasks in this study)

Aspectual category	Semantic features		
	Dynamic	Telic	Punctual
State <i>The boy knows about the frog.</i>	–	–	–
Activity <i>He is looking for the frog.</i>	+	–	–
Accomplishment <i>He found the frog.</i>	+	+	–
Achievement <i>He arrived in the forest.</i>	+	+	+

This line of research started with L1 acquisition studies, which “found that children were sensitive to lexical aspect in the morphological encoding of past events” (Bardovi-Harlig 2000:193). Reviewing the early studies on L1 acquisition of temporal distinctions, Bardovi-Harlig (2000) concludes that “The semantics is not an abstract temporal relation, but a result of the effect of a process on the end-state, and the child’s ability to observe it. This distribution of verbal morphology in L1 acquisition is cognitive as well as linguistic because the child’s system is said to lack the concept of temporal location, a concept that is necessary for tense” (2000:194).

Another influential L1 acquisition study, by Weist et al. (1984), furthered the Defective Tense Hypothesis with the claim that the L1 tense distinctions mark aspect rather than tense. This finding was later modified (Andersen and Shirai 1996, Shirai and Andersen 1995); the modified claim was that the Defective Tense Hypothesis should be taken in relative and not absolute terms, i. e. children learn tense relations while they are learning aspect (Bardovi-Harlig 2000:196). Importantly, Bardovi-Harlig also notes, quoting Klein 1986, 1998), that research on tense-aspect L2 acquisition by adult learners “also afforded the opportunity to test claims of the

cognitive-developmental basis for tense-aspect distribution in first language acquisition” (2000:196).

As mentioned earlier in the introduction to this study, the initial research on L2 tense-aspect acquisition brought about the important finding by Roger Andersen and his collaborators, that L2 learners first acquire verb-inherent semantic aspectual distinctions, rather than tense or grammatical aspect, typically marked morphologically (Andersen 1991:307). Robison (1990, 1995) further specified the hypothesis, as the Primacy of Aspect Hypothesis “in the sense not that the morphemes that denote aspect in the target language are acquired first, but that target language verbal morphemes, independent of their function in the target language, are first used by the learner to mark aspect” (1990:316).

In his original study, Andersen (1991) predicts that lexical aspect in L2 Spanish will have the following L2 developmental spread: (1) perfective past (from achievements to accomplishments to activities to states), followed by (2) imperfective past (from states to activities to accomplishments to achievements). While imperfective emerges later than perfective, the stages for the two essentially overlap, creating a developmental continuum of eight stages (Bardovi-Harlig 1998:474). Other L2 studies on Spanish (Ramsay 1990, Hasbun 1995, as well as other L2’s (French, English) have further confirmed the hypothesized acquisitional stages with minor variation in the emergence of categories depending upon the proficiency level and task type (Bardovi-Harlig 1998).

The most compelling support for the L2 distribution of verb morphology comes from Robison (1995), who examined aspect distribution across temporal

contexts and found that L2 English learners marked achievements as past even when the events referred to present or future time. In Robison's study, (1995) L2 learners at lower proficiency levels associated present and past with lexical aspect, while at the more advanced levels they used temporal marking for tense distinctions. This finding has been confirmed in studies with controlled written tasks (Bergström 1995, Bardovi-Harlig and Reynolds 1995), showing that achievements and accomplishments i.e. 'events' are marked mostly as past, activities marked as progressive, while states are dominantly present. These findings support the claim that the developing verb morphology in L2, i.e. in the interlanguage, is largely influenced by lexical aspect, only to be superseded by the grammatical tense-aspect distinction.

Importantly, however, other studies testing the Aspect Hypothesis have challenged the strong claim that tense and grammatical aspect are acquired separately from lexical verb-inherent aspect (Bardovi-Harlig 1992, Robison 1995, Andersen and Shirai 1994; see Shirai 2003a, 2003b, 2006 for L1 acquisition). These researchers support the finding that L1 and L2 learners are initially influenced by aspect. For example in Bardovi-Harlig (1992), L2 learners used past tense with achievements more frequently than with activities or states. However, L2 learners in her study showed some use of tense across semantic categories and did not use past morphological markers for aspect rather than tense. In other words, morphological markings showed influence of lexical aspect in L2 data but did not support the Defective Tense Hypothesis, i. e. the Aspect Hypothesis (Bardovi-Harlig 1992; 2000:197).

As I pointed out earlier, numerous L2 studies testing the Aspect Hypothesis are varied in methodology and quantification techniques. Generally, these studies have expanded L2 tense-aspect research from untutored to instructed adult L2 learners in large cross-sectional data samples. Working on groups of L2 learners of a range of L1s and L2s has allowed researchers to study group scores and varying proficiency levels, minimizing the effect of individual variation and broadening the analysis of lexical aspect effects to more languages. The latter contributed to drawing more reliable conclusions about language-specific or universal effects of lexical aspect on development of L2 verb morphology (Bardovi-Harlig 2000).

Both data collection methods and elicitation tasks have also varied. As summarized in Bardovi-Harlig (2000:199), the tasks vary from oral and written personal and impersonal narratives, cloze passages and judgment tasks to retelling of silent films and picture stories. Thus, the tasks vary from spontaneous to controlled, resulting in variation in produced tokens per aspectual category and across categories. As observed by Bardovi-Harlig (2000), one of the methodological problems with respect to testing the Aspect Hypothesis in naturalistic, spontaneous production tasks, such as film or picture story retell, has been that “Certain types of predicates occur more frequently than others” (Bardovi-Harlig 2000:201), which has prompted researchers to use more directed tasks such as cloze passages and guided narratives (Bardovi-Harlig 2000:201).

This methodological point, while pertaining to elicitation techniques relevant to testing the Aspect Hypothesis, has also influenced the choice of tasks in this L2 study,

where I am using a cloze task and a picture-narrative task. I will return to this issue in the section discussing the data collection/elicitation methods in this bi-directional study on English and Russian as L1 and L2.

Although largely supported in a variety of studies, the Aspect Hypothesis has been challenged by some L2 studies' counterevidence (Bardovi-Harlig 2000). Methodologically, such studies addressed the same research issues as the studies supporting the Aspect Hypothesis, such as: a distinction between grammatical and lexical aspect; definition and coding of aspectual categories; and systematic quantification and analysis of the results (Bardovi-Harlig 2000:265-266). While the Aspect Hypothesis as such has not been significantly countered with falsifying evidence, some L2 studies have challenged its individual predictions. Bardovi-Harlig's (2000) discussion of such studies includes early L2 studies (Kumpf 1984; Rhode 1996; Robison 1995). For example, Kumpf's (1984) L1 Japanese/L2 English learner marked past only on states in the background, contrary to the Aspect Hypothesis.

However, as noted by Bardovi-Harlig (1999; 2000) and Shirai and Kurono (1998), the higher percentage of states were tokens of the verb *be*, which is a tense marker in English and does not occur in the base form; the overgeneralization of *be* was also prompted by the L2 learners' low proficiency level (Bardovi-Harlig 2000:267). Rohde (1996) and Robison (1995) found the use of *-ing* with punctual events in L2 English, also challenging the predictions of the Aspect Hypothesis. Because a large number of tokens were in fact the phrase *going to* for future marking, the results were

not interpreted as a challenge to the Aspect Hypothesis.

Salaberry (1999) found a high use of past across categories, not primarily on telic verbs (achievements and accomplishments), interpreting the finding as a challenge to the Aspect Hypothesis and stating that “the preterite may function as a default tense marker” (Bardovi-Harlig 2000:269). Similarly, Dietrich et al.’s (1995) meaning-oriented study on a number of L2s found that their results do not conclusively follow the Aspect Hypothesis. As Bardovi-Harlig points out, however, this study differs methodologically from the form-oriented studies and without a clear distinction of the aspectual classes can not adequately test the Aspect Hypothesis (Bardovi-Harlig 2000:269).

A parallel line of L2 tense-aspect research investigates the acquisition of tense relative to the acquisition of aspect. However, as argued by Bardovi-Harlig (2000), the Aspect Hypothesis predicts only the initial influence of lexical aspect in L2 acquisition, but does not question the acquisition of tense. Thus, studies researching the emergence of tense markers (Robison 1995; Bardovi-Harlig 1992) do not constitute counter-evidence to the Aspect Hypothesis *per se*; tense develops gradually and simultaneously, which is further argued under the Prototype Hypothesis (Andersen and Shirai 1994; Shirai and Andersen 1995), already outlined in the introduction. This leads Bardovi-Harlig (2000) to point out that “the ‘tense *or* aspect’ question receives a ‘tense *and* aspect’ answer when prototypical features of the past and perfective are taken into account” (2000:271). This statement will be of methodological significance in data coding and analysis in this study.

2. 2. 3. Overview of the studies on the Discourse Hypothesis

As already stated on page 17, the Aspect Hypothesis makes predictions regarding the correlations between verbal morphology and lexical aspect, but it does not take into account discourse effects in L2 production. Among the theoretical proposals regarding temporal relations in narratives, one important claim quoted in Bardovi-Harlig (2000:284) comes from Dahl (1984) and Hopper (1979, stating that “time reference is determined more by the narrative context than by tense itself” (2000:284). In order to better understand any interaction of verb semantics and text semantics when it comes to L2 tense-aspect acquisition, L2 researchers have added the influence of discourse functions as an important part of the analysis. A wide range of L2 studies have investigated primarily narrative discourse, gradually developing research on what has been termed the Discourse Hypothesis.

The Discourse Hypothesis, fully stated earlier on page 20, makes predictions about the distribution of verb morphology relative to discourse organization, i.e. information grounding. This line of L2 research relies on the theoretical and analytical principles first introduced by Hopper and Thompson (1980). The Discourse Hypothesis predicts that L2 learners will use past markings for the foregrounded events, whereas the verbs in the background will be primarily marked by base forms (Flashner 1989, Bardovi-Harlig 1992, 1995). Kumpf’s (1984) study of a Japanese learner of L2 English, referred to earlier in the section on the Aspect Hypothesis, points to somewhat different findings; Kumpf’s (1984) L2 learner used tensed stative verbs, mainly *be*, in the background together with the habitual and progressive aspect for active verbs; in contrast, base forms were found in the foreground.

Other relevant L2 studies investigated a range of L1 and L2s and used both qualitative and quantitative analyses of L2 data at varying levels of proficiency (Bardovi-Harlig 2000: Table 5.1; 286-288). Despite some counter-arguments regarding the reliability of this type of analysis in the research on L2 temporal relations, particularly at lower levels of proficiency (Bardovi-Harlig 2000), the Discourse Hypothesis has been largely supported in L2 research, showing that the verbs in the foreground will be marked as past regardless of their aspectual category (Bardovi-Harlig 1998).

Furthermore, it has been argued that both the Aspect Hypothesis and the Discourse Hypothesis should be considered together, where “telicity and grounding are not coincidental” (Bardovi-Harlig 1998:474). Namely, whereas the Discourse Hypothesis predicts a high percentage of past markings regardless of the aspectual category, the Aspect Hypothesis predicts a low percentage of past markings with atelic verbs regardless of grounding. As further explained in Bardovi-Harlig (1998), “If foreground verbs, regardless of aspectual class, were marked in the simple past tense, and background verbs were not, then this would constitute evidence for the Discourse hypothesis. If telic verbs, regardless of grounding, were inflected for the simple past and atelic verbs were not, then this would constitute support for the Aspect Hypothesis”(1998:474).

In her cross-sectional study of 37 pairs of L2 English oral and written narratives, Bardovi-Harlig (1998) found that (1) achievements are most highly marked by past, regardless of grounding; (2) accomplishments are the next aspectual category to be marked by the simple past, primarily in the foreground; (3) activities

are the least marked as past, with higher use of simple past in the foreground and the progressive in the background.

With respect to both hypotheses, Bardovi-Harlig (1998) interprets her finding as a hierarchy predicting which verbs in the narrative discourse will be morphologically marked by L2 learners of varying proficiencies: achievements, regardless of grounding; accomplishments (mostly in the foreground); activities (higher use of past morphology in the foreground). This analysis leads Bardovi-Harlig (1998) to conclude that the hierarchy shows “the influence of both aspectual class and narrative structure”(1998:498) and that, “Using verbs to construct discourse may be one way in which learners come to expand their interlanguage prototypes and move toward the point-of-view use of tense-aspect that characterizes a native speaker’s potential for creative use” (1998:499).

Although most discourse-oriented studies on L2 acquisition of tense-aspect investigate narrative discourse, a number of studies have looked at text types (Von Stutterheim and Klein 1989, Noyau 1984, 1990). Quoting Von Stutterheim’s L2 German study on narrative and descriptive discourse, Bardovi-Harlig (2000) emphasizes the importance of discourse type for dominant temporal relations. According to Von Stutterheim’s analysis of the discourse effects on L2 German tense-aspect relations, “In narratives temporal reference is moved forward by bounded events, whereas in descriptions unbounded states imply the maintenance of the temporal frame. Very low-level learners may rely solely on discourse type and temporal adverbials in the absence of verbal morphology, regardless of text type” (qtd. in Bardovi-Harlig 2000:318-319).

Looking at differences among narrative types, Noyau (1990) pointed out the importance of personal narratives for a more varied L2 use of tense-aspect morphology. Noyau contends that “Personal narratives offer less of a structure than fictional or retell narratives and thus offer greater potential for observing how the learner manages temporal reference outside the bounds of an essentially chronological structure (qtd. in Bardovi-Harlig 2000:319).

As she summarizes research on the role of discourse in L2 tense-aspect acquisition, Bardovi-Harlig (2000:320) argues for further inquiry into discourse organization, including “more varied narratives” and “non-narrative texts”. She exemplifies this line of research by referring to her work (Bardovi-Harlig 1999) on realis and irrealis in narrative, a qualitative analysis of fictional narratives geared toward more narrative features otherwise found in personal narratives, and a quantitative analysis of the difference between fictional and personal narratives (Bardovi-Harlig 2000:321). These important methodological and analytical points are relevant for this study on L2 tense-aspect acquisition, which uses a Frog Story retell task to elicit L2 data. The possible limitations of the fictional narrative are balanced out by the use of *both* a cloze passage⁵ and a narrative. I will discuss task types and possible task-effects in this study in Chapter 4, which lays out the methodology, and Chapter 6, the concluding chapter, respectively.

Regardless of the methodological nuances, it is clear that L2 tense-aspect acquisition cannot be fully analyzed without considering discourse structure. As Bardovi-Harlig (2000) contends, “...discourse is a central influence on the

⁵ For consistency in the choice of task type, cloze passages in both languages are also narratives.

distribution of tense-aspect morphology” (335). From the Discourse Hypothesis to discourse types, L2 tense-aspect distribution needs to be observed beyond verb and clausal semantics.

2.2. 4. Overview of the cognitive or prototype L2 studies

Other L2 studies on the acquisition of tense-aspect relations have expanded the research regarding the influence of verb semantics on the acquisition of verbal morphology; these studies have emphasized the role of the distribution of forms in the input, semantic prototypes, and three universal cognitive principles: the Relevance principle, the Congruence Principle, and the One-to-One Principle (Andersen and Shirai 1994, 1996, Shirai and Andersen 1995). Following Bybee (1985) and Slobin (1985), they explain their empirical findings about both first and second language learners as universal or prototypical tendencies in expressing tense-aspect, also typical of adult native speakers.

The three universal principles work as follows: (1) the Relevance Principle allows the learners to acquire first a grammatical morpheme if the meaning of the inflection is directly relevant to the meaning of the verb, closest to the verb stem (Bybee 1985)⁶; (2) the Congruence Principle (Andersen 1993) predicts that both learners and native speakers will use the verbal morpheme whose aspectual meaning is most congruent with, i. e. similar to the aspectual meaning of the verb, such as

⁶ As Andersen (1991:319) points out, the irregular past is first interpreted by L2 English learners as marking lexical aspect, and not past per se because inherent aspect is more relevant to the meaning of the individual verb.

telicity, perfectivity, and pastness (Giacalone-Ramat 1995 qtd. in Bardovi-Hralig 2000:425); (3) the One-to-One Principle (Andersen 1984) is applied by language learners such that they map only one meaning, i. e. function to each new verb morpheme.

In line with Rosch (1973), Ross (1973), Lakoff (1987), and J. R. Taylor (1989), Andersen and Shirai (1994) further contend that "...learners initially infer from the input directed to them the most prototypical meaning of each inflection and associate the inflection with the most prototypical members of each semantic aspect class of verbs" (1994:146). In other words, the claim is that in L1 and L2 acquisition a linguistic category is acquired by *starting from the prototypical members of the category* and later spreading to the less prototypical members of the category (Li and Shirai 2000). Building on cognitive principles and the lexical aspect hypothesis, Shirai and Andersen (1995) introduce the Prototype proposal in the research on L2 tense-aspect acquisition and argue that prototypical progressive marks activities and iterative achievements, such as *jump*, i. e. action-in-progress, whereas events which are telic, punctual, resultative, such as *arrive*, represent the prototypical past and/or perfective (1995:754-755).

The Prototype account of L2 tense-aspect acquisition "involves the spreading of the semantic boundaries of tense-aspect markers from prototypes to non-prototypes" (Li and Shirai 2000:79). Table 4.1. in Li and Shirai (2000:79) illustrates the spread, where the cell numbered '1' is the prototype.

	State	Activity	Accomplishment	Achievement
(Perfective) Past	4←	3←	2←	← 1
Progressive	4←	1→	2→	→ 3
Imperfective	1→	2→	3→	→ 4

In their review of the studies using the prototype framework to investigate L2 tense-aspect acquisition, Li and Shirai (2000) review L2 English small-scale studies, larger cross-sectional studies and also longitudinal studies on the acquisition of temporal markings in L2 English. (2000:80). While small scale studies, such as Robison (1990) and Huang (1993) supported the Prototype Hypothesis, largely finding consistent correlations between past tense morphology and dynamic verbs as opposed to stative verbs, cross-sectional studies, covering more data by a larger number of subjects, provide more evidence for this theoretical proposal (Li and Shirai 2000).

As mentioned earlier, important cross-sectional studies with 30 or more subjects of different L1 backgrounds and varying proficiency groups provide more data to analyze the spread of morphology from the prototype to the non-prototype, as shown in the figure above. Robison's (1995) findings were consistent with the hypothesis for the prototype progressive/past (activities) relative to non-prototypes (achievements), but no significant difference was found in restriction to prototypes between less advanced and advanced L2 English learners, which went against the Prototype Hypothesis (Li and Shirai 2000:81).

In Bardovi-Harlig (1992), a 135-subject cross-sectional L2 English study, the results were consistent with the Prototype Hypothesis (Li and Shirai 2000:82). States

were marked for past less than were activity verbs. As emphasized by Li and Shirai, “Activity-achievement differences are more than 20% for four levels, whereas state-activity differences are less than 5% for four levels” (2000:82). Following the Prototype Hypothesis, achievements (+telic +punctual +dynamic), the prototype past, share only one feature with activities, (+dynamic), but activities share two features with states, in that they are –telic –punctual” (Li and Shirai 2000:82). Thus, the Prototype Hypothesis provides an additional explanation of the results (Li and Shirai 2000:82).

A similar, important study, Bardovi-Harlig and Reynolds (1995), further supported the Prototype Hypothesis, showing a higher past marking on achievements and accomplishments rather than activities and states. At higher L2 learner levels, however, states were marked with the past more consistently than were activities. Although this does not support the Prototype Hypothesis, it follows some of the earlier research showing that the difference between activities and states is not so significant (Li and Shirai 2000:82). Another cross-sectional study, by Bardovi-Harlig and Bergström (1996) reported similar results, where activities were most frequently in the progressive aspect, with achievements in the past, thus supporting the Prototype Hypothesis (Li and Shirai 2000:83).

The two relevant small-scale longitudinal studies reviewed by Li and Shirai (2000) include Rohde (1996) and Lee (1997). The results of these studies are in part consistent with the Prototype Hypothesis, with two inconsistent findings. In Rhode (1996), two L1 German children used progressive with achievements to express future meaning (Li and Shirai 2000:83). The results from the two L1 Korean children

in Lee (1997) showed inconsistent patterns in the spread of the past for the younger, 10-year old subject as opposed to the 14-year old, as well as in the spread of the progressive for both subjects (Li and Shirai 2000:83-84).

This result can be compared to the findings in the cross-sectional studies with instructed L2 learners, where the development of prototype to non-prototype showed stronger effect in the intermediate level rather than the beginning level learners (Li and Shirai 2000:84). The result may suggest that in the beginning stages of L2 English acquisition, the spread of prototype to non-prototype is not the primary acquisition pattern in L2 English, but is likely preceded by a less regular pattern and formed in the next, more stable stage of L2 English tense-aspect acquisition.

In addition to these L2 English studies, Li and Shirai (2000) contribute to the testing of the Prototype Hypothesis by analyzing L1 Chinese and L1 Japanese data, expanding the prototype account research with important cross-linguistic findings. Although these are not L2 findings, they are significant in the light of the Prototype Hypothesis and cross-linguistic variation in tense-aspect acquisition. Since language-specific aspects of L2 acquisition are the focus of this study, I will briefly summarize the findings as relevant to the research on cross-linguistic factors in tense-aspect acquisition.

In a series of three cross-sectional studies using both comprehension and production tasks, Li and Shirai (2000) investigated lexical and grammatical aspect in L1 Mandarin Chinese. In the first experiment, the children's comprehension indicated that they understood progressive marker *zai* better with activities and semelfactive verbs

(i.e. verbs such as *cough*, *tap*, *knock*, which indicate repeated events when used with progressive (Li and Shirai 2000: 97) than with accomplishments. In contrast, perfective *le* was consistent with accomplishments, while there was no difference in either of the two aspectual particles with activities and semelfactives or states (Li and Shirai 2000:123).

The second, production experiment, resulted in the use of imperfective markers *zai* and *ne* primarily with activities and semelfactives (Li and Shirai (2000:123). In the third, imitation part of the study, again, perfective marker *le* was used with achievements, whereas states were used both with the perfective marker *le* and the imperfective marker *zai* (Li and Shirai 2000:123-124). With the results showing strong correlation between imperfective and atelic verbs and perfective and telics, Li and Shirai conclude that, due to the verb typology in Chinese, “the difference between achievement and activity verbs ... comes not from the punctual but from the resultative meaning” (Li and Shirai 2000:124). L1 Chinese children’s connecting of lexical and grammatical aspects become more pronounced over time, which leads Li and Shirai to a conclusion that that this is due to “the learners’ analysis of the distributional properties in the speech they hear, and to their ability to extract patterns of association between lexical and grammatical aspect” (2000:125).

The next test case for the prototype account in Li and Shirai (2000: 129-148) is the analysis of the L1 and L2 acquisition of tense-aspect in Japanese. As defined by Li and Shirai (2000), the Japanese tense-aspect system is similar to the one in English, the major difference between the two being that the Japanese past tense marker *-ta* is commonly analyzed to have the meaning of perfective (Li and Shirai

2000:129). Another important variation from a system like the one in English is that the Japanese imperfective *-te i-*, when combined with achievements, can express a resultative state but can not express a process that leads up to the punctual point; rather, it is limited to the duration of the resultative state. For instance, *The horse is winning the race*, can not be expressed in Japanese, while *Ken is dying* in English can only be expressed as *Ken is dead* in Japanese (Li and Shirai 2000:130-131). The Japanese imperfective marker, then, expresses progressive with durative verbs and resultative with achievements (Li and Shirai 2000:131).

The results from the L1 and L2 studies suggest that the Prototype account does not explain the variation in the acquisition of Japanese. In L1 acquisition, Li and Shirai (2000) argue that the fact that there is a higher percentage of *-te i-* with achievements in adult speech, as opposed to activities in child speech, points to a number of influencing factors, such as conceptual-grammatical salience (activities marked morphologically as salient rather than states), as well as the input distribution (Li and Shirai 2000:146-147, emphasis mine).

In L2 acquisition, a number of factors such as input and L1 effect, together with the effect of instruction in tutored L2 Japanese learners, contribute to the L2 Japanese tense-aspect acquisition (Li and Shirai 2000). Overall, then, the prototype proposal accounts only in part for the trends in the acquisition of Japanese as L1 and L2. While there are strong cross-linguistic correlations between morphological markings and specific lexical categories, these links are generally stronger in the earlier stages of both L1 and L2 acquisition; the correlations tend to differ from one language to the next, pointing in the direction of language-specific factors in the

acquisition of tense-aspect (Li and Shirai 2000).

One additional important point by Li and Shirai (2000), which will be considered in this study, is that “the general acquisition pattern of associations between lexical and grammatical aspect has to do with the probabilistic nature of the associations” (188-189). In particular, L2 acquisition is characterized by variability in the form-function mappings, dependent upon both semantic and grammatical factors that range from cognitive or universal factors; to the L1 conceptual-grammatical influence; to the interaction between other learner-specific, i.e. internal as well as external, i.e. input/target L2-driven effects.

In order to examine the significance of the factors that are examined in this study, I turn to what I will term *language-specific conceptual approach* and to the role of the *L1 tense-aspect prominence* effects in L2 acquisition. While this approach addresses prominence as a potential for crosslinguistic influence, i.e. transfer, it should not be identified with but rather considered distinct from the term conceptual transfer (Jarvis 1998, Odlin 2005), discussed further in section 3.5.

2.3. Constructing an L2 tense-aspect system: language-specific conceptual approach and the influence of L1

In the earlier section of this study, where I introduce the background literature, the term conceptual refers to the functional or meaning-oriented studies on the L2 acquisition of tense-aspect; the studies investigate the development of forms for the tense-aspect meanings across different languages. In line with the predictions of the Grammatical Domain Hypothesis (GDH), I wish to expand the use of the term

conceptual in two ways.

First, I use the term *conceptual approach* to refer to researching *tense-aspect concepts specifically expressed in L1s that are not found or whose forms are dissimilar in L2s*. Although broadly, this definition of ‘conceptual approach’ comes close to the notions of ‘meaning transfer’ and ‘conceptual transfer’ (Odlin 2005), I use the term specifically to identify dissimilar conceptual-grammatical links in L1 and L2 in the domains of grammar such as tense-aspect (Slobin 1991, 1996a, 1997). If, for instance, one follows the theoretical proposal that languages can be categorized as tense-prominent and aspect-prominent (Bhat 1999), then the L2 learner, caught between the L1 and L2 of two types, has to reorganize the *conceptual representations* and/or morphological or other formal devices needed in talking about time in L2. Hence, the term *conceptual approach* is adequate for the analysis.

One such example, which is my focus in this study, is the case of an L1 Russian L2 English learner. As will be reviewed in detail in Chapter 3, and as stated before, Russian can be identified as an aspect-prominent language, whereas English, in contrast, can be classified as tense-prominent; they differ in the prominence with which aspect is grammaticalized in Russian as opposed to tense in English. Russian tense-aspect verb morphology, helped by other formal linguistic means, such as adverbials, ‘favor’ varied, nuanced distinctions in aspectual meaning. English tense-aspect morphology gives prominence to tense distinctions and relies both on regular/irregular morphology and on the complex verb phrase, i. e. periphrastic forms where tense-aspect concepts are typically expressed by a verb phrase consisting of an auxiliary and the base verb.

For instance, to express the concept of having finished/completion of ‘reading a book’, in Russian it suffices to use a prefixed perfective verb, *pro-čitat’ knjigu*; in English, depending on the tense, the concept can be expressed as *read a book* or *have/has read a book*. Allowing for a complex picture based on such linguistic polarity, it can be hypothesized that these form-function mismatches will significantly affect the L1 English L2 Russian learner.

Second, the overarching, more general question regarding language acquisition is whether knowledge of language is innately specified prior to exposure or is learned as the learner is exposed to language input. As mentioned in the introduction, the debate between the nativist and functional theoretical models, respectively, has influenced research in both L1 and L2 acquisition. Research on the universal linguistic properties, such as the punctual/non-punctual distinction in the study of lexical aspect, for instance, is part of the debate on the innateness of language and language learning (Li and Shirai 2000:194-202).

Admittedly, tense-aspect acquisition research demonstrates that the differences between L1 acquisition and L2 acquisition need to be observed both in the context of universal typological and language-specific factors. Examples of such factors include the critical period for language learning; the use of the progressive markings on stative verbs in L2 acquisition, which is not typical of L1 acquisition; the problem of ultimate attainment and the lack of stable distribution and consistency of form-function mapping, in L2, as opposed to L1. As Li and Shirai put it, “...L2 learners can not create uniform, stable form-function mapping to the same extent as L1 learners can” (2000:193).

Arguing to extend L2 tense-aspect acquisition research to language-specific factors, I add the term *language-specific* to the term *conceptual* study, thus defining my approach as: (1) *conceptual*, i. e. meaning-driven; (2) investigating *language-specific* linguistic means of talking about time in specific languages. In other words, such an approach acknowledges both universal and language-specific factors but narrows down the main research question to the tense-aspect grammatical means and their semantic representations that *vary in salient ways between L1 and L2*.

One way to provide the rationale for *the language-specific conceptual approach* is to support functional theoretical proposals and to view L2 tense-aspect acquisition as a functional, probabilistic process whereby learning L2 tense-aspect categories and forms develops gradually; L2 learners rely on both lexical aspect categories and the L1-specific tense-aspect system⁷. For instance, in their functional connectionist proposal, Li and Shirai (2000) refer to Givón (1979, 1995), Delancey (1998), who argues that while nativist proposals take universal language properties to be reflective of innate categories, cross-linguistically shared language properties do not have to be innate (2000:202).

In fact, Li and Shirai's research on language-specific tense-aspect patterns and the acquisition of those patterns in English, Chinese, and Japanese, prompts Li and Shirai (2000) to propose their "functional, input-based probabilistic learning approach (2000:206) and argue that "approaches that place undue emphasis on the initial innate structure of linguistic knowledge can not account for the facts and processes in the acquisition of lexical aspect and tense-aspect morphology" (2000:205).

⁷ This argument has been made in L1 research, which I review in detail in Chapter 3, section 3.5., where I review related L1 and L2 research on language-specific conceptual-grammatical links.

The research goal in this study, then, is to examine if and how any dominant differences in the specific, salient tense-aspect features of the L1 and L2 affect L2 tense-aspect acquisition. What happens once the L2 learner moves from the initial, presumably prototypical stage in the acquisition of, for instance, perfective, imperfective, progressive aspect and the corresponding grammatical forms? Does past coincide with perfective? Do progressive and imperfective functions fully match (Bardovi-Harlig 1998)?

More importantly, what happens if an L2 does not have progressive or the perfective/imperfective distinction? What is the relevance of discourse markers and functions in mapping out the tense-aspect relations for the L2 learner, such as adverbials, connectivity, sequencing, etc, as emphasized by the conceptual approach (c.f. Stutterheim and Klein 1987).

This study will use *a language-specific conceptual* framework to examine such language-specific influences in L2 English and L2 Russian tense-aspect acquisition. In the next Chapter, I provide the background for the methodology, presentation and analysis of the results in the study. I will first review the tense-aspect typological profiles of Russian and English. The English tense-aspect system will be discussed as tense-prominent, characterized by the primary and secondary tenses and some morphological inflections on the verb. Russian, on the other hand, will be discussed as a language with aspect as the dominant semantic temporal category, expressed by the productive verb morphology.

In the overview, I follow Bhat's (1999) theoretical proposal, where English is classified as a tense-prominent language, and Russian is identified as an aspect-

prominent language. Similar theoretical principles, classifying languages as satellite-framed and verb-framed have also been used by Berman and Slobin (1994) and Slobin (1991, 1996a, 1996b, 1997, 2000, 2003, 2004, 2006) in the L1 research on spatial relations across languages.

Chapter 3

Typological Profiles of English and Russian

An Overview

Before getting into the discussion of the cross-linguistic research on language-specific influences, which has a bearing on the methodology and hypotheses proposed in this dissertation, I outline the relevant typological features of the tense-aspect systems in Russian and English, L1 and L2 in the study, respectively. I will discuss tense-aspect features of Russian and English by referring to Bhat's (1999) categorization of languages as tense-prominent and aspect-prominent. I will review the tense-aspect typological markers in Russian and English as languages with complex temporal systems, where varied morpho-syntactic devices are used to express distinct tense-aspect functions.

Within the temporal systems in the two languages, some temporal categories coincide, whereas others have language-specific functions. For example, both languages have grammatical tense categories present, past, and future but differ in aspectual contouring in that English makes a distinction between the progressive and perfect, while in Russian the aspectual distinction is between the imperfective and perfective. This tense-aspect distribution is represented in the figure below.

Tense-aspect categories	English	Russian
Progressive	+	–
Perfective/Imperfective	–	+
Perfect	+	–

Evidently, there is an asymmetry in the encoding of grammatical aspect in the

two languages and in the functions assigned to the temporal-aspectual categories. Russian exploits the perfective/imperfective distinction, making this aspectual pairing dominant, i.e. *prominent* in its tense-aspect system. Perfective/imperfective aspectual pairs are what characterizes and dominates the verb system in Russian; while imperfective has present, past, and future tenses, perfective has no present tense, and its present forms denote future meanings. English, on the other hand, lacks the paired perfective/ imperfective distinction, and has progressive and perfect, all marked for tense; its tense-aspect system is dominantly, i.e. *prominently*, marked by tense rather than aspect.⁸

While only a detailed description of the lexico-semantic functions can fully show the complexity of the comparison (c.f. Bhat 1999), it is clear that the basic mismatch in form-function mappings may present a challenge for an L2 learner of either language. For instance, an L1 Russian/L2 English learner has to introduce the category progressive into his/her tense-aspect system, whereas an L1 English/L2 Russian learner has to learn all the aspectual forms and functions absent from his/her L1. Furthermore, in using a temporal system of a language, the L2 learner has to be able not only to construct simple clauses but also to code “the connectedness—or coherence—of sentences in their wider discourse context” (Givón 1984:269). For the learner, then, the challenge is multiple: structural, conceptual, and pragmatic.

As it has already been noted, the verb is a category central to the temporal-aspectual relations. Givón (1984) states that “of all lexical categories the verb is most intimately associated with coding states/events/actions in the proposition. There exists

⁸ *I am reading* as opposed to *I was reading* shows a difference in tense, as do *I have read*, *I had read*, and *I will have read*. In Russian, *Čítaju* ‘I am reading’ or ‘I read-PRES’ and *Pročítaju* ‘I will read (and finish reading)’ puts

[...] a gradation from the lexical-semantic properties of verbs, to their propositional-semantic properties in coding states/events/actions, and onward to their contextualized properties in connected discourse” (1984:269-270). In other words, the verb complex with its grammatical and propositional properties helps build the temporal expression in a language. For this reason, going beyond the inherent verb properties helps to understand fully the complex learning task an L2 learner of two mismatching verb/temporal systems is confronted with.

The complexity of the temporal relations (TAM =Tense-Aspect-Modality) is summarized in Givón (1984), who defines these categories as lexical-semantic features, related to the verb meanings, as propositional-semantic features, which “code various facets of the state, event, or action”; and as discourse-pragmatic features, necessary in discourse organization (184:269). While tense systems involve the fundamental features of sequentiality and point of reference, other components in verb semantics are relevant for aspectual coding, i.e. durative vs. punctual (or, unbounded vs. bounded), and perfective/completive vs. imperfective/incompletive. According to Givón, “Tense involves primarily—though not exclusively—our experience/concept of time as points in a sequence, and thus the notions of precedence and subsequence. Aspects of various kinds involve our notion of boundedness of time-spans, i.e. various configurations of beginning, ending, and middle points. But in the semantic space of aspect, nearly always some element of tense is also involved, in terms of establishing a point-of-reference along sequential time” (1984:272).

The distinctions among these categories, while motivated by verb lexical

semantics cross-linguistically, do not necessarily coincide or code the same set of functions across languages. In other words, tense-aspect systems are language-specific as much as universal. Givón's observation about perfectivity illustrates this point, "[...] it would be erroneous to assume that the time-axis for the imperfective/incompletive is in the middle of the event, just like it is for the durative aspect. Rather, the cognitive/communicative focus in construing perfectivity is that of termination, while in construing durativeness it is of being in the middle" (1984:276). Thus, if a language tends to mark tense-aspect reference along the durative/punctual boundary, it may contrast in an important way with a language that marks tense-aspect as perfective/imperfective. English and Russian, the L1s and target languages in this study, represent examples of such a mismatch in tense-aspect reference.

3.1. Tense-Aspect in Russian: A Typological Profile

Tense	Present	Past	Future
Aspect	Imperfective	Imperfective	Imperfective
		Perfective	Perfective Present

The tense-aspect system of Russian is notably marked by aspect, which, as noted earlier, has led some researchers to label this type of temporal system 'aspect-prominent' (Slobin 1991, Bhat 1999). The imperfective/perfective aspectual contrast is central to the Russian temporal grammar at all three significant levels: verb lexical semantics, propositional semantics, and discourse/pragmatics (Filip 2003, Polinsky 2008.). It is an obligatory category that marks the temporal boundary and contouring of the situation in the present, past, and future tense.

Thus, with respect to time-reference, conceptually and communicatively, a situation in Russian has to be either imperfective or perfective. This aspectual dichotomy is essential to the Russian grammar. The form-function nuances of the aspectual contouring in Russian illustrate the prominence of aspect as a grammaticized, obligatory, systematic, and pervasive (Bhat 1999) marker of the Russian tense-aspect system.

Verbal Aspect of the verb *čitat*’, ‘read’:

Imperfective	Present	Past	Future
3pSG-MASC	<i>čita-et</i>	<i>čita-l</i>	<i>budet čita-t</i>

Perfective	Present	Past	Future (Present used for Future)
3pSG-MASC	<i>pro-čita-et</i>	<i>pro-čita-l</i>	

As pointed out by Polinsky (2008), the imperfective/perfective aspectual pairs in Russian are mainly formed in the below exemplified forms: from perfective verbs through imperfectivizing suffixation; from infinitive verbs to perfectives through prefixation, and from a combination of prefixes and suffixes. The examples from Polinsky (2008) illustrate this description of Russian aspectual distinctions.

- | | | | |
|-----|----|----------------|------------|
| (1) | a. | <i>zvat</i> | ‘call’ |
| | b. | <i>po-zvat</i> | ‘call up’ |
| (2) | a. | <i>delat</i> | ‘do, make’ |
| | b. | <i>s-delat</i> | ‘do, make’ |
| (3) | a. | <i>moč</i> | ‘manage’ |
| | b. | <i>s-moč</i> | ‘manage’ |

- (4) a. *dat* 'give' (perf.)
 b. *da-va-t* 'give (imperf.)
- (5) a. *kričat* 'scream'
 b. *krik-nu-t* 'scream' (punctual)
 c. *po-krik-iva-t* 'shout regularly'

Examples (4) b., (5) c. and (6) b. below show that the imperfective suffixation in Russian is mainly regular:

- (6) a. *prognat* 'chase away' (perf.)
 b. *progonj-a-t* chase away (imperf.)

Some aspectual pairs are irregular, i.e. formed through **suppletion**:

- (7) a. *brat-vzjat* 'take' (imperf./perf.)
 b. *govorit'-skazat* 'say' (imperf./perf.)

(Polinsky 2008:5).

Polinsky further points out that "aspectual prefixes are varied and verb-class-dependent" (2008:6), which makes the derivation of prefixed perfective verbs a lexical process, and shows that aspect in Russian, in fact, is a combined inflectional and derivational system (Polinsky 2008:6; Comrie 1976, Dahl 1985, Filip 1999, as qtd. in Polinsky 2008:6).

Importantly, Polinsky emphasizes Filip's discussion of Russian aspect (1999, 2003, qtd. in Polinsky 2008), stating that for the complete understanding of Russian aspect the following three components are needed: (1) individual verb classes within "the homogeneous predicate category"; (2) fine lexical desinctions within affixes, especially prefixes, and (3) the use of the morphological rules, especially those

deriving lexical items, particularly through prefixation (qtd. in Polinsky 2008:6).

The complex form-meaning associations in derived prefixed verb forms are very well illustrated in Polinsky's (2008:8, manuscript) set of examples for the base verb 'cook' in Russian.

- (8) a. *-varit* 'cook, boil' (impf.)
 b. *s-varit* 'boil, cook' (perf.)
 c. *za-varit* 'brew' 9e.g. (tea)
 d. *na-varit* 'cook a large quantity'
 e. *ob-varit* 'scald'
 f. *pod-varit* 'conduct some additional boiling'
 g. *ot-varit* 'boil'
 h. *do-varit* 'cook as much as required'
 i. *pro-varit* 'cook through, cook fully'
 j. *vy-varit* 'boil through'
 k. *u-varit* 'reduce, pouch'
 l. *pere-varit* 'overcook'

The verbal aspectual variation, i.e. nuanced semantic perspectives shown above, provide an example of both the morphological and functional elaboration of aspect in Russian.

In the enormously rich literature on aspect in Russian, Brecht's (1985) important, detailed analysis identifies the salient properties of Russian aspect that contribute to its prominence. Brecht (1985) notes, "The correlation of telic situations with perfective aspect and atelics with imperfectives has very strong formal

(derivational and syntactic) and semantic support in Russian” (1985:11). Aspectual imperfective/perfective verb pairs are formed by prefixation or by derivational suffixation. Imperfective, the typologically unmarked member of the pair, combines with all the tenses to express atelic (i.e. unbounded, habitual, and/or consecutive situations). In terms of Vendler’s categories (1967), achievements and accomplishments are grammatically marked by the perfective, whereas states and activities are expressed by the imperfective.

Atelic verbs are usually simplex, and form the perfective by adding a prefix to the stem.

ATELIC SITUATIONS:

	IMPF	PF	
STATE	<i>umet’</i>	<i>s-umet’</i>	‘know how’
	<i>bojat’sja</i>	<i>po-bojat’sja</i>	‘fear, be afraid’
ACT.	<i>dumat’</i>	<i>po-dumat’</i>	‘think’
	<i>myt’</i>	<i>vy-myt’</i>	‘wash’
	<i>est’</i>	<i>s-est’</i>	‘eat’

(Brecht 1985:12)

In general, telic verbs are prefixed, and their imperfective verb counterparts are formed by adding a suffix, or by morphologically modifying the stem, as shown below.

TELIC SITUATIONS:

IMPF	PF
------	----

ACC.	<i>dokaz-yv-at'</i>	<i>dokazat'</i>	'prove'
	<i>reš-a-t'</i>	<i>rešit'</i>	'solve'
	<i>otkryvat'</i>	<i>otkryt'</i>	'open'
ACH.	<i>slučat'sja</i>	<i>slučit'sja</i>	'happen'
	<i>priežžat'</i>	<i>priexat'</i>	'arrive'
	<i>privykat'</i>	<i>privyknut'</i>	'become used to'

(Brecht 1985:12)

The formal correlation of telics with perfective aspect and imperfectivizing suffixation and atelics with perfectivizing prefixation is further confirmed in a class of Russian verbs called “perfectiva tantum” and “imperfectiva tantum”, which express either telic or atelic situations, respectively. In the examples below, verbs expressing atelics, i.e. states and activities, are imperfective with no perfective counterparts, whereas telic achievements are perfective and have no imperfective pairing.

(States)	<i>imet'</i>	'have'
	<i>spat'</i>	'sleep'
(Activities)	<i>rabotat'</i>	'work'
	<i>tjanut'</i>	'pull'
(Achievements)	<i>ruxnut'</i>	'collapse'
	<i>uliznut'</i>	'slip away'

(Brecht 1985:13).

To complicate matters further, inherently telic or atelic situations can be transformed into their opposite via the process of telicization/atelicization, thus “changing the basic character of the situation itself” (Brecht 1985:14). The change is a conceptual one as much as grammatical, whereby a part of the situation or the whole situation can be viewed differently by the speaker. This cognitive-communicative change is formally expressed by a morphological change on the verb itself.

Perfective marks telic (i.e. bounded, resultative) situations, but the temporal contouring may focus on semantically different situations. In fact, atelic situations can be changed into telics, i.e. imperfectives can change to varying perfective functions through lexical prefixation. For example, the verb *pisat'*, ‘write’ denotes an unbounded activity. Its perfective counterparts, formed by lexical prefixation, have different meanings, such as *za-pisat'*, ‘jot down’, *na-pisat'* ‘finish writing’, *pere-pisat'*, ‘rewrite’ (Brecht 1985:14-15). The lexically derived perfectives imply a goal or endpoint. Similarly, another atelic situation such as *čitat'* ‘read’ (imperfective, activity) can become perfective, goal-oriented, focusing on different components of the same situation, as in *pere-čitat'* ‘reread, read over’, *za-čitat'* ‘read out’, *do-čitat'* ‘read up to’. (Brecht 1985:15).

Perfective may mark a different semantic component of the same situation, such as “its inception, conclusion, intensification, a limited period of duration, or the like” (Brecht 1985: 15). This “sub-lexical” (Brecht 1985:15) grammatical process in a tense-aspect system like Russian is often called Mode of Action (Sposob Dejstvija, or Aktionsart). In this case, verbal temporal contouring may vary, focusing on a

different semantic content of a situation, ‘whether it be its inception, conclusion, intensification, a limited period of its duration, or the like’ (Brecht 1985:15). An example from Brecht (1985) illustrates this functional feature of the Russian perfective: *vy-kurit*, ‘finish smoking’, *za-kurit*, ‘light up, start to smoke’, *po-kurit*, ‘smoke for a while’, *na-kurit-sja*, ‘smoke one’s fill’ (1985:15). As noted by Brecht (1985), “...sublexical prefixation involves a semantic field which focuses on a component of the situation, whereas lexical prefixation creates a quite different situation entirely” (16).

On the other hand, a telic situation *objasnit* ‘explain’ (perfective, accomplishment) can change to *objasnat* (imperfective, activity); *priiti* (perfective) can change to *prihodit* (imperfective) ‘arrive, come up to’ (achievement changes to iterative, i.e. habitual or, by semantic extension, to a state, as noted in Comrie 1976, Brecht 1985).

The morpho-semantic process of atelicization is quite complex in Russian. As pointed out by Brecht, “the particular notions of Process, Repetition, and Conation arise as a result of the amalgamation of the meaning of the imperfective aspect with the telic situational types” (1985:18). Atelicization of Accomplishments results in activities and the notion of process, (*objasnit* /*objasnat*, ‘explain’) whereas atelicized Achievements are grammaticalized into repetition/repeated states (*prihodit* /*uhodit*, ‘come/go’) (Brecht 1985:19). Similarly, accomplishments may atelicize into states adding the meaning of repetition, usually with an added adverbial (*vsegda objasnjal*, ‘always used to explain’ while atelicized Achievements shift to activities (*dolgo privykal*, ‘took a long time to adjust’) (Brecht 1985:23). Examples of propositional

aspectual support will be further discussed below.

A related semantic shift occurs between telics. In this case, the use of the imperfective for complete events is also referred to as *konstatacija fakta* or statement-of-fact; an imperfective verb refers to a statement of result for an activity, but no statement of its end-point. In the examples below, the imperfective focuses on the activity of window-opening or book-reading, whereas the perfective indicates the end-result of a specific, individual situation, i.e. the open window and the book which has been read.

Vanja *uže* *otkryva-l* *okno.*
 Vanja-NOM already opened-IMPF-3pSG-MASC the window
 (repeatedly, habitually)

‘Vanja already opened the window repeatedly.’

Vanja *uže* *otkry-l* *okno.*
 Vanja-NOM already (has) opened-PF-3p-SG-MASC the window
 (one-time, recent event)

‘Vanja has already opened the window.’

On *čita-l* *etu* *knjigu.*
 he-NOM read-IMPF-3pSG-MASC that-ACC book-ACC

‘He read that book.’

On *pro-čita-l* *etu* *knjigu.*
 he-NOM read-PF-3pSG-MASC that-ACC book-ACC

‘He has read that book.’

At the propositional level, verb morphology and adverbials together create a semantic context for the intended imperfective/perfective situation. Whereas verb prefixes and derivational suffixes are the main productive morphological devices, specific adverbials help create the aspectual context for the intended situation (Brecht 1985, Rassudova 1977). While there is generally a correlation between situational semantics and aspect, many Russian verbs can express semantically varying situations (Forsyth 1970, Brecht 1985).

As already shown with individual verbs above, specific adverbials and direct objects contribute to the semantic shift within the category of telic or atelic. Some examples from Rassudova (1977) illustrate this tense-aspect feature.

Ja dolgo privyka-l k vašemu klimatu.

I (for) a long time was getting used-IMPF to your climate

‘I was getting used to your climate for a long time.’

(qtd. in Brecht 1985:23)

Ja uže prinima-la aspirin, no golova bolit.

I already took-IMPF aspirin, but head hurts

‘I took aspirin already, but my head still hurts.’

Vsu noč ne somknu-l glaz

‘All night I didn’t close-PF eyes-DO-ACC-PL’

‘I didn’t sleep all night long.’

(Rassudova 1977:142-143)

Examples such as these led Rassudova (1977) to conclude, “A majority of

contexts admit both aspects, a change of aspect being accompanied by a change in the meaning of the utterance” (143) [emphasis mine]. Evidently, such a variable semantic-propositional status of the two aspects accounts further for the complexity of the aspect-driven system.

However, Rassudova (1977) also notes that the marked perfective is semantically more definite and fixed, whereas the unmarked imperfective has a greater semantic variability, partly referring to the imperfective-specific contexts, and *in part sharing contexts with the perfective* (see also Brecht’s (1984) theoretical argument on the form and function of the Russian aspect). [emphasis mine] A related argument for sentence-level analysis is also put forth by Brecht (1985).

The examples below (Rassudova 1977:140) show semantic variability of the imperfective, as in the (a) inceptive-one-time occurrence; (b) iterative-single consecutive repeated actions; and (c) general validity-statement of fact, respectively.

(a) *Načina-l-sja* *dožd’*, *smerka-lo-s’*
 started-IMPF rain got dark-IMPF

‘It was starting to rain; it was getting dark.’

(a) *Nača-l-sja* *dožd’*, *smirk-lo-s’*.
 started-PF rain got-dark-PF

‘It started to rain; it got dark.’

(b) *Boljnoj prosypa-l-sja na neskoljko minut i opjat’ zasypa-l.*
 the patient woke up-IMPF every few minutes and again went to sleep-

IMPF

‘The patient was waking up every few minutes and going back to sleep again.’

- (c) *Ja* *zvoni-l* *emu.*
 I-NOM called-IMPF he-DAT (iterative, habitual)
 ‘I called him.’ (repeatedly)

In traditional grammars and literature on the Russian aspect such semantic overlap between the imperfective and perfective is often termed *the competition of aspects* (Brecht 1985). Overall, then, a seemingly straightforward aspectual dichotomy in Russian covers a complex and often variable set of tense-aspect referential functions expressed by verb classes, verb morphology, adverbials, as well as the total contextual and pragmatic meaning of the intended situation. While it is clear that any complete linguistic analysis of tense-aspect relations should include verb, propositional, and discourse tense-aspect features, the relevant features in Russian indicate the prominence of aspect over tense at all levels of analysis.

3. 2. Tense-Aspect in English: A Typological Profile

The tense-aspect system in English distinguishes progressive and perfect, the aspectual categories missing from the Russian system. English does not have the imperfective/perfective distinction; rather, tense-aspect reference is more tense-oriented (Givón 1984, Berman and Slobin 1994). Tense is a deictic category; it relates the time of a situation to speech time. Aspect, on the other hand, marks the way in which a situation is viewed, i.e. two situations can be of the same tense reference, but can differ in the internal temporal contouring as viewed by the speaker.

For example, in a verb like *sing*, *I sang* is the simple past form expressing a

completed activity/accomplishment, which may have been a one-time occurrence (Givón 1984) or may have had longer duration in the past (Noonan 1991) but is viewed as completed; on the other hand, the progressive form *I was singing* focuses on the duration of the activity in the past. Perfect, semantically the most complex tense-aspect category, introduces additional features: completeness, current relevance, anteriority, and counter-sequentiality (Givón 1984).

As already discussed earlier, the fact that aspectual contouring in English depends on the location of a situation on the timeline has contributed to categorizing English as a tense-prominent language (Slobin 1991, Bhat 1999, Givón 1984 for progressive). The tenses express a range of lexical-semantic, propositional, and pragmatic functions, combining with the aspectual meanings to entail within-situation distinctions related to temporal reference.

<i>Tense</i>	Present	Past	Future
<i>Aspect</i>	simple	simple	simple
	progressive	progressive	progressive
	perfect	perfect	perfect

Tense-prominence in the English tense-aspect system can be further shown by Noonan's analysis of primary and secondary tenses in English (Noonan, 1991, unpublished).

<i>Primary tenses</i>	Present	Past	Future
	Simple	Simple	Simple
(simple/sequential	be/is	was	will be

time reference relative to time of speech)

Secondary tenses

Perfect

Perfect

Perfect

(relative,
been

have been

had been

will have

i.e. time reference relative to

primary tenses)

Prospective

Prospective

Prospective

be/is to

was to

will be about to

was about to

was going to

be going to

would +Inf

Whereas the primary tenses (linearly) mark sequentiality relative to present time as point of reference, the main function of secondary tenses is to code an event out of sequence (past or future) relative to speech time, i.e. in reference to a primary present, past, or future tense. Primary present tense is also used for statement of fact/general truth, i.e. generic or habitual events or states that are temporally unbounded. The present perfect, which links up primary present and secondary past “is used to *refer to time extending from a period in the past to the present, and to past events whose results persist into the present*” (Noonan 1991: 53) [emphasis mine]. Here are some examples.

Present Perfect:

‘John has done his homework.’

‘Gerald has been in Argentina.’

‘After Ginger has done homework, she will call her boyfriend.’

Perfect further combines with the past and the future, as in:

Past Perfect

‘Mary had finished dinner when I got back home.’

Future Perfect

‘Mary will have eaten dinner by the time Nick gets back.’

As pointed out in Brinton (1988), one of the most detailed recent studies on aspect in English, aspectual analyses of English have been of two kinds: formal and notional. Whereas tense-aspect in English has been analyzed by linguists, (Comrie 1985, Bybee and Dahl 1989, Bybee, Perkins and Pagliuca 1994, Dahl 1985), the notional analyses have been primarily done by traditional grammarians. On the other hand, philosophers of language have been concerned with verb semantics, i.e. Aktionsart.

All of these approaches have led to some insightful and influential theoretical models, but also to some terminological overlap and, occasionally, confusion. Notably, however, “Two-way typologies of verbs can be found in both grammatical and philosophical works” (Brinton 1988:23). As previously noted in the theoretical introduction and literature review in this study, such binary verb classifications include stative/non-stative, punctual/durative, and telic/atelic. Vendler’s typology (1967) has been pointed out as an example of a typology extensively used in the L2

research.

As mentioned earlier, the typology distinguishes four aspectual categories identified by relevant semantic features of dynamicity, durativity, and telicity: states, activities, achievements, and accomplishments

While verb typologies have contributed to the study of aspect in an important way, they also have flaws and can be discussed within the context of the English tense-aspect system. Mourelatos (1981, qtd. in Brinton 1988) and Brinton (1988), among others, find verb typologies such as Vendler's (1967) incomplete in that they do not take into account the linguistic context beyond verb semantics, including grammatical aspect and propositional aspect, especially the propositional aspectual nuances instantiated by nominal arguments and prepositional phrases. Brinton (1988:29) quotes examples from Vendler (1967), where accomplishments consist of a verb and a single, count-noun object, such as *paint a picture*, but states, activities, and achievements are analyzed as simple verbs without their arguments (or complements such as noun objects). Another relevant example quoted in Brinton (1988:29-30) is that Vendler distinguishes between "thinking that" as a state, and "thinking about" as an activity, but "he does not explicitly comment on the importance of the complement structures" (Brinton 1988:30).

A related important point is also made by Mourelatos (1981), who emphasizes that Vendler's classification remains limited to verb types and does not extend to "categories of verb predication" (qtd. in Brinton 1988:419). Furthermore, other propositional elements such as adverbials or agency are neglected in typologies such as Vendler's (Brinton 1988).

In the same study of tense-aspect research, theory, and historical development, Brinton (1988) argues for a “compositional” approach to the study of aspect. He cites a number of linguists who have worked in this framework, including Comrie (1976), Lyons (1977), Taylor (1977), Freed (1979), and others. Quoting from Freed (1979) that “aspectual meaning is carried by the interaction of the various linguistic features” (1979:12-14), Brinton concludes that these features include “tense, adverbial phrase, noun phrase, noun type, verbal construction, aspectualizer, and complement structure”(Brinton 1988:37). Overall, then, the complexity of tense-aspect relations reaches beyond lexical verb semantics (Givón 1984). Brinton’s analysis of tense-aspect in English (1988) adds such a theoretical perspective to the study of tense-aspect in general, and is reviewed here as relevant to the analysis.

Following the argument that aspect and Aktionsart should be analyzed separately in any study of aspect (as for instance, grammatical aspect and lexical aspect in L2 studies), Brinton (1988:53) proposes an aspect model for English, which includes:

Category	Subcategory	Formal markers
1. perfective		<i>simple forms</i>
2. imperfective	progressive	<i>be V-ing</i>
	continuative	<i>continue to V</i> <i>V-ing; keep on V-ing</i>
3. phase	ingressive	<i>start to V, V-ing</i> <i>begin to V, V-ing</i>
	egressive	<i>stop V-ing; cease to V, V-</i>

ing

finish V-ing

4. habitual

(be) used to V;

(be) accustomed to V

simple forms

5. perfect

have V-en

The different categories are defined in a number of ways. The categories of perfective and imperfective are based on Comrie (1976), where Brinton (1988:52) follows Comrie's definitions of the aspectual division. While the perfective "looks at the situation from outside without necessarily distinguishing any of the internal structure of the situation", the imperfective "looks at the situation from inside, and as such is crucially concerned with the internal structure of the situation" (Comrie 1976:4). As perfective looks at a situation as total, complete, Brinton points out that it is expressed in English "most commonly by the simple past, less often by the simple present" (1988:52).

According to Brinton, the category of phase or point aspect (beginning and/or end of a situation) is determined by the feature 'punctual' in that these aspects focus on either the beginning or ending of a situation and are compatible with only punctual and not with durative adverbials. His examples include aspectualizers:

*He began to write at 5, but not *'He began to write for hours* (1988:52).

Brinton further points out that “The perfective aspect is neutral in respect to durativity and occurs with punctual and durative adverbials, as in *He wrote for hours. He stood up at 5.*’ (1988:52).

Brinton’s analysis of the imperfective in English differs from the traditional models (c.f. Comrie’s distinction between habitual and continuous (1976)). Brinton sees the two subcategories of the imperfective as progressive and continuative, both of which view a situation as incomplete. Verb semantics determines whether continuative expresses a continuous or iterative situation (1988:53). The explanation for the habitual mainly relies on Freed (1979), who argues that the difference between habitual and iterative lies in the fact that the habitual expresses actions which re-occur on different occasions, while iterative expresses actions which are repeated on the same occasion (qtd. in Brinton 1988:54).

While further examining the interaction of aspect and Aktionsart, Brinton (1988) reviews lexical verb semantics and the progressive, verb semantics and the perfective, and verb semantics and the perfect. In English, the progressive gets grammatically expressed with the dynamic, durative, and/or repeatable verbs (Brinton 1988:39). In other words, these three semantic features significantly limit the use of verbs in the progressive, which is specifically relevant for stative verbs.

In discussing the perfective, expressed by simple forms, Brinton (1988) emphasizes that there are few limitations to the use of the perfective in English with the different verb classes (1988:42). The following are his examples of the different verb types:

<i>John is angry.</i>	(stative verb)
<i>John was angry.</i>	
<i>John (always) finds money.</i>	(punctual verb)
<i>John found money.</i>	
<i>John writes a letter every day.</i>	(telic verb)
<i>John wrote a letter.</i>	
<i>John runs.</i>	(atelic verb)
<i>John ran.</i>	
<i>John hammers (every day).</i>	(iterative verb)
<i>John hammers.</i>	

(Brinton 1988:43).

The most significant feature of the perfective in English simple forms, past and present, is the sense of a goal, completion of the situation, which makes punctual verbs semantically most natural in the perfective forms, and includes “some arbitrary endpoint” with the atelic verbs as well (Brinton 1988:43).

The most complex Aktionsart relations in English are those evident in the perfect. While marking indefinite past, perfect essentially connects past with current relevance or present speech time. Typically used with specific adverbials, perfect cuts across a number of semantic options, which, taken together with Aktionsart, results in a highly complex combination of forms and functions. According to Brinton (1988), however, most discussions of the English perfect have analyzed grammatical forms but not the Aktionsart of the verb. One of the earliest articles that looked at both was Bauer (1970, as qtd. in Brinton 1988). This paper details the interactions of the

resultative and continuative aspect and the lexical meaning of the verb, in conjunction with adverbial modifiers (qtd. in Brinton 1988:43).

In his further analysis of the relationship between lexical aspect and the perfect, Brinton (1988) points out the difference between perfect aspect related to telic and atelic verbs. Telic, as well as punctual verbs, coincide with the completive/resultative perfect in that they express situations in which *the goal* has been attained, as in *I have persuaded him* or *He has found it* (43).

On the other hand, atelic verbs don't have the same meaning, as in:

He has lived in many different parts of the world or *He has lived in London since 1950* (Brinton, 1988:44). As Brinton's examples show, when used in the perfect aspect, atelic verbs express indefinite past results, repeated or continuative situations. When used in the perfect progressive, both telic and atelic verbs can be continuative, while punctual verbs assume an iterative meaning (Brinton 1988), as in *He has been pressing the button* (Brinton 1988:44).

Another important addition to this analysis of the English perfect is that Brinton (1988), following some earlier studies (cf. Bauer 1970), takes into account the entire predication, including the noun objects. Plural count nouns and mass nouns, for instance, can change verb meaning to a repeated action/situation, as in the following example:

'He has scored three goals within the last fifteen minutes' (Brinton 1988:44)

Brinton concludes his analysis by saying that continuative perfect, as in *He has lived in London since 1950* is "comprised of atelic verb and durative adverbial or telic /atelic verb and progressive" (1988:45). In other words, as Brinton claims, the

meaning of continuation into the present and further on “is contributed by either the adverb or the progressive, not the perfect. The function of the perfect is, as always, to show a past situation connected with the present” (1988:45). Brinton’s conclusion nicely points out the significant role of the sentential elements beyond the lexical meaning of the verb in constructing the perfect in English.

Last, it is important to note that verb morphology in the English tense-aspect system involves plain verb morphology (verb stem change), *-ing* morphology (in the progressive), and auxiliary verbs *be* and *have* in the finite, tensed forms to indicate the temporal reference. Importantly, modal verbs can be used instead of auxiliary verbs to modify the temporal boundary and semantic content of a situation, but these phenomena open up the broad referential category of modality, which is not the focus of this study.

As shown in the discussion of the examples, Brinton’s model (1988) analyzes the English tense-aspect system by focusing primarily on a distinction between the categories of aspect and aktionsart but also secondary systems of aspectual marking. He looks into the temporal contouring of the events, situations, and states, starting from the meaning as expressed by a number of forms, such as verb morphology, complex verb phrases, noun objects, adverbials, etc. Briefly, this theoretical approach covers aspectual distinctions in English, with the detailed analysis of aspectualizers for aspect and postverbal particles for aktionsart.

If, however, one looks at the tense-aspect distribution and the salience of tense over aspect in English, taking patterns of grammaticalization and degree of grammaticalization as starting criteria, proposal such as Bhat’s (1999), presents a

more inclusive and typologically informative analysis of the cross-linguistic tendencies that can have important impact on L2 learning. Based on the degree of grammaticalization, obligatoriness, systematicity and pervasiveness of tense rather than aspect in English, a proposal such as Bhat's (1999), based on tense or aspect-prominence, suggests that *tense prominence*, rather than lexicalized aspectual functions (Brinton 1988) serves as a theoretically plausible criterion in the analysis of tense-aspect and its acquisition in English.

In the next section, I discuss such theoretical considerations and the L1 impact English and Russian comparisons can have on the L2 learning of tense-aspect in these two languages.

3. 3. Comparing the two: English as Tense-prominent and Russian as Aspect-prominent

Overall, then, investigating the two tense-aspect systems, those of Russian and English, involves a number of important considerations.

1. Depending on the basic verb meaning, inherent/lexical aspect may be shared by the two systems within universal conceptual categories, i.e. states, activities, accomplishments, and achievements (first suggested by Vendler 1967).

2. Russian and English have different tense-aspect distributions. Russian relies on the imperfective/perfective functional distinction in the three primary tenses of present (imperfective), past (imperfective/perfective), and future (imperfective; present for perfective future meaning); English, on the other hand, can be categorized as a tense-oriented language, with deictic reference being expressed via primary and

secondary tenses. As already noted earlier, some researchers have termed English a tense-prominent language (Bhat 1999), whereas Russian is an aspect-prominent language (Berman and Slobin 1994).

At the level of form, specifically verb morphology, the two systems differ in an important way: Russian employs prefixes, verb stem change, and suffixes to vary the tense-aspect meanings, whereas English marks tense-aspect by the morphological change on the verb stem, via the use of auxiliary verbs and other verbs/aspectualizers, particles, or by inflection.

3. In the present tense, habitual/factual meanings are comparable between the Russian imperfective and the English primary present. In the past, however, the Russian imperfective collapses the English equivalents of the definite past and the present perfect indefinite past, current relevance meanings; some other important meanings remain specific to Russian. The examples with the verb 'read' above illustrate this meaning-overlap with the two English primary and secondary tenses, i. e. simple past and the present perfect. For instance,

(9)	<i>Čita-la</i>	<i>etu</i>	<i>knjigu</i>
	read-PAST-IMPF-3p-FEM	that-DEM-ACC	book-SG -ACC

'I read that book.' (in the past)

or

'I have read that book.' (in the indefinite past)

4. Tense-aspect nuances specific to Russian:

(a) Russian has no perfect, and the functions expressed by it have some counterparts in the Russian past perfectives, denoting completed,

resultative and punctual events.

- (b) Russian has no progressive in any of the primary tenses. Durative situations are coded by the imperfective, as opposed to the non-durative perfective.
- (c) In Russian, Aktionsart is a sublexical process whereby prefixation codes different components of the same situation (Brecht 1985); this process is absent from English. The same is true of the morphological forms marking the semantic content of the entire situation (see examples above). In English, phrasal verbs partly fulfill such functions, as in *break up*, *break off*, *break in*, *break out*, etc.
- (d) In Russian, present perfective is used to code future punctual/bounded situations. English uses primary (simple) present, primary (simple) future, or secondary prospective to express future (see Noonan 1991). The notion of secondary future (perfect) is absent from the Russian system, and there is no comparable perfective-perfect match in the future between the two languages.
5. Tense-aspect nuances specific to English:
- (a) English has no overt grammatical imperfective/perfective distinction reflecting the aspect-prominence in Russian. Marked for tense, imperfective meanings may vary from habitual to progressive, while completive/resultative perfective meanings are also marked for tense throughout the paradigm. Aspectual distinctions in English are expressed through perfect and progressive.

6. Both languages employ adverbials as contextual referential support at the propositional and discourse/pragmatic levels. Russian seems to require more adverbial support with the imperfective (as in atelicization), whereas the perfective seems to be more semantically fixed and predictable (as in telicization) (Brecht 1985, Rassudova 1977). Regardless of the adverbial clues, atelicization and telicization in English seem to be divided between durative and punctual meanings, the latter including states, as in attributives (see Givón 1984 for an explanation of the durative/progressive vs. imperfective, and Noonan 1991 for a discussion of the attributive).

With these important typological descriptors in mind, I now turn to the focus of the study: the tense-aspect feature variation in L1 and L2 that can have effects on the L2 tense-aspect acquisition. The theoretical framework for such language-specific variation is the one that categorizes languages as tense-prominent and aspect-prominent. For this reason, I will return to Bhat's (1999) analysis of tense-aspect-mood prominence in languages, while referring to the salient features of Russian and English as the languages under investigation in this study.

3.4. Tense-Aspect Prominence as a Potential Factor in L2 Acquisition

3.4.1. English and Tense-prominent languages

As already quoted in the introduction, *grammaticalization*, *obligatoriness*, *systematicity*, and *pervasiveness* are the four factors that Bhat (1999) takes into account in order to determine the degree of *tense-prominence* or *aspect-prominence* in a given language. According to Bhat (1999:95), while these factors typically act

interdependently in a given grammar, they are also to a certain degree independent of one another; thus, these factors can have multiple manifestations or variable degrees of interdependence and independence in a language while establishing prominence of one grammatical category over another, such as tense over aspect.

Turning to the example of English, categorized as tense-prominent (Bhat 1999, Berman and Slobin 1994, Slobin 1991, 1996a, 1996b), I will review each of the four factors individually within the context of tense-prominence. Tense is highly grammaticized in English, as shown in verb morphology (verb inflections) and in the use of inflected auxiliaries to mark tense. According to Bybee's definition of grammaticalization, "as [lexical items] become more and more grammaticalized, there is gradual erosion of their lexical meaning into abstract grammatical meaning" (Bybee 1985, qtd in Bhat 1999:96). Grammatical verb tense markings in the present and, especially, past, as well as the auxiliaries used in the other verb tenses illustrate that tense is fully grammaticalized in English.

On the other hand, aspect, such as progressive, for instance, is less grammaticized, only as auxiliary *be* next to the participle, distinguishing between present, as in *is writing* and past *was writing*. Thus, temporal reference is grammatically obligatory in the aspectual meanings as well. Overall, as discussed in the preceding section, tense is the domain of the English grammar that is grammaticized through the complex system of primary and secondary tenses.

Obligatoriness and *systematicity* are two related criteria, making tense a prominent category in English. As noted earlier, "grammaticalized concepts tend to be obligatory and get organized into paradigms" (Bhat 1999:96). In English, tense is

obligatory throughout the verb paradigm, making the system of primary and secondary tenses salient and prominent in the English grammar. Progressive and perfect aspects are also systematically marked for tense. In fact, the notion of perfect has been categorized as tense and/or aspect. Bhat, for example, notes that “traditionally, perfect is regarded as a tense, along with past, present, future, and pluperfect” (1999:168).

However, Bhat also cites Comrie (1985, qtd in Bhat 1999:168-9), who argues that the difference between past and perfect does not depend on the location of the situation on the timeline; both past and perfect mark an event which occurred before the present moment/speech time. Perfect, however, has the additional meaning of current relevance at the time of speaking, as in

“a. *I lost my penknife.*

b. *I have lost my penknife.* (current relevance)

Comrie identifies the meaning of current relevance as the basic meaning of the perfect and argues that it is separate from tense (169).

Bhat’s position is that the differing views about the perfect originate partly in the complexity of the notion, but also in the fact that have differing means of viewing and encoding this notion. His claim is “that tense-prominent languages view and encode it from the point of tense, aspect-prominent languages from that of aspect, and mood-prominent languages from that of mood” (170). He categorizes the notion of perfect as “(i) Temporal view: Past event with current (present) relevance
(ii) Aspectual view: completed (perfective) event with continuing (imperfective) relevance” (170).

This theoretical position regarding perfect strengthens the case for tense-prominence in English, together with the fact that English also has pluperfect and future perfect, both marked for tense, the same as the progressive.

Pervasiveness can be described as a high distribution or dominance of a grammatical feature. As already pointed out in the introduction, Bhat's useful clarification is that "Concepts that are restricted to a small area in the grammar are less prominent than the ones that have scope over a larger area" (1999:96). In English, tense is dominantly grammaticized and pervasive relative to aspect. Its verb system is organized based on tense distinctions, and verbs carry obligatory temporal reference for the situation, state, or event on the timeline. Bhat, however, cautions that in some languages the most prominent category can be broadened to include not only verbal but also other grammatical categories such as nominal or adverbial (1999:96-97).

In fact, as I already pointed out, Bhat (1999:120-121) includes English as an example of tense-prominent languages. He emphasizes that in English, the category of tense is more grammaticalized than aspect or mood, that it is obligatory and more pervasive than aspect or mood. He also adds that "this obligatoriness makes it rather difficult to translate into English verbal forms of other languages in which tense distinctions have been left unspecified" (1999:120).

Based on the four relevant criteria, a higher degree of tense-prominence classifies English as a tense-prominent language. In the next section, following the same framework, I discuss Russian aspect in the light of its prominence in the Russian grammar.

3.4.2. Russian and Aspect-prominent languages

Grammaticalization of aspect in Russian can be seen primarily in the organization of verbs as imperfective or perfective. In the verb system, both the lexical/semantic content and the grammatical marking classify verbs as one or the other aspectual category. The verb paradigm consists of imperfective/perfective pairs; as seen earlier in the discussion of Brecht's analysis (1985), telicization of the imperfective verbs is a common productive morphological process in Russian (Brecht 1984, Polinsky 2008); in addition, atelicization of the perfective verbs further shows grammaticalization of aspect in Russian (Brecht 1985, Polinsky 2008). Tense is marked in the imperfective, as present, past, or future (the last one with the auxiliary); perfective has temporal markings in the past, whereas the present perfective marking expresses future meaning.

<i>Pro-čita-la</i>	<i>etu</i>	<i>knjigu</i>
read-PERF -Past-1-SG-FEM	that-FEM-ACC	book-FEM-ACC
'I have read that book' (completive)		
<i>Pro-čita-ju</i>	<i>etu</i>	<i>knjigu</i>
read-PERF-fut	that-FEM-ACC	book-FEM-ACC
'I will read the book' (COMPL = completive)		

Two other relevant criteria, *obligatoriness* and *systematicity* also confirm the prominence of aspect over tense or mood in Russian. Bhat's (1999, Noonan 1992 for Lango, qtd. in Bhat 1999:125) definition of how obligatory aspectual marking works in aspect-prominent languages is useful here. He points out that "Aspect-prominent

languages show an obligatory marking of aspect distinctions, whereas they indicate tense and mood distinctions through specific markings only when the meaning is not derivable from the context” (125). In Russian, verbs are inflected for imperfective or perfective; out of context, perfective is typically understood as past, while it cannot be used as present; as already shown, present perfective adds the future meaning to the aspectual contouring, i. e. the aspectual situational component or phase expressed by the verb.

The systematicity of aspect in Russian can be observed in the salient distinction between the imperfective and the perfective and a complete verb paradigm for each of the two aspects. In comparison to English, which marks tense systematically across varied verb classes, Russian has its entire verb system organized around the imperfective/perfective distinction. In Russian, aspect is obligatory and more systematically present in the grammar than tense, which contrasts with the English tense-dominant verb system.

Clearly, following these criteria, the *pervasiveness* of aspect in Russian can be observed in the finite verb system, but it is also prominent in other forms such as adjectival participles, for example. On all four criteria, aspect is more pervasively represented than tense in the Russian grammar, making it a more dominant category and identifying Russian as an aspect-prominent language.

3.5. Related L1 and L2 research on language-specific conceptual-grammatical links

As already noted, this study investigates if and how the L1 tense-aspect

system affects the L2 tense-aspect acquisition, including form-function overlaps and mismatches between the two. Thus, the central question is the role of the relationship between the temporal-aspectual conceptual categories and their linguistic expression in specific languages. To approach this question, I find it necessary to take into account both the universal and the language-specific features of the relevant linguistic systems and to postulate the hypotheses that reflect this goal. For this reason, in addition to the L2 research on universal tense-aspect categories and the functional/conceptual ways of expressing them regardless of language, I wish to consider the language-specific tense-aspect features of one language over another, and the impact of such nuances on the L2 learner.

With this goal in mind, I add to Bhat's (1999) proposal the theoretical models that also have a bearing on this study. These are inspired by a moderate version of the Linguistic Relativity Hypothesis, primarily in cross-linguistic research on L1 acquisition. These proposals motivate the predictions and the methodology used in the study.

A recent revival of some aspects of the Linguistic Relativity Hypothesis, also known as Sapir-Whorf Hypothesis, makes an inquiry into the relationship between the language-specific grammatical categories and the semantic categories they code (cf. Gumperz and Levinson 1996, Lucy 1992a, 1992b, Niemeier and Dirven 2000, Gentner and Goldin 2003, Levinson 2003, Slobin 2000, 2003, 2004a, 2004b, 2009). While re-examining the work of Sapir, Whorf, Humboldt, and Boas, the researchers currently pursuing the idea draw on crosslinguistic findings in language acquisition, lexical patternings across languages, and the socio-cultural impact of the context in

which a language is used.

Although the Linguistic Relativity Hypothesis has been criticized and rejected by the important work on linguistic and semantic universals, its revised version doesn't necessarily undermine these important findings. As noted by Gumperz and Levinson (1996), "Very little, [...] is actually known about substantive semantic or conceptual universals. It is true that there are demonstrations of universal semantic principles in a few domains like color terminology, ethnobiological taxonomies, perhaps also in systems of kinship terminology. However, these demonstrations carry no necessary general implications, and the same holds for studies of grammatical meaning" (7).

Furthermore, the current focus on linguistic relativity is not an either-or prediction. Namely, it does not contradict the universal conceptual primitives expressed across languages. However, these basic conceptual primitives are expanded by the language-specific linguistic patterns to encode meaning for its speakers. This way, language filters the experienced world for its speakers through the grammatical means available in a specific language. In the words of Gumperz and Levinson (1996), "...on the molecular level there are language-specific combinations of universal atomic primitives, which make up lexical meanings (and meanings associated with morpho-syntactic distinctions) and *which may have specific conceptual effects*" (25). [emphasis mine]

One of the often-quoted weaknesses of the Linguistic Relativity approach is a lack of empirical evidence that would support its basic claim. Most studies have researched either specific semantic domains, such as color-coding, or have been

limited in design, in the scope of the research questions, and in the interpretations of the results (see Lucy 1992b for a review of studies on Linguistic Relativity Hypothesis). Recently, however, crosslinguistic research on first language acquisition has posed questions and offered support for a weak version of the hypothesis (Slobin 1991, Berman and Slobin 1994, Slobin 1996a, 1996b, 1997, 2000, 2004b, 2006, Choi and Bowerman 1991, Bowerman 1996, Bowerman and Levinson 2001, Guo et al. 2009). These studies have investigated language-specific influence on spatial cognition, temporal relations, agent-patient relationship, and other pragmatic functions. The languages studied include, but are not limited to, English, Korean, Spanish, German, Hebrew, and Turkish. Bowerman (1996), for instance, provides evidence for sensitivity to language-specific spatial expressions and motion verbs in young Korean and English-speaking children.

Berman and Slobin's detailed crosslinguistic study on first language acquisition of linguistic forms and the related functions in a Frog Story narrative task (1994) finds consistent differences in the linguistic expression among the speakers of the researched languages as early as age 3, following with ages 5, 9, 11, and adult. Even though forms may be available in a language, linguistic development shows that from early age on children adhere to the forms *specifically preferred by the language*. In other words, Frog Stories represent language-specific form-function contexts.

This finding leads Berman and Slobin (1994) to suggest that "such differences have important cognitive implications. Language-specific patterns of "telling the Frog Story" suggest that the native language directs one's attention, while speaking, to particular ways of filtering and packaging information" (1994:612). Pointing to a

connection between language-specific typology and cognition, Slobin (1991) has proposed that “The expression of experience in linguistic terms constitutes *thinking for speaking*—a special form of thought that is mobilized for communication...” (1991:12).

The way that language may influence thought, then, is compared to *on-line encoding and decoding of linguistic messages*. Language-specific grammatical patterns are filtering devices through which concepts get not only linguistically expressed but also cognitively ‘channelled’. Grammatical forms that are both frequently *accessible and obligatory*, “draw the learner’s attention not only to the forms themselves, but to the conceptual distinctions that must be made in order to use those forms appropriately – both referentially and in connected discourse” (Berman and Slobin 1994:640).

Overall, when linguistic forms are *obligatory and frequently accessible*, the speaker’s attention is channelled towards the corresponding functions, increasing their saliency for the speaker. That way, “by accessing a form frequently, one is also directed to the conceptual content expressed by that form” (Berman and Slobin 1994:640). Language-specific attention channelling, therefore, influences the ways in which linguistic messages are conceptually channelled. Developmentally, this influence is noted early in acquisition, and it consistently continues as each form maps onto more functions. Similar findings on influence of the language-specific conceptual organization on early acquisition of Korean and English was confirmed in Bowerman and Choi (1991) and reviewed in Bowerman (1996).

Following this line of argument, it is reasonable to expect that the *accessible*

and *obligatory* forms of the L1 influence L2 acquisition, which is what Slobin terms “first language thinking in second language speaking”(1991:89-91). Namely, Slobin suggests that lexicalization patterns of L1 may interfere with the learning of L2. As Slobin notes, “Languages differ from one another not only in the presence or absence of a grammatical category, but also in the ways in which they allocate grammatical resources to common semantic domains” (Slobin 1996a: 83). Therefore, grammaticalized concepts in L1 persist in L2 acquisition, which, as Slobin further points out, constitutes additional evidence in support of a moderate version of linguistic relativity, i.e. as the influence of language on the parts of experience expressed through linguistic forms.

Some examples of such “linguistically encoded perspectives” (Slobin 1996a: 89) include tense-aspect relations, spatial relations, definiteness, etc. Conceptual categorization in these areas of grammar depends on linguistic encoding and decoding, i.e. has no corresponding manifestations in the objective outside world. One cannot easily observe temporal relations or a difference between indefinite and definite articles. Since these conceptual categories and relations are encoded differently in different languages, they are often difficult to acquire in adult SLA.

Slobin (1996a), for instance, cites examples of Spanish perfective/imperfective distinction as being difficult for English L1 speakers because this aspectual distinction is absent from English. Other specific instances include Turkish L1 speakers who have difficulty acquiring English, Spanish, or German articles because Turkish doesn't have definite articles; L1 German speakers use simple present in English where they should use the progressive, since this distinction

doesn't exist in German. Slobin concludes that "...each native language has trained its speakers to pay different kinds of attention to events and experiences when talking about them. This training is carried out in childhood and is exceptionally resistant to restructuring in adult second-language acquisition" (1996a: 89).

It appears, then, that crosslinguistic research on first language acquisition sheds light on the semantic (cognitive) effects of language-specific lexicalization patterns in language learning. It also introduces an important proposal into L2 research, which is that the L1 lexicalization patterns, especially in the dominant form-concept links, considerably influence adult L2 learning. The influence is primarily dependent on the typological profiles and differences between the lexicalization patterns in the learner's L1 and L2. Certain areas of grammar, where concepts get 'packaged' primarily through language, will be more challenging for adult L2 learners whose L1 has significantly different grammatical configuration.

In a related research endeavor, recent L2 research on crosslinguistic influence, or *conceptual transfer* and *meaning transfer* (Odlin 2005; see also Cook 2003 for L2 effects) has looked into the theoretical models of Linguistic Relativity and 'thinking for speaking' to account for L1-based conceptual differences (Jarvis 1998, Odlin 2003, 2005, Jarvis and Pavlenko 2008, Pavlenko and Jarvis 2002, Pavlenko 2009). While *conceptual transfer* is defined as *lexical transfer*, and as such does not overlap with my term *language-specific conceptual approach*, meaning-transfer relates to space, time and affect (Odlin 2005).

However, as I already pointed out earlier in the literature review, very few of these studies address L2 tense-aspect acquisition (Collins 2002, Rocca 2002, Shirai

and Nishi 2003). Those on L1 conceptual transfer do not necessarily look to language-specific linguistic ‘filtering’ or typology as explanatory models. In his study on L1-based lexical-conceptual choices in L2 English by L1 Swedish and L1 Finnish speakers, Jarvis (1998), for instance, considers Slobin’s ‘thinking for speaking’ (1991) “ill-equipped to account for L1 influence in interlanguage (IL) lexical reference” (1998:11).

A small number of recent studies on conceptual transfer (Jarvis and Pavlenko 2008) have investigated the crosslinguistic influence in the conceptualization of time; one area of conceptual transfer “involves crosslinguistic differences in the tense systems, whereby different languages create different links between time, events, contexts, and speakers’ purposes.” (Jarvis and Pavlenko 2008:140). In a study on Russian-English bilinguals, for instance, Boroditsky and Trusova (2003) found that the differences between completed and incomplete events are noticed more frequently by these bilinguals than by the L1 English speakers. Similarly, L1 English L2 learners of Russian are often unable to distinguish completed and incomplete events; these L2 learners tend to use imperfective, instead of the target perfective, verbs to refer to punctual events and actions, such as *on echen’ pugalsia*, ‘he was repeatedly very scared’, instead of *on ochen’ is-pugalsia*, he got scared (Pavlenko and Driagina 2006).

As pointed out by Jarvis and Pavlenko (2008), in addition to the acquisition of the morpho-syntactic markers, the other difficulty is that “learners need to transform a single lexicalized concept of undifferentiated action into two related but distinct lexicalized concepts, one of which refers to ongoing or generic actions and one to

completed or punctual actions and events, linking word pairs to these differentiated concepts' (141).

While such findings need to be further tested and investigated, I wish to argue that tense-aspect is, indeed, a domain of grammar whose specific linguistic nuances are instantiated in *thinking for speaking* (Slobin 1991, see also Evans 2003). As such, typological tendencies in L1s and L2s to mark tense more prominently than aspect or the other way around (Bhat 1999), become a persuasive starting point in research on language-specific effects in L2 acquisition.

Put another way, certain areas of grammar, in which concept-grammar links are distinctly filtered through language, may cause more difficulty for adult L2 learner whose L1 system exhibits features that don't match those of L2. This mismatch may show in a number of ways: (a) certain L1 forms may not exist in L2; (b) certain L2 forms may not exist in L1; (c) L1 forms may express only some, but not all, L2 functions; (d) L2 forms may express only some, but not all, L1 functions; (e) some L1 functions may be expressed by another set of L2 forms; (f) some L2 functions may be expressed by another set of L1 forms;

Table 2 Possible L1/L2 lexicalization pattern mismatches relevant to L2 acquisition of a semantic domain, such as tense-aspect, with examples from Russian and English

L1 forms-functions	L2 0 corresponding forms-functions
L1 Russian Perf/IMPF	L2 English No PERF/IMPF
L1 0 corresponding forms-functions	L2 forms-functions
L1 Russian No Present Perfect	L2 English Present Perfect

(some) L1 forms	express	(some) L2 functions
L1 Russian Imperfective		L2 English Progressive

(some) L1 functions are expressed by other L2 forms	(some) L2 functions are expressed by other L1 forms
(some) L1 Russian PERF by (some) L2 English Past	(some) L2 English Past by (some) L1 Russian PERF
(some) L1 Russian IMPF by (some) L2 English Present Perfect	(some) L2 English Present Perfect by (some) L1 Russian IMPF

The proposed distribution of possible L1-L2 mismatches in lexicalization patterns brings up the role of grammar-cognition interface in L2 acquisition, as noted in the introduction to this study. In the Grammatical Domain Hypothesis (GDH), I posit that specific areas of L1 grammar, such as tense-aspect, will be more strongly conceptually set and therefore harder to restructure in adult L2, provided L1 and L2 grammatical-conceptual links lack significant correspondences. In other words, if L1 and L2 exhibit typologically relevant form-function discrepancies in the expression of semantic categories, L2 learning will bear effects of these discrepancies.

For example, in the tense-aspect systems of English and Russian there are several, previously outlined typological differences. While the English system dominantly relies on deictic tense relations, the system of Russian is dominantly marked by imperfective-perfective aspectual distinction. An L1 English learner of L2 Russian has to grasp both grammatically and conceptually a prominently aspectual and morphologically complex system. On the other hand, an L1 Russian learner of L2 English has to learn the functions of the English progressive and perfect in the present, past, and future, and to restructure tense-aspect functions making them more

tense-marked while de-emphasizing the aspectual contouring, prominent in Russian.

Going back to Bhat's theoretical model of tense-prominent and aspect-prominent languages (1999), the criteria that he applies to categorizing languages based on prominence of tense or aspect also include the ones used in L1 cross-linguistic research by Slobin and others (1994; 1996a, 1996b). Grammatical forms that are both *accessible* and *obligatory* by definition are those that are *highly grammaticalized* and *obligatory* in a given language; such *grammaticalized forms are systematically organized* and typically *pervasive*; Bhat's (1999) four criteria for *prominence* reinforce the notion of *salience* of form-meaning links that are *obligatory and accessible* (Berman and Slobin 1994, Slobin 1996a, 1996b) Such linguistic forms are highlighted, linguistically preferred, and thus highlight the matching concepts for the speakers of the language.

If the tense-aspect system in a language highlights tense rather than aspect, for instance, the attention of its speakers will be primarily drawn to and channeled thorough these conceptual-grammatical links, making them more readily available and, therefore, prominent. The notion of *prominence*, then, fits with the approach to L2 tense-aspect acquisition in this study, which is that the prominent categories in L1 will influence the acquisition of the prominent categories in L2, particularly when the L1 and L2 differ in the degree of prominence they assign to the relevant categories, such as tense over aspect or vice versa. More simply put, this approach reflects Slobin's proposal, already quoted, that L2 learners are led by "first language-thinking in second language speaking" (1996a).

More specifically, an L1 English speaker starts from a tense-prominent system

when learning an L2. In English, “verbal core system consists of two paradigms of finite forms, called simple present and simple past, which have present and past reference respectively” (Bhat 1999:150). Tense-prominent languages, which give more prominence to marking the point in time when an event occurs (Bhat 1999:152), also tend to have no state verbs; the verbs in these languages are mainly dynamic, such as actions or processes (Bhat 1990:150). However, English does not fall in the same category to the same degree in that it has a set of state verbs, but most states in English can also be used as dynamic verbs, including the verb *be* (Bhat 1999:154). Obligatory, highly grammaticized tense in English cuts across both primary and secondary tenses, highlighting the time of event occurrence on the timeline as *prominent and accessible* to its speakers.

By comparison, a Russian L1 speaker begins from an aspect-prominent system when learning an L2. Both Aktionsart, inherent lexical aspect, and point-of-view aspect are at the core of the Russian verb system, grammaticized through the perfective/imperfective distinction to a higher degree than tense. As an aspect-prominent language, Russian has perfective/imperfective paradigms marked by the systematic, pervasive morphology which allows the conceptual shift from imperfective to perfective through telicization and from perfective back to imperfective through atelicization (Brecht 1985).

In that regard, Russian follows both Bhat’s criteria for prominence and his statement that ‘...the most prominent category would be represented by inflectional markers, which are closest to the verb base’ (Bhat 1999:161) and Bybee’s criteria for the universal relevance of aspect (1985, qtd. in Bhat 1999), “i) the most relevant

element occurs closest to the verb; ii) a morpheme cannot become fused with the verb unless it is immediately contiguous to the verb; iii) relevance also influences the actual fusion process, since the elements to be fused must have conceptual unity” (Bhat 1999:155). Thus, aspect is highly grammaticized and both formally and conceptually accessible for a Russian speaker, highlighting the temporal contouring of a situation to higher degree than the temporal reference, i.e. time of event occurrence on the timeline.

To summarize, in this Chapter I reviewed the typological profiles of Russian and English. I provided a detailed overview of the complex aspectual system in Russian, marked by verb classes, distinctive lexical affixes, and morphological rules (Polinsky 2008). I also explained the differences between the marked but more fixed perfective and the unmarked but more variable perfective (Rassudova 1977, Brecht 1985). Furthermore, I provided examples of the processes of telicization, shifting the forms and meanings from imperfective to perfective, and atelicization, shifting the forms and meanings from perfective to imperfective.

In the subsequent section, I reviewed the relevant accounts of the tense-aspect system in English. I discussed the primary and secondary tenses in English (Noonan 1991, Brinton 1988), a possible model of aspectual functions in English (Brinton 1988), and the model of tense-prominence in English (Bhat 1999). Then, I compared the relevant typological features of Russian as an aspect-prominent language and English as a tense-prominent language. In the final two sections of the Chapter, I discussed in detail tense-aspect prominence as a potential factor in L2 acquisition and the L1 and L2 acquisition research on language-specific form-meaning links, as it

pertains to my *language-specific conceptual* approach in this study.

To follow this approach, I will use the frameworks of *tense-prominent/aspect-prominent languages* (Bhat 1999) and *linguistically salient lexicalization patterns* (Slobin and Berman 1994; Slobin 1996a, 1996b). I will examine L1 Russian L2 English and L1 English L2 Russian data against the predictions of the Grammatical Domain Hypothesis (GDH) and as examples of the differing degrees of tense-aspect prominence: Russian as an aspect-prominent and English as a tense-prominent language.

In the next Chapter, I review the methodology used in the collection and analysis of the L2 data.

Chapter 4

Methodology

4.1. Materials

The design for this study was based on the purpose to elicit multiple tense-aspect forms and their corresponding functions, i.e. to investigate prominent English/Russian lexicalization patterns in a pair of L1-L2 data sets. As a result, the study combined the L2 target forms in cloze tests, which have been typically used in L2 research in general and in a number of L2 tense-aspect studies specifically (c.f. Collins 2001) with a picture book without words “Frog, Where Are You?”, originally used in an L1 cross-linguistic developmental study by a team of researchers (Berman and Slobin 1994), and later used in numerous studies, including current L2 research on heritage Russian speakers (Polinsky 2008).

The material for the cloze tasks comes from two college textbooks, one an intermediate level, 2nd year Russian college textbook (Davis and Oprendeck 1973) and the other a high-intermediate English grammar textbook (Steer and Carlisi 1998) (See Appendix A). Both textbooks have been used for college-level classroom instruction and in that respect matched the backgrounds of the subjects in the study, intermediate-high intermediate college-level L2 learners of Russian and English. The contents of the cloze tasks were comparable in that they were also narratives with a matching number of verb slots, prompting the subjects to select the L2 tense/aspect

forms. The themes in both stories are cross-culturally familiar and acceptable: family, earning a living, attending college, and adjusting to college life and its culture.

The Russian narrative is a folk story told from the storyteller's point of view. The two simple narrative episodes are presented sequentially, both anchored in the past, with the clausal predicates in either perfective or imperfective aspect. Each episode has simple narrative structure; a father makes the son find work to make his own money and is not willing to leave anything to the son in his will until the son proves that he makes money on his own. The mother is the one who protects the son, but when the father throws the son's unearned money into the fire, she warns the son that he should start making money on his own instead of having fun all day long. In the next episode, the son really works for the money, which he brings home saying he has made it by himself. Once again, the father throws the money into the fire, but this time around the son screams that his money that he worked so hard for is now gone; the father responds that it is only now that he is sure the son's money was genuinely earned.

The English narrative, on the other hand, is a personal or experiential narrative told from the narrator's (first person's) point of view. The narrator tells a story familiar to the instructed L2 English learners in a typical U.S. college program: the story of his arrival in the United States from Indonesia and his experiences in getting adjusted to the new culture and college life. The experiences are presented sequentially, as individual events, mainly anchored in the past, with some verbs in the present and future tenses. The simple college student narration tells about the narrator's first days and months in college and in an English-speaking culture relates

the narrator's experience as a realization that his initial thinking and cultural behavior needed to be adjusted as the narrator learns more about the new surroundings and himself. The varying tense choices made the story appropriate as an English tense-prominence task, while including an example of the progressive and a number of perfect tenses (or, as some researchers refer to them, e.g. Berman and Slobin 1994), progressive and perfect *aspects* in English).

The picture book "Frog, Where Are you?" consists of 24 pictures depicting a narrative storyline of a boy's search for his missing frog, a series of episodes on the search, and the successful ending to the search. In that respect, the narrative content was uniformly shared between Russian and English speakers as "...a typical children's story with a hero (the boy and his dog), a problem (the boy has a pet frog which runs away), a set of actions which follow from this problem (the boy and dog search for the missing frog), and a happy ending (the boy finds his frog or gets another one in exchange)" (Berman and Slobin 1994:20). The picture-sequencing in the narrative structure allowed for the elicitation of the tense-aspect forms and functions relating to the events and states in a story, connecting the episodes and marking simultaneity, connectivity, and internal contouring, or what Berman and Slobin call "temporality" (1994: 19).

4.2. Participants

In this bi-directional study, the following L2 data were collected: the responses by L1 English/L2 Russian subjects and the responses by L1 Russian/L2 English subjects. All the data were collected from instructed college-level adult L2

learners of comparable proficiency levels (intermediate-high intermediate). The learners were from a number of college intermediate-level L2 classes: at Johns Hopkins University, George Washington University, University of Maryland, and Montgomery College, Maryland. The L2 Russian learners, a larger L2 group (N=21), were all enrolled in the Russian language classes at the first three schools of the four previously listed; the L2 English learners, a smaller group of subjects (N=10), were taking English as a Second Language (ESL) classes at Montgomery College.

A lack of matching numbers of L2 learners in both groups was a methodological concern in my data comparison and analysis⁹ (See next page). However, since the detailed analysis was defined as the *language-specific conceptual approach* and focused on verb and clause-level tense-aspect, *tense-aspect prominence* was analyzed beyond the number of tokens; a look into *the systematicity and pervasiveness* (Bhat 1999) of form-function mappings made the analysis of unequal samples functional rather than only quantitative. While I acknowledge that this disparity remains a concern, the two L2 samples provided data for an in-depth qualitative functional analysis.

The baseline Frog Stories come from the native speakers of English (N=10) and Russian (N=10) of comparable age and education levels. The cloze test responses were checked both against the textbook answer key/s and in consultation with a native speaker of English/Russian for each task. In the picture-narrative task, I compared the native speaker tense-aspect choices, looking at most relevant features such as dominant narrative tense, prominent patterns in the use of tense, prominent

patterns in the use of aspect, and clausal ‘texture’, broadly defined as the scope and variation in the native speaker tense-aspect forms-functions, and the narrative length.

Before the data were collected, the subjects were asked to fill out a brief questionnaire, containing the following four main questions: (1) their native language (L1); (2) the length of time and the kind of exposure to L2; their self-rated ability in L2 Russian/English on a graded scale 1-5, i.e. basic, fair, good, very good, excellent, in six relevant language skills (listening comprehension, reading comprehension, speaking, writing, translation from L1 to L2 and from L2 to L1); (3) fluency in any other languages they know.

The L1 Russian/L2 English learners have resided in the United States at least a year and have also received formal English language instruction in comparable English as a Second Language (ESL) college programs. On the given scale, they self-rated their fluency as ‘good’ or ‘very good’ (3-4). They indicated fluency in other languages, mainly Slavic languages, such as Ukrainian. The L2 Russian subjects, on the other hand, have been exposed mainly to classroom instruction in Russian from 1.5 to 9 years; a number of them (N=8) have done study abroad (mostly short summer programs) and had exposure to L1 Russian speakers. Regardless of the difference in time of exposure to Russian as their L2, on the average, they self-rated their language skills as ‘fair’, ‘good’ or ‘very good’ (2-4, avg. 3.5), placing them in a rather homogenous proficiency group.

The majority of the subjects have also studied other languages, primarily Romance languages, such as Spanish and French, but also German and others,

⁹ Data collection at the comparable proficiency levels was a challenge due to low enrollments in the L2 (FL) Russian courses at the target level, and my limited access to a comparable number of L2 English

reporting a 'fair' to 'good' fluency. Overall, then, the L2 learners in both groups had received formal classroom instruction in the L2 and self-rated their fluency as 'good/very good', equivalent to the intermediate-high intermediate proficiency levels of the language courses they were taking at the time of data collection. The table below summarizes the survey responses. (See Appendix B for a copy of the survey form)⁹.

Table 3

Language	Time of exposure	Type of exposure	Self-rated fluency	Other languages	Number of subjects (N)
L1 Russian/ L2 English	avg. 1-2 years	classroom instruction	good/fair	yes	14
L1 English/ L2 Russian	avg. 2-4 years	classroom instruction	good/fair	yes	21

Despite the difference in the time of exposure, L2 learners in both groups, self-rated their fluency and were placed in the college language courses reflecting intermediate-high-intermediate proficiency; no other proficiency instruments were used as a third, independent measure. The fact that the L2 English learners had a comparable proficiency to the L2 Russian speakers after a shorter time of exposure to the L2 may be due to their additional, naturalistic exposure to the L2 by living in the U.S.

4.3. Tasks and Coding

As mentioned, two tasks were used in the study to tap into the L2 production

participants with the matching L2 learning backgrounds.

by the two L1 groups of adult learners in the study: (1) a modified cloze task where the subjects were asked to fill in the blanks with the contextually appropriate tense-aspect verb forms; (2) Frog Story—a short wordless picture story for children already used by Slobin and his associates (1991, 1994, 1996a, 1996b). Both tasks were written; the cloze test was presented as written, as cloze tasks typically are; to keep the task procedure consistent, Frog Stories were also collected as written stories, i. e. the subjects were shown the picture book and wrote out the story based on the sequence of events shown in the 24 pictures.

Due to the limited time I had with each individual subject, the data were collected in two sessions. The cloze task responses were collected first: (a) perfective/imperfective verb forms in the Russian cloze test ($n=33$); (b) verb tense/aspect responses in the English cloze test ($n=27$). As described earlier in the section about the materials used in the study, both cloze tasks were simple narratives from the level-appropriate college language textbooks, and the vocabulary, including the verbs, was level-appropriate and entirely familiar to the subjects in both L2 groups. (Please see Appendix A for the copies of the cloze tests).

During the second data collection session, I followed the basic design originally used in the Berman and Slobin (1994) cross-linguistic developmental study of narratives. However, the procedure was modified since the Frog Stories were elicited in the written format rather than as spoken narratives (Berman and Slobin 1994). The goal of my study is to analyze the L2 tense-aspect forms and functions, hence collecting the written Frog Stories was in line with the purpose of the study and methodologically parallel to the cloze task.

The paraphrased task instructions for *the written* Frog Story followed the procedure in Berman and Slobin (1994:22):

“Here is a book. This book tells a story about a boy, his dog, and a frog. First, I want you to look at the pictures. Pay attention to each picture that you see and afterwards you will tell¹⁰ the story out as you look at the pictures.”

The subjects in both groups had five minutes to review the pictures before writing out the narrative. The native speaker controls for both Russian (N=10) and English (N=10) received the same instructions. The L1 English baseline stories, however, were based on transcribed oral Frog Story narratives collected by Slobin and his associates in the summer 1995 Linguistics Society of America Institute graduate seminar on cross-linguistic discourse research, which I attended at the time.

In addition to the advantage of eliciting a variety of verb types and tense-aspect distinctions as well as keeping the constant narrative format in both tasks, the research methodology in using Frog Stories has other important advantages. As noted by Berman and Slobin, “By taking ‘texts’ as the basic material for analysis, we have abstracted away from the task of actually performing this story” (1994:24). The task elicits narratives directly, highlighting the “special nature of picture-description tasks” (1994:24), which have been reliably used in numerous L1 and L2 studies. A similar task, a short silent film was used, for instance, by Bardovi-Harlig and others (following Chafe 1980, as reviewed in Bardovi-Harlig 2000).

In both tasks, a mono-verbal clause was taken as the basic unit of tense-aspect analysis. The sentences in the cloze tasks were coded at the single-predicate clause

level. In the same way, a mono-verbal clause was coded as the basic unit of meaning in the L2 Frog Stories; following Berman and Slobin, a mono-verbal clause was defined “...as any unit that contains a unified predicate. [...] a predicate that expresses a single situation (activity, event, state)¹¹. Predicates include finite and nonfinite verbs, as well as predicate adjectives [...] infinitives and participles which function as complements of modal or aspectual verbs are included with the matrix verb as single clauses, e.g. *wanted to go, started walking*” (1994:660).

However, in my modified version of the analysis, because my research questions and hypothesis are focused on tense-aspect and not modality, modal verbs were not coded or analyzed. Instead, what I refer to as “the minimum unit of analysis”, or “coded clauses” (Berman and Slobin 1994:26), is the verb of the predication indicating tense-aspect, together with non-finite verbs marking tense/aspect together with the main verb. Specifically “The verb might be finite or non-finite, e. g., the following were all considered a single clause in English: *running through the woods; taken by surprise; (in order to) help his friends; was angry*. [Modal] and aspectual verbs were counted together with their main verbs; that is, the following constitute single clauses: *want to climb the tree; goes to look; started running*” (1994:26).

In that respect, my coding system largely followed the one used in Berman and Slobin (1994:26-27) and included all the details of “temporality” (Berman and

¹⁰ The quote from Berman and Slobin (1994) reflects the methodology used in their study. In this study, however, the task was *written instead of spoken*, i.e. the participants were told to *write* the story out.

¹¹ Berman and Slobin (1994) state that “This unit was selected as being more linguistically structured than the behavioral unit of ‘an utterance’ but as less determined by syntactic criteria than ‘a sentence’” (26).

Slobin 1994:19) related to tense/aspect, such as,”...[verb semantics], grammatical marking of tense-aspect...lexical marking of tense-aspect (by verbs such as those meaning ‘begin’ or particles like *out, off*); lexical marking of sequential and other temporal relations (e.g. by use of expressions like ‘after that’, ‘meanwhile’; syntactic constructions (simple clauses, complements, relatives, and adverbial subordinates)”. In addition to the tense/aspect marking on the verb, the relevant clause-level elements contributing to the tense-aspect meaning other than the verb itself, included the noun phrase or the adverbials, as used to express “a single situation (activity, event, state)” (Berman and Slobin 1994:660).

In order to address the Grammatical Domain Hypothesis (GDH), i.e. the questions about tense or aspect prominence in L2, I took as the most relevant the coding of tense/aspect expressed through the verb. The coding of tense/aspect was the basis for the type/token analysis of the L2 forms and functions. L1 English/L2 Russian verbs, for instance, were coded for tense (PRES; PAST; FUT), as well as perfective (PERF) or imperfective (IMPF). L1 Russian/ L2 English verbs got coded as present, past, future (PRES; PAST; FUT), perfect, progressive (PF; PROG). To investigate hypothesized aspect prominence, aspectual functions, such as inchoative, completive, habitual, were also coded together with tense specifically in the L2 English data.

The same general coding methodology was used with the native speaker cloze tasks and Frog Stories. To clarify, I list two examples of my coding methodology as applied to the L2 Russian data and two examples of the L2 English data, one clause for each task.

(12) a. *Odnáži starik zbolel.*
 suddenly old man-NOM-MASC fall ill-PERF-3PSG-
 MASC ‘Suddenly the old man fell ill.’

b. *Ljaguška ušla.*
 frog- NOM-FEM go out-PERF-3P-SG-FEM
iz banki očenj tiho.
 out-PREP jar-GEN-FEM very-ADV quietly-ADV
 ‘The frog went out of the jar very quietly’

(13) a. *The Americans talk-ed to me so fast.*
 talk-PAST

b. *They start-ed calling out from the window*
 start-PAST V-ing-PART (INCEPTIVE)

Since verbs were central to the analysis, I used a simplified taxonomy to code inherent verb semantics. All verbs were categorized as states or events and were marked for telicity and durativity, as needed. I found this additional coding useful especially because past was the anchor tense in the L2 Russian cloze task and in the Frog Stories, and the dominant tense in the L2 English cloze task. That way, I was able to look at any correlations between the L2 use or misuse or the past relative to the inherent verb meaning. My study, however, does not address lexical aspect and the coding methodology dose not include Vendler’s categories (states, activities, achievements, and accomplishments).

The claim about tense/aspect prominence in the Grammatical Domain

Hypothesis (GDH) is the following:

- (1) L1 English learners of L2 Russian will use *tense* more prominently, i.e. more target-like than aspect. There will be more non-target L2 aspectual choices, and they will be limited or overgeneralized.
- (2) L1 Russian learners of L2 English will use *aspect* more prominently, i.e. more target-like than tense. There will be more non-target L2 tense choices, and they will be limited or overgeneralized.

To address the predictions of the GDH, I counted and categorized verb tokens based on target-language contextual accuracy as (a) Target Russian (TR) and L2 Russian (L2R); (b) Target English (TE) and L2 English (L2E). In each instance, tense-aspect distinctions were labeled and counted for frequency, or, following Bhat's criteria for prominence, "obligatoriness and pervasiveness" (1999). I used frequency of tense-aspect forms to be 50% and over as the quantifiable L2 tendency indicating prominence.

The next part of the data analysis addressed the functions expressed by the L2 forms and any overgeneralizations, as predicted by the Grammatical Domain Hypothesis (GDH). For this purpose, I listed the verbs used in both tasks and compared them to the native speaker verb choices as described above. This way, I analyzed prominence following Bhat's concept of "systematicity" (1999) and the data analysis methods by Berman and Slobin (1994) and by Polinsky in the studies on heritage Russian speakers (2008; and to appear in Brinton, Kagan, and Bauckus)¹². In

¹² I found the research on heritage learners to be applicable to L2 acquisition following Polinsky's statement that "The state of the grammar of low-proficiency [heritage] speakers can be taken as representative of incomplete acquisition per se, and the differences from the baseline grammar found in the grammars of these speakers also would be expected to be more pronounced" (2008:266)

her study on aspectual distinctions in lower proficiency heritage Russian speakers, for instance, Polinsky hypothesized that "...heritage Russian will lose or regularize the formation of the imperfective, will have a smaller set of prefixal perfective forms with possible variation across speakers, and will develop compensatory mechanisms for expressing general aspectual distinctions which have a conceptual basis" (2008:273). In the analysis, she grouped the findings by identifying morphological change in the encoding of aspect, loss of aspectual pairs, and, more specifically verbs of motion and retention of isolated prefixal forms (2008). For the purpose of analyzing the data against the predictions of the GDH, I have categorized the findings into: morphological forms, tense-aspect substitutions, lexical means in expressing aspect, and idiosyncratic tense-aspect examples, which identify relevant subject-specific instances of L2 variation.

In the next Chapter, I present the results for each target language in the following format. I start with the results for L1 English/L2 Russian and follow with the discussion of the results for L1 Russian/L2 English. First, I present the tables with the frequency results for Task 1 (cloze task) followed by Task 2 (Frog Story). I include summary tables of verb tokens and percentages of non-target tokens for the relevant tense/aspect forms for each task; for the purpose of the analysis, the categories of tense/aspect are labeled as (temporal/aspectual type, so the token percentages can be analyzed as type/token percentages). I also include a table with the average number of clauses for Task 2 (Frog Story) to compare frequencies to the syntactic, i.e. narrative 'density' of the L2 stories. In addition to the tables, and to expand the analysis of the tense-aspect marking strategies, I include relevant

(idiosyncratic) examples of clause-level tense/aspect use in the L2 Frog Stories for each L2.

In the concluding chapter, Chapter 6, I also address any discourse-level strategies relevant to the findings, as I sum up the results in the light of the GDH predictions and the theoretical and pedagogical implications that *the language-specific conceptual approach* in this study may have on further research on the L1 effects in the L2 acquisition of tense-aspect.

Chapter 5

Results and Discussion of the Results

In this chapter, I present and discuss the results of the study; the discussion is divided into two subsections: the section discussing L1 English/L2 Russian results, and the section discussing L1 Russian/L2 English results. I start by presenting the results obtained on the first task (the cloze task), followed by the results on the second task (Frog Story). I discuss the results on both tasks relative to the predictions of the Grammatical Domain Hypothesis (GDH), focusing on the notion of aspect-prominence (L1 Russian) and tense-prominence (L1 English). In the last section of the chapter, I will summarize the results in the light of the proposed predictions and the generalizations relevant in the comparison of the two L2 groups.

5.1. Results for L1 English/L2 Russian

As already stated in Chapter 1, Sections 1.3. and 1.5., the general statement of the

Grammatical Domain Hypothesis (GDH) is as follows:

L2 tense-aspect acquisition will be affected when the encoding prominence in L1 does not correspond to the one in L2 (as in tense-prominent English and aspect-prominent Russian). L2 forms and functions will tend to promote tense or aspect, respectively.

The following predictions will support the hypothesis:

(a) L1 English learners (tense-prominent) will have a limited number of

aspectual distinctions in L2 Russian. L2 verbs will indicate tense bias instead. L2 aspect will be limited or overgeneralized (to compensate for the lack of aspectual distinctions).

- (b) L1 Russian learners will have a limited number of tense distinctions in L2 English. L2 verbs will indicate aspectual bias instead; L2 tense will be limited or overgeneralized (to compensate for the lack of tense distinctions).

The conditions that will falsify the GDH are as follows:

- (a) L1 English/L2 Russian learners will consistently use L2 aspect showing a *clear tendency toward target* distinctions; the use of tense will not be prominent relative to aspect.
- (b) L1 Russian/L2 English learners will consistently use L2 tense showing a *clear tendency toward target* distinctions; the use of aspect will not be prominent relative to tense.

As an outcome of the tested predictions of the GDH, the results for L1 English/L2 Russian will be described and analyzed for each task in the subsections below.

5.1.1. Task 1 Cloze Task

The results of the first task for L1 English/L2 Russian subjects are summarized as L2 token frequencies of the imperfective and the perfective in comparison to the native speaker Russian aspectual choices for the same verbs. While the majority of the aspectual decisions by the Russian native speakers are punctual perfective verbs (29/33 or over 87%), the L2 Russian data (L2R) show the subjects'

preference for substitutions of the imperfective for the perfective with all perfective verbs in the task. Since some verbs in the task are tokens of the repeated verbs ($n=6$; IMPF= 3; PERF=4), the percentage of imperfectives used instead of perfectives comes to $25/29=86\%$. The aspectual choices for Task 1 are provided in Figure 1 below, followed by Table 4, with the results for the L1 English/L2 Russian learners (L2R). (A copy of the Task is attached in AppendixA)

Consistent with the narrative task, past was the anchor tense in the L2 Russian group, comparable to the L1 Russian, with the exception of two punctual verbs used in the contextually necessary imperative forms (*dat'*, 'give', and *skazat'*, 'say, tell'), by both L2 learners and the baseline Russian speakers.

As a preliminary observation, I point out the consistency and target-use of past tense by the L2 subjects, compared to their non-target use of the aspectual forms; this result can be interpreted as the consistent use of tense in the task. However, Task 1 also provides aspectual pairs, with the choice of the imperfective and perfective for every verb, repeated verbs, and the perfective meanings for the majority of the verbs. Despite the relative ease due to the task features, the L2 Russian learners show limited aspectual choices, rather substitutions, whereas tense remains constant. Task-specific consistent use of tense does not 'promote' or 'match up' the use of aspect in the L2 data. I will return to this observation later in the discussion.

Table 4 lists all the verbs (events) in Task 1, divides them into imperfective/perfective forms, and provides the functions for each (For Tables 4-11, please refer to the end of the chapter).

Table 4 here

Next, Table 5 is a summary table with raw numbers/tokens (total tokens: 693) for each verb type (total verbs= 33), for all subjects (n=21). Each verb is categorized as target imperfective (T IMPF) or target perfective (T PERF) and L2 Russian imperfective (L2R IMPF) and L2 Russian perfective (L2 PERF). I compared the L2 Russian decisions on the use of imperfective/perfective to the aspectual choices of the native speakers for every verb. The most frequent non-target L2 substitutions of the imperfective for the perfective are given in the parentheses in Table 5.

Table 5 here

I compared the type/token results in Table 5 to the specific aspectual meanings for each verb in order to test the aspectual substitutions in the L2 sample against the GDH predictions and to have a more complete picture of how form-meaning links may have played a role in the L2 Russian subjects' choices of one aspectual form over the other.

When Tables 4 and 5 are compared, it becomes clear that even though the L2 subjects show mixed decisions between the imperfective and perfective for the target perfective aspect, the majority of all L2 tokens are perfective (n=560), comparable to the native speakers. . Nevertheless, as shown in Table 5, there is a higher percentage of non-target imperfective forms than the perfective forms ($71/133= 53\%$), as opposed to the total non-target perfectives ($10/560= 1.8\%$). Despite fewer perfective errors, the perfective is not used consistently for specific verb meanings. For instance, aspect substitutions appear even highly frequent target-like imperfectives used for durative continuous actions, such as *poguljat'* instead of target *guljat* or

porabotat’ instead of the target *rabotat*’. This distribution of non-target forms for the two aspects brings up some important points.

Morphologically, the verbs in Task 1, listed in Table 4, consist mainly of a stem and a derivational prefix for the perfectives; a number of them are formed by changing the verb stem itself or a suppletive: *umret*’, ‘die’ *skazat*’, ‘tell’ *pomoč*, ‘help’, *vzjat*’, ‘take’ *ponjat*’, ‘understand’, *rešit*’ ‘decide’, *brosit*’, ‘throw’ *obmanut*’ ‘cheat’ *zarabotat*’, ‘earn’ and the motion verb *priidti*, ‘come up’. Morphologically complex imperfectives, formed by adding *-va* to the perfective stem are only a few: *dat*’/*da-va-t*, ‘give’ *zarabotat*’/*zarabot-(i)vat*’ ‘earn’, and, more morphologically irregular in the formation of the imperfective, *obmanut*’/*obman-(ji)vat*’, ‘cheat’.

In terms of the morphological form, then, the L2 subjects were deciding between the imperfective form and its perfective prefixed counterpart. In most cases, the perfective prefix changes the meaning of the verb from the imperfective to the perfective, most commonly *po-* and *za-*, marking punctual, inceptive or completive meanings. In other words, the task favored a relatively regular set of the perfective choices, morphologically transparent, frequent in baseline Russian (Polinsky 2008), and commonly introduced early in L2 Russian instruction as examples of the lexical/derivational formation of the aspectual pairs.

Despite the relative morphological “ease” of the aspectual pair choices in Task 1, the L2 results reveal mixed decisions regarding the choice of the perfective, as well as a lack of a clear pattern in the decisions to use the imperfective instead of the target perfective regardless of the verb meaning or its morphological form. This result suggests that the L2 Russian learners do not have consistent form-function

mappings of the perfective in contrast to the imperfective, that the inherent/lexical aspect, (e.g. punctual meaning) is not the only factor for the choice of the perfective or the imperfective in the aspectual pair, and that, based on this recognition task, the L2 subjects do not seem to overgeneralize consistently the morphological forms of either imperfectives or perfectives in this set of verbs.

In this respect, the finding supports the GDH in that the L2 subjects have shifting and limited aspectual choices; the L2 aspectual choices, primarily favoring the perfective, but revealing a higher percentage of non-target imperfectives, can be interpreted as limiting the aspectual choices regardless of the target form-function mappings in obligatory contexts.

The choice between one and the other member of the aspectual pair, however, fluctuates between a tendency to choose the perfective and a tendency to choose the imperfective for the same verbs. This result leads to the observation that the L1 English/L2 Russian speakers may treat the aspectual forms as individual lexical items, or one member of the aspectual pair that maps the meaning of the verb onto the form. This finding is consistent with the research on Russian heritage speakers growing up in the United States as English-dominant bilinguals (Polinsky 2008, Polinsky, to appear).

Mixed perfective/imperfective decisions in contrast to the consistent use of the past tense as anchor tense in the task suggest that the GDH prediction is generally supported in terms of the L1 English/L2 Russian tense-bias with a limited number of aspectual choices (one or the other member of the aspectual pair). Generally, imperfective use shows more non-target forms across all verbs. The only exceptions

are the verbs *guljat* , ‘walk’ and *rabotat* , ‘work’, used primarily as needed by context.

Looking at the results in more detail, a set of verbs that are the most frequent aspectual substitutions of the imperfective for the perfective, i. e. marked by the imperfective, in comparison to others do not seem to share a consistent pattern either in form or in meaning: *za-bolet* , ‘fall ill’ (L2 *bolet*), *polučit* , (L2 *polučat*) ‘get’ *pomoč*, (L2 *pomogat*) ‘help’ *obmanut* (L2 *obmanjyvat*) ‘cheat’.

For the purpose of a more detailed look at the L2 aspectual choices, I list the verbs with *three or more* instances of the non-target choice of the imperfective instead of the baseline perfective; the verb forms are listed in the past tense as the anchor verb tense in the task, with the exception of one infinitive used as the complement of the perfective *rešit* , ‘decide’. Interestingly, the perfective form *rešit* , ‘decide’ was used by all the subjects in the study.

Table 6

T PERF = Target Perfective

L2R = L2 Russian

VERB (past)	T PERF (past)	L2 R IMPF (past)
<i>fell ill</i>	<i>za-bolel</i>	<i>bolel</i>
<i>started to laugh</i>	<i>za-smejalsja</i>	<i>smejalsja</i>
<i>screamed/cried out</i>	<i>za-kričal</i>	<i>kričal</i>
<i>(decided to) help</i>	<i>(rešila) pomoč</i>	<i>(rešila) pomogat</i>
<i>got</i>	<i>polučil</i>	<i>polučal</i>
<i>cheated</i>	<i>obmanul</i>	<i>obmanjival</i>

The verbs in the table are inherently punctual. The derivational prefix *za-* marks the inceptive, i. e. the beginning of the state/activity. The other three verbs in the L2 data, those with the morphologically changed stem, refer to the punctual/resultative actions.

In this set of verbs, the non-target use of the imperfective instead of the perfective occurs regardless of whether or not the verb is a state or activity, punctual inceptive or resultative, and independent of the morphologically marked lexical prefix *za-*. Thus, the non-target use of the imperfective for the perfective suggests a lack of the aspect-based morphological or lexical pattern and additionally suggests that the L2 Russian learners treat the aspectual distinctions as individual lexical items or unified concepts which they do not map onto the corresponding aspectual choices.

Another set of aspectual forms and meanings to be looked at are those that are marked by the target aspect. These verbs (given here in their infinitive base forms), include *guljat* 'walk', and *rabotat* 'work', for the imperfective (mentioned earlier), as well as *pozvat* 'call up', *reshit* 'decide', *priiti* 'come up to', *dat* 'give', *dostat* 'take', and *brosit* 'throw', for the perfective. Additional perfective verbs with only one non-target occurrence each are *skazat* 'tell', *pobežat* 'run away', *ponjat* 'understand', and *sdelat* 'do'. In the case of these verb types (verb meanings), the imperfective marks activities, while the perfective verbs are punctual and resultative. In this small set of verbs, then, target aspectual choices can be correlated with the meanings, i. e. inherent verb aspect.

One more test case for the GDH is the use of aspect in the few instances of the

target non-past tense verbs since the default tense choice in the task is dominantly past, and since the GDH predicts prominent use of tense for L1 English/L2 Russian learners. These verbs include *umret* 'die', (present perfective for future meaning, *dat* 'give' (imperative, non-finite), *skazat* 'tell' (imperative, non-finite), and *(rešila) pomoč*, '(decided to) help' (perfective infinitive). These verbs are mainly correctly used, with the highest target choice numbers for *dat* 'tell' and *skazat* 'tell'; the verb *umret* 'die' is used in the future imperfective form 3 times, paralleling the form of the future tense in English, i. e. 'will +verb'. The highest number of non-target choices, but still almost equally divided between the non-target imperfective infinitive and the target perfective infinitive is the verb *pomogat*/'*pomoč*, 'help'. The verb *rešit* 'decide' is in the past, and the aspectual choice seems to be a lexical decision, i.e. the choice of verb meaning as an individual lexical item rather than aspect.

To summarize, in Task 1 L1 English/L2 Russian use a higher percentage of the perfective than the imperfective forms, as expected in the cloze test with more target perfective choices. However, the imperfective is substituted for the perfective in more non-target contexts than the other way around. In fact, more overall non-target occurrences are found in the use of the imperfective. This suggests that the imperfective is more frequently substituted for the perfective, although, in general, the perfective is used more by the L2 Russian learners. The form-function mappings of target choices are not consistent or straightforward and indicate a tendency rather than a clear pattern: activities for the imperfective and completives for the perfective. These findings support the GDH in the following way:

L1 English/L2 Russian learners use a limited set of aspectual choices; the imperfective non-target forms are higher in frequency. At the same time, the baseline tense choice is maintained, primarily through the task-based past tense choices matching the use of the perfective. Overall, L2 tense is used more consistently in line with the native speaker options, while L2 aspect is limited and overgeneralized, with the perfective being more accurately used but also overgeneralized to some imperfective contexts, and the imperfective carrying more non-target aspectual choices. Overall, then, L1 English/L2 Russian learners use tense more consistently and accurately than aspect, which suggests the GDH L1 effect claim regarding tense-prominence.

5.1.2. Task 2 Frog Story

Out of the 21 L1 English/L2 Russian Frog Stories, one narrative was not complete but the tense-aspect choices were included in the analysis for comparison of the relevant episode/segment in the story. The number of clauses per narrative varied from 14 to 64, averaging 25-30 clauses per narrative (average =25-30). While the individual narratives are marked by idiosyncracies, making grouping of the results quite challenging, some significant patterns have emerged. In the following sections, I will present the results, address their relevance for the GDH, and then conclude with the summary of the results relative to the predictions of the GDH for L1 English/L2 Russian.

Before I go into the detailed discussion of the results, let me briefly

summarize the major tense-aspect features of the native speaker, i.e. baseline Russian Frog stories. Ten (n=10) native speaker Frog Stories served as the baseline for Task 2. The following four relevant narrative and tense-aspect prominence features

characterize these narratives:

(a) Frog Stories by Russian native speakers are long, ranging from 22 clauses per narrative to 174 clauses per narrative (average =71 clauses); they are narrated in the past tense as the default verb tense, and they they include narrative strategies not found in the L2 stories, such as the use of names for the main characters, narrating the story from the first person perspective, and expanding the narrative by adding an introductory episode as the background to the episode depicted in the first picture of the 24-picture story book used as task 2. Overall, these stories are characterized by more textual density and more varied narrative strategies than the L2 Russian Frog Stories.

(b) These narratives have a clear perfective/imperfective distribution to mark events in the foreground and the events in the background, respectively. Overall, perfectives are more frequently used than imperfectives, their main narrative function being to advance the narrative. In addition, the narratives have a range of varied perfectivizing prefixes and perfective verb forms to mark the perfective aspect for the main, i. e. foregrounded events. Most of these perfective forms are not found in the L2 narratives at all. To illustrate, some examples of such varied perfective forms are *u-skakat*, ‘hop, skip, leap’, *opro-kinut*, ‘throw off’, *pod-krast'sja*, ‘stealthily come up to’, *pod-cepit*, ‘thrust upon’, *udivit'sja* ‘get surprised’, *svalit'sja*, ‘knock down’, *vii-sunut'sja*, ‘poke one’s head’, *stolknut'sja*, ‘collide, crash’ *po-darit*, ‘give a gift’,

proverit, ‘check, verify’, *u-ronit*, ‘drop’, *zabludit’ sja*, ‘lose one’s way, *vii-pliivat*, ‘swim out’.

(c) Lexical means to express aspect are used mainly with only a few imperfectives, such as phasal aspects to mark the beginning of the activity as in *stat’ zvat*, ‘start to call’, *načat’ iskat*, ‘start to search’; the continuation of an activity, as in *prodolžat’ iskat*, ‘continue to search’; state of deciding on an effort, as in *rešit’ poiskat*, ‘decide to look for’, and making an effort, as in *starat’ sja pomoč*, ‘try to help’. The L2 Russian use and frequency of these lexical expressions will be addressed in a separate subsection below.

(d) Deverbals are aspectual forms frequently used in clausal sequencing only in the baseline Frog Stories. They can be verbal adjectives, present active/passive, past active/passive, or verbal adverbs. In the native speaker Russian Frog Stories, two of these forms are typically used: (1) (less frequent) past active verbal adjective, formed from imperfective and perfective verbs by adding *-vš*, or *-šii* and adjective endings to the infinitive (past tense stem); (2) (more frequent) verbal adverb, transitive or intransitive; imperfective is formed from the present stem of the imperfective verbs by adding *-ya* after vowels and most consonants; the perfective verbal adverb is formed from the past stem of the perfective verbs by adding *-v* after a vowel and *-shi* after a consonant (Beyer 2008: xxi-xxii). The examples below will illustrate each of these aspectual forms as used in clausal sequencing in the baseline Frog Stories (deverbals are in bold type).

(1) *A ničego ne zamečajuščii*.IMPF pes

prodolžal atakovat' gnezdo.

'And **the un-suspecting** dog

continued to attack the nest.'

(2) *Uvidev*.PERF *noru,*

maljčik stal zvat' ljagušenka tam.

'**Having seen** the hole

The boy started calling Froggie there.'

Importantly, as noted above, L2 Russian Frog Stories do not employ any deverbals as verb forms in clausal sequencing.

Now, I will turn to the L2 Russian Frog narratives by L1 English speakers. In all the L2 narratives, the dominant past anchor tense parallels the native speaker tense choice. Occasional use of the present tense appears as quoted speech by the characters within the narrative or in the commentary outside of the main storyline, either as part of the narrative or at the end of the narrative. The shifts to present, however, are not significant in terms of their frequency. Target use of tense is maintained dominantly throughout the L2 narratives.

The use of aspect, on the other hand, is characterized by more variation. However, some general observations are in order. The L2 narratives have numerous examples of morphologically misformed verbs, either perfective or imperfective, showing that the complex morphology of the Russian aspect has not been acquired. In addition, the tendency to substitute the imperfective for the perfective, largely without a consistent recourse to either a specific form or function or the link between the two,

points to a generalization already given in the first task: L2 Russian learners treat aspectual choices as individual lexical items rather than aspectual nuances. Finally, repeated tokens of the same verbs in the same aspectual class, typically imperfective, and the use of lexical means to express aspect, indicate a limited set of aspectual distinctions in the L2 Russian production.

In the tables below, I present summary results and individual results from the L2 Frog Stories, followed by the examples of the clauses that illustrate the relevant findings. In order to test the tense-aspect prominence predictions of the GDH, the discussion of the results will be divided into four subcategories: (a) non-target morphological forms; (b) aspect substitutions (mainly imperfective for perfective); (c) lexical means/strategies; and (d) idiosyncratic clausal strategies, illustrated with examples.

Table 7 here

(a) Non-target L2 Morphological Forms

The impoverished, incomplete morphology in the L2 Russian Frog Stories (examples with the * in the table) clearly shows that the target forms have not been fully acquired for all target verbs. While it is difficult to pinpoint a consistent morphological strategy such as overgeneralization of the affixes (Polinsky 2008), the non-target forms follow the aspect-marking morphological processes in Russian.

For instance, stem change (IMPF to PF), as in *rešat* /*rešit*’, ‘decided’ is applied in the misformed verbs *kričat* /*za-kričat*’/**kričil*’, ‘screamed’. Similar attempts show in the verbs *razbivat*’ (*sja*)/*razbit*’ (*sja*)/**razbal*’, ‘break’ or in *sidet*’/*posidet*’/**sudel*’, ‘sit, be sitting’, *čuvstvovat*’/*po-čuvstvovat*’/**čustavaju*’ ‘feel’

viset / *poviset* / **visili* ‘hang’, *padat* / *upast* / **upasla*, ‘fall’, *privetstvovat*

/ **privetvsvala* (IMPF only) ‘welcome’.

As a perfectivizing strategy, prefixation is illustrated in the verbs *javljat*’ (*sja*)/*javit*’

(*sja*) / **po-javlyalas*’, ‘turn up’, *ranit*’/*ranit*’ or *poranit*’ * / *poranali*, ‘wound’.

(b) Aspectual Substitutions

As Table 7 shows, the second most consistent L2 strategy is the substitution of the imperfective for the perfective. Out of the 43 *non-target verbs* typically used by the L2 Russian subjects, 24, or 56% of all non-target verbs are imperfectives used instead of the target perfective events regardless of their perfective meaning/function (punctual, inceptive, resultative, completive). In other words, one of the two aspectual choices, in this case imperfective, is used as the aspectual event marker in a semantically inconsistent way. The L2 Russian subjects seem to have chosen the aspect for the verb as an ‘either/or’ option, selecting the imperfective as one of the two lexical rather than lexical and grammatical options.

Furthermore, unrelated to the perfective meaning, the choice of one aspect over the other indicates a pattern of selecting a lexical item rather than a grammatically marked aspect. At the same time, however, except in case of the verb *čuvstvovat*’ / *počuvstvovat*’ / **čustavaju*, ‘feel’, all the aspectual substitutions are marked for the past tense, the default narrative tense in the L2 Russian Frog Stories. Importantly, then, while the L2 Russian subjects mark tense consistently, the use of aspect varies from the morphological malformations to the use of the imperfective instead of the perfective.

The next pattern to be pointed out is the aspectual marking of the small set of

multidirectional/unidirectional motion verbs used in the L2 Russian Frog Stories.

VERB	MOTION (IMPF/PF)	L2
'walk/set off'	<i>hodit'</i> (multidirectional)	<i>šol</i> (unidir.)
	<i>idti/poiti</i> (unidirectional)	<i>vihodil, prihodil,</i> (multidir.)
'climb'	<i>lazit'/polezt'</i> (multidirectional)	<i>lazil, *u-lezla,</i> <i>*lezla</i>
'run away'	<i>begat'/pobežat'</i> (multidirectional)	<i>bežal, begal</i> (unidir./multidir.)
	<i>bežat'/pobežat'</i> (unidirectional)	
'carry'	<i>nosit'/ponesti</i> (multidirectional) (unidir.)	<i>*prine, nesla</i>
	<i>nesti/ponesti</i> (unidirectional)	
'ride, drive go by vehicle' context	<i>ezdit'</i> (multidirectional)	<i>poezdal</i> (multidir.)
	<i>ehat'/poehat'</i> (unidirectional)	(no semantic in the story)

Four out of five motion verbs used by the subjects are examples of non-target L2 choices that do not distinguish between multidirectionals and unidirectionals and favor imperfective over perfective or morphologically misformed verbs. The lack of consistent form-meaning mapping, including the use of a verb whose meaning does

not correspond to any motion event in the story, reconfirms that the L2 subjects' aspectual strategy is one event-one lexical item, rather than aspect.

(b) Lexical Means

In identifying the use of lexical means as an aspect-marking strategy by the L1 English/L2 Russian subjects, I follow Slobin and Berman (1994), who list "lexical marking of aspect (particles, verbs, adverbs)" (1994:19) as one of the ways of marking temporality in their Frog Story crosslinguistic study. Specifically, the examples I list illustrate the use of a complex predicate (verb phrase) rather than including adverbs as part of the clause-level expression of aspect. Following Polinsky (2008), the verb phrase is defined as consisting of a matrix verb and an infinitive complement, where the matrix verb marks the tense (tests the GDH tense-prominence prediction for L1 English), and, together with the infinitive complement, expresses aspect. Furthermore, in Russian, a matrix verb, marked for the tense, can take an imperfective or a perfective infinitive, and, in some instances, both (Polinsky 2008):

- a. *ustat' begat/*bežat'* 'get tired of running' (imperf./*perf.)
- b. *zabyt' pokupat'/kupit'* 'forget to buy (*imperf./perf.)"

(examples from Polinsky 2008:13 in manuscript before publication).

The list of complex verb phrases below illustrates the way that a number of target perfective aspectual choices were expressed by the L2 Russian learners. Each L2 infinitive complement from the list below, except the verb *smotret'*, 'look, see, watch' is in the imperfective form, and *the morphologically accurate target imperfective/perfective forms are given in the parentheses*. Some of the complements, however, are adjectives, identified with a '+' below.

- (2;29) *prodolžal *prighat'* 'continued to scare (the bees)?'
(pugat' /ispugat')
- (2;46) *budem gotovit'* 'will make/cook'
(varit' /svarit')
- (3; 8) *stali smotret'* 'started to look'
(smotret' /posmotret')
- (3; 11) *stali kričat'* 'started to cry'
(kričat' /zakričat')
- (3; 26) *stala laet'* 'started to bark'
(laet' /zalaet')
- (3; 32) *stali prigat'* 'started to get scared'
(pugat' /ispugat')
- +(3; 36) *stali (ochin') beshenii* 'became (very) angry'
(serdit' (sja)/rasserdit' (sja))
- +(3; 40) *stala bespokoet* 'became irritated'
(bespokoit' (sja)/pobespokoit' (sja))
- (3; 44) *stala bežat'* 'started to run'
(bežat' /pobežat')
- (4; 22) *rešil vzjat'* 'decided to take'
 (acceptable in baseline Russian)
- (5; 13) *načali letat'* 'started to fly'
(letat', letet' /poletet')
- (7; 18) *načalis' bežat'* 'started to run (away)'

(*bežat* /*pobežhat*')

+ (8; 21) *stali rastroinimi* 'became agitated'

(*rasstraivat* /*sja/rasstroit* /*sja*)

(12; 21) *prodolžat* /*iskat*' 'continued to search'

(*iskat* /*poiskat*') (imperfective acceptable)

(17; 20) *poprob*(**i*)*val naiti* 'tried to find'

(*poprobovat* /*naiti*)

The examples of lexical means in L2 Russian to express target perfective aspect include mainly matrix verb + infinitive complement predicates. The functions are primarily those of phasal aspect (Bhat 1999): inceptive, continuative, change of state), an aspectual strategy that is possible but not preferred in baseline Russian. While the target aspect in the examples above is the perfective form of the verb, in the L2 Frog Stories the imperfective or a complex verb phrase (lexical expression of aspect) is consistently substituted for the perfective.

This finding points further in the direction of a limited set of aspectual choices in L2 Russian analyzed in this study, whereby the past is consistently marked on the matrix verb, marking aspect in a way which is consistent with the L1 English: 'started to run'; continued to search; decided to take'; tried to find'. In only one example of the present tense, *budem gotovit*' 'will make-1p pl-FUT-IMPF' (completive/resultative meaning), this L1 strategy is further supported regardless of the shift in tense. Thus, these aspectual strategies are in line with the prediction of the GDH regarding the L1 English/L2 Russian limited and overgeneralized aspectual choices while tense remains consistently marked.

(d) Idiosyncratic Clausal Examples

I subdivide the clausal examples in three groups based on the type of the subject-specific tense-aspect strategy. The first set of examples includes a switch in tense from past to present. For each participant, the number appears in the square brackets at the top, and the numbered clauses below are marked in the sequence they appear in the subject's Frog Story.

(1) [Subject 3]

08 *Maljčik i sobaka stali smotret'* (PAST INF-IMPF) *v ih komnate dlja ljaguška.*

'The boy and the dog started to look in the room for the frog.'

09 *No oni ne naidu* (PRES PERF) *ego.*

'But they don't find him.'

10 *Oni deržali* (PAST IMPF) *okno.*

'They held the window'

11 *Stala kričat* (PAST INF-IMPF) *dlja ljagušku.*

'And started to call for the frog.'

The L2 tense-shift strategy here seems related to the expression of aspect rather than tense; the verb 'find (out), discover', which is in the present tense in clause 09, contrasts with the activity of 'looking for', in the past tense in clause 08. In fact, the verb 'find out, discover' is used in the sense of 'find', a punctual or resultative aspectual meaning indicating the unsuccessful end of the search. Furthermore, the verb is in its perfective form (*nahodit'/naiti*, 'find'), where the perfective form used by the subject has a target future meaning since perfective

present forms are used to express future in Russian.

As the punctual, resultative meaning of ‘find’ clearly contrasts with the next two clausal verbs, both in the past tense and marking an episode boundary in the Frog Story, the past-to-present non-target L2 switch in the previous episode, “But they don’t find him’, appears to be a way of marking aspect through functional/lexical means (verb item that means end of search); the switch to present functionally expresses perfective aspect in the past, which would have been a preferred target form in Russian. In this case, then, the need to express aspect disrupted the consistent marking of the target past.

(2) [Subject 4]

22 *Eto ljaguška prinadležaet* (PRES IMPF) *k maljčiku.*

‘That frog belongs to the boy.’

23 *Tože esli ona poterjaets’* (PRES PERF)

‘Even if she gets lost’

24 *Ona naidot* (PRES PERF).

‘She finds.’ (passive intended)

25 *Oni (maljčik i ljaguška) prinalizhajot* (PRES IMPF) *k drug drugu.*

‘They (the boy and the frog) belong to each other.’

The shift to present here happens at the end of the narrative, as a concluding comment to the happy ending in the search for the lost frog. The rest of the subject’s Frog Story is in the past, so this switch to the present has the function of marking the narrator’s commentary. Grammatically, the use of the imperfective followed by the perfective, in a way similar to the example above, indicates a contrast between a state,

‘belong to’, and the punctual verbs ‘lose’ and ‘find’, both of which are in the non-target present tense since the present perfective in Russian expresses future meaning.

In the perfective, then, the L2 past-to-present shift has the aspectual meaning of ‘getting lost’ and ‘being found’ (the latter verb is in the non-target active form but with the meaning that the frog was found, not that it found itself). Similar to the example above, the disruption in consistent past marking reveals a narrative and aspectual functional strategy rather than a failure to mark tense.

Next, I will address several clausal examples that illustrate aspect substitution, i. e. the use of the imperfective for the perfective and the non-target switch from one aspect to the other between two consecutive clauses/events.

Although this strategy has already been discussed in the previous section, following the tables with non-target aspectual choices, I will discuss the individual examples to expand on the aspect-marking strategies in the L2 Frog Stories.

(3) [Subject 3]

63 *I kogda ljaguška proshalas*’ (PAST IMPF) *s ego semje,*

‘And when the frog was saying good-bye to its family’

64 *Malčik, sobaka i ljaguška pošli* (PAST PERF) *domoe.*

‘The boy, the dog, and the frog walked home.’

(4) [Subject 4]

03 *Eto ljaguška bežala* (PAST IMPF) *ot banki*

‘The frog was running away

04 *potomu što ona proishodila* (PAST PERF) *ee semya.* (meaning?)

because she happened/took place? her family.’

(5) [Subject 5]

07 *Oni vstrečali* (PAST IMPF) *s drugimi životnami*.

‘They were meeting other animals.’

08 *Pervim životnam kotoriim oni vstrechali* (PAST IMPF)

The first animal they were meeting

09 *Bil* (*groundhog*).

‘Was the groundhog.’

In the clausal examples above, the three subjects follow a similar strategy in that the imperfective is substituted for the target perfective (hence the gloss in the progressive). Specifically, Subject 3 uses the imperfective in clause 63 for the verb ‘say good-bye’, here in the punctual/completive meaning, followed by a perfective in the next clause, 64.

The same pattern appears in the Frog Story by Subject 4, where the non-target use of the imperfective for ‘run away’ is followed by the perfective of the verb ‘happen/take place’, whose meaning does not fit within the clausal context, and might be read as ‘missed her family’ or a similar more contextually meaningful expression.

Finally, Subject 5 uses the non-target imperfective with the verb ‘meet’ consistently over two subsequent clauses.

The substitutions illustrated with these three examples further confirm the general trend of substituting the imperfective for the perfective and marking the verbs for tense while choosing aspect as an individual verb item rather than the target form in the aspectual pair. In a sense, this L2 strategy can be included with the other

strategies that indicate limited aspectual marking, while tense remains consistently marked regardless of aspect, thus confirming the GDH prediction regarding L1 English tense prominence and limited L2 aspectual choices.

The next group of subject-specific examples can be seen as a mix of form-meaning patterns with the goal of communicating the narrative meaning regardless of form. Among these patterns are idiosyncratic clause-level inconsistencies in (a) lexical choice, (b) morphological patterning, and (c) clausal sequencing. In what follows, I give examples of each of the significant idiosyncratic patterns.

(6) [Subject 8]

08 *Kogda maljičik *vistal* (PAST-PERF) (*vstal*)

‘When the boy got up’

09 *On zametil* (PAST PERF)

‘He noticed that’

10 *Čto ljagušk njet* (Ø COP-NEG).

‘There was no frog.’

While this subject uses the target perfective for the punctual events ‘get up’ and ‘notice’, the non-target, misformed morphological form marked with the * illustrates incomplete morphological patterning.

The example that follows shows a similar and somewhat more complex pattern.

(7) [Subject 9]

03 *Maljičik i sobaka *popitalis*’ (IMPF) *naiti* (PERF INF) *v ljagušku*.

‘The boy and the dog *fed to find the frog.’

05 *Oni všli* (PAST PERF) *v les.*

‘They went out the woods.’

06 *Vo vremena maljičik pitalsja* (PAST IMPF) *naidti*-PERF INF *v ljagušku.*

‘At the time the boy *fed to find the frog.’

07 *Sobaka našel*-PAST PERF *v roi pčelov.*

‘The dog *found a swarm of bees.’

Looking closely, this subject combines all three strategies to communicate the narrative regardless of form. For instance, the repeated non-target verb pattern in clauses 03 and 05 lacks not only the targeted morphological form but also the lexical meaning. The gloss ‘fed to find the dog’ clearly does not match the meaning of the clause, which in the narrative episode best fits the start of the search for the missing frog. The verb can be seen as a lexical item for such intended meaning, most likely a similar verb *probovat’/poprprobovat’*, ‘try’, as in ‘tried to find the frog’, which occurs in a number of other L2 Frog Stories.

The intended perfectives in clauses 03, 04, and 06, *po-pitalis’*, *vshli*, and *naš(e)l* (see the gloss above) illustrate non-target prefixation for the first two verbs and a non-target vowel change for the third verb (should be *našol*). This mix of forms and lexical choices also illustrates clausal sequencing, with the repeated verb patterns in clauses 03 and 05 specifically used to continue the narrative. Importantly, while L2 aspect is expressed via a mix of strategies, target past tense is marked consistently.

Some related clausal sequencing strategies are illustrated in the examples from a number of subjects. I’ll first review Subjects 10, 11, 12 together.

(8) [Subject 10]

06 *Maljčik i šenok iskali* (PAST IMPF) *ljagušku*.

‘The boy and doggie looked for the frog’

07 *No ne mogli naiti* (NEG PAST IMPF PERF – INF) *ee*.

‘But couldn’t find her.’

...

11 *Ešo oni ne mogli naiti* (NEG PAST - IMPF PERF – INF) *ljagušku*.

‘Again they couldn’t find the frog.’

The clausal sequencing strategy in this subject’s Frog Story is illustrated in the repetition of the complex verb phrase ‘couldn’t find (the frog)’. The verb *moč*’/*smoč*, ‘can, be able to’ (target *moč*, IMPF) seems to have two functions in this case: a lexical function marking the unsuccessful search for the frog as the aspectual ending to the event; and a narrative function moving the narrative forward from one episode to the next.

(9) [Subject 11]

09 *Ego sobaka poprobovala* (PAST PERF *iskat*’ – IMPF – INF) *v botinke*

‘His dog tried to search in the bottle’

10 *No ne smoga* (NEG - PAST PERF) **vitaščat*’-**IMPERF ego golova*
otsjda.

‘But couldn’t pull his head out.’

...

14 *I banka *razbila* (PAST PERF).

‘And the jar broke.’

15 *Maljčik bil-PAST-COP očen’ rastroen*.

‘The boy was very upset.’

16 *Čto ego banka *razbila* (PAST PERF).

‘that the jar broke.’

...

18 *Oni dolžni iskat’* (MOD IMPF – INF) *podalše v lesu*.

‘They ought to search further in the woods.’

...

24 *Maljčik poproboval posmotret’* (PAST PERF PERF – INF) *v duplye v derive*.

‘The boy tried to have a look in the tree trunk.’

This L2 Frog Story example has all three characteristics discussed in this subsection: (a) lexical choice/lexical means in expressing the event, shown in clauses 10 and 24, ‘tried to search’, ‘tried to have a look’, where the matrix verb ‘try’ has both the lexical function of emphasizing the effort in the search and a clausal function of marking the episode boundary; the use of the modal/matrix verbs in clauses 11 and 18 seem to be lexical means to express the resultative and continuative aspect, shown in ‘couldn’t pull out’ and ‘ought to for’ in 11 and 18 respectively; (b) the use of non-

target morphology is shown in clauses 11, 14, and 16, all resultative aspects, with the non-target verb form for ‘pull out’ and the incomplete verb forms for ‘break’, which is a reflexive verb in Russian (*razbit'sja*); (c) repeated (and overgeneralized) aspect choices have the narrative function of advancing the narrative despite the limited aspectual options. In all these instances the L2 verbs are marked with the past, predictably marking tense, in support of the GDH.

(10) [Subject 12]

13 *No kogda on podal* (PAST PERF) *otvet*.

‘But when he gave the answer’

14 *Ego sobaka upal* (PAST PERF).

‘His dog fell.’

15 “*Mne nado naiti* (MOD PERF – INF) *lyagushku*.

“ ‘I have to find the frog.’

16 *I ne volnovat'-sja* (NEG IMPERF - INF- REFLEX) *o tebe*.

‘And not worry about you.’

17 *Tebe nado idti* (MOD IMPERF – INF) *so mnoi*.”

‘You have to go with me.’

This subject’s Frog Story examples exhibit similar features. The lexical expression of aspect in clause 13, ‘give an answer’ has the resultative/punctual meaning and replaces the target perfective *otvetit'* in the aspectual pair *otvečat'/otvetit'* ‘answer’. In clause 14, the perfective *upast'* of the aspectual pair *padat'/upast'*, ‘fall’ marks another resultative/punctual meaning. The repeated pattern modal + infinitive in 15 and 17 emphasizes it is necessary for the boy and the dog to

find the frog and to search together; this can aspectually be interpreted as resultative, ‘need to find’ and inceptive ‘need to start the search’.

The imperfective in 16 expresses a state and precedes the need for a search in 17, sequentially expressed by the imperfective infinitive within the complex verb phrase.

The mostly overlapping features are illustrated in the clausal examples by Subjects 13, 14, 15, and 17 have all the elements under discussion: lexical aspectual expressions, morphological misformations, and clausal sequencing. I will address them one by one after presenting them as a set of examples from the L2 Frog Stories.

(11) [Subject 13]

04 *Na sledjuščii den' malčič ne smotrel (NEG PAST IMPF) ljagušku v banke.*

‘The next day the boy didn’t see the frog in the jar.’

05 *On smotrel (PAST IMPF) ego odeždah i ego komnate.*

‘He looked his clothes and his room.’

06 *Malčič i sobaka smotreli (PAST IMPF) v okne.*

‘The boy and the dog looked in the window.’

07 *No kogda sobaka smotrela (PAST IMPF).*

‘But when the dog looked’

08 *On upal (PAST PERF) iz okna.*

‘He fell out of the window.’

...

18 *No olen' soveršil* (PAST PERF) *ataku na maljčika.*

‘But the deer stopped its attack on the boy.’

(12) [Subject 14]

01 *Maljčk i ego sobaka sideli* (PAST IMPF) *doma v spalnike.*

‘The boy and his dog were sitting at home in the bedroom.’

*Sobaka *sudela* (PAST IMPF) *na kraie okno.*

‘The dog was sitting at the edge of the window.’

...

(13) [Subject 15]

30 *Sidja-vi-ščuju* (DEVERBAL IMPF) *s ego ljagušagoi ženoi...*

‘Sitting with his wife frog’

31 *Saša ne hotel meshat'* (NEG - PAST IMPF IMPF – INF).

‘Sasha didn’t want to interfere.’

(14) [Subject 17]

05 *Kogda Bob otkrival* (PAST IMPF) *glazu.*

‘When Bob was opening his eyes’

08 *On osoznel* (PAST PERF)

‘He realized’

09 *Čto Boris ušol* (PAST PERF).

‘That Boris left.’

Subject 13, for instance, uses the imperfective *smotret* 'look' over four clauses for subsequent events, which contrasts with the perfective, resultative meaning expressed in the phrase 'finished the attack' in clause 19. One additional note to this example is that this specific aspectual marking strategy is repeated in a number of L2 Frog Stories; the verb *smotret* is used in its non-target imperfective form without an exception in almost every L2 story.

A similar example of the lexical means to express aspect can be seen in the Frog Story example by Subject 17, where the imperfective in clause 5 'was opening his eyes' is meant to connect to the punctual or resultative meaning in the following two clauses; the non-target use of the imperfective for the punctual meaning in clause 5 shows a way of expressing the aspectual function both in lexical terms and as a part of event sequencing strategy: the boy opened his eyes, i. e. woke up and realized that the frog was gone.

Morphological misformations are illustrated next. Subject 14 has a switch from a well-formed imperfective *'sided'* for the verb 'sit' in clause 01 to a non-target vowel change in the same verb in clause 12.

Subject 18, as shown below, has a form-related strategy directly opposite to Subject 11; while Subject 11 missed on the reflexive form in the verb *razbit'sja* 'break', Subject 18 adds the reflexive *sya* to the verb *vstretit'* 'meet' where it is not needed. Similarly, in the complex verb phrase in the narrative by Subject 20 further below, the morphologically misconstrued perfective of 'get dressed' is used within the verb phrase 'wanted to get

dressed', indicating the intended punctual aspectual meaning in clause 04 contrast to the continuative activity 'sleep' in clause 05.

(15) [Subject 18]

11 *Tam oni vstretilis*' (PAST PERF – REFLEX) *pčelov, olenj i sov.*

'There they met the bees, the deer, and the owl.'

(16) [Subject 19]

07 *V etot denj, maljšik i ego sobaka soveršili* (PAST PERF) *v tuflami i potom na ulice.*

'That day, the boy and his dog ended in slippers and then on the street.'

...

10 *Oni soveršili* (PAST PERF) *iz okna.*

'They ended out of the window.'

...

14 *I posle oni soveršili* (PAST PERF) *pole.*

'And then they ended outside.'

(17) [Subject 20]

04 *Maljšik i sobaka hotjeli* (PAST PERF) **otdenjat*'(PERF – INF) (*odet'sja*).

'The boy and the dog wanted to get dressed.'

05 *I poetomu oni spali* (PAST IMPF).

And then they were sleeping'.

Another clear example of a lexical aspectual strategy, also used in clausal and episodic sequencing, can be seen in Subjects 19 and 21. The punctual or resultative meaning in clauses 07, 09, 14 is tied to the non-target verb *soveršit*, which marks both the event and the episode, easily tracked back to the verb ‘end up’ in L1 English with a punctual meaning marking either the start or the ending of an action/event; in other words, clausal examples 07 and 14, stating that the boy and the dog ended up on the street and outside, mark the actual beginning of the search on the street and outside.

As the final relevant example, the Frog Story by Subject 21 below illustrates a consistent use of both tense and the target perfective aspect to mark punctual events, one of which, *skazat*, ‘tell’, is repeated in clauses 23 and 26; the target use of the imperfective in clause 21 for the stative verb *znat*, ‘know’, is contrasted with the over-generalized imperfective in *smotret*, ‘look’, in 24, here having the function of event/clause sequencing or marking a switch to a continuative activity right after the punctual verb in clause 23.

(18) [Subject 21]

19 *Togda maljčik upal* (PAST PERF) *v vodu.*

‘Then the boy fell in the water.’

20 *Srazu on znal* (PAST IMPF)

‘He knew right away’

21 *Kuda pošla* (PAST PERF) *ego ljaguška.*

‘Where the frog went.’

22 *On skazal* (PAST PERF) *sobake* “*Tiše*”.

‘He told the dog, “Quieter!”’

23 *I medlenno smotrel* (PAST IMPF) *malenkiju gruppu ljagushkoi*.

‘And calmly looked at a small group of frogs.’

24 *Maljčik opjat vzial* (PAST PERF) *ego ljagušku*.

‘The boy again took his frog.’

25 *Skazal* (PAST PERF) *dosvidani drugim ljaguškam*

‘Said good-bye to the other frogs.’

26 *I vernulsja* (PAST PERF) *domoi se ego sobakoi i ljaguškoi*.

‘And went back home with his dog and frog.’

To summarize, in light of the GDH prediction for L1 English/L2 Russian, the following findings are significant:

(1) The verbs in the L2 Russian Frog Stories are consistently marked for tense, hence the tendency to mark tense dominates the data.

(2) On the other hand, aspectual distinctions are, indeed, limited; the non-target use of the imperfective covering a number of meanings points to a lack of aspectual pairs, i. e. a reduced set of aspectual choices in L2 Russian.

(3) The finding that the L2 Russian subjects seem to follow a small set of the possible Russian aspectual morphological patterns in the misformed verbs can be interpreted as the overgeneralization of the familiar, i. e. learned forms. Similarly, the overuse of the imperfective can be seen as the overgeneralization of the imperfective

in the case of non-target aspectual substitutions.

On the basis of these observations, the GDH predictions are supported for L1 English/L2 Russian. The verbs in the L2 Russian data are prominently marked for tense. Aspectual choices are limited, and the overgeneralized non-target use of the imperfective compensates for the full range of target aspectual choices. There is a clear tendency to mark tense more systematically and pervasively than aspect.

I will come back to this statement at the end of the chapter, as I discuss the findings referring to both tense and aspect prominence as the theoretical proposal that I follow, before considering other alternative explanations in the concluding Chapter 6.

5.2. Results for L1 Russian/L2 English

5.2.1. Task 1 Cloze Task

In this section, to parallel the discussion of the L1 English/L2 Russian results, I will address the results for the other group of subjects, L1 Russian/L2 English learners; again, the results will be presented by task and evaluated against the predictions of the GDH for this group of L2 English learners.

Recall the GDH statement regarding L1 Russian/L2 English learners, which predicts the following:

(a) L1 Russian learners of L2 English will rely on aspect more prominently than tense (Russian is an aspect-prominent language).

(b) L1 Russian learners will have a limited number of tense distinctions. L2 verbs will indicate aspectual bias instead (such as progressive and perfect); L2 tense

will be limited or overgeneralized (to compensate for the lack of tense distinctions).

In the cloze task, the 27 English verbs represent tokens of present, past, future, present and past perfect and past progressive. Therefore, the temporal options are varied, covering the tense-aspect options that are predicted by the GDH. The limitations of the cloze task are that the copula ‘be’ has five (5) repeated instances, two (2) in the present and three (3) in the past; and that the verbs ‘study’ and ‘leave’ are repeated as the acceptable choices of either past perfect or past, respectively, and in consecutive clauses (07-10). However, this distribution of temporal options was necessary in a naturalistic task, as the first-person narrative by a college student with a background similar to the backgrounds of the L2 subjects responding to the task.

Since the cloze task came from an intermediate-high intermediate college English as a Second Language (ESL) grammar textbook (Steer and Carlisi 1998), the answer key to the task was used as the English native speaker baseline¹³. The list in Figure 2 below summarizes all the target verb tokens in the present, future, past and perfect or progressive and includes the same information about the L2 instances of present, future, past, perfect or progressive.

(A copy of the task is attached in Appendix A).

VERB	TENSE	L2 FORM	MEANING
tell	have told	<i>tell, told</i>	present/current relevance
be	(I) am	<i>was/had been</i>	present/state
seem	seem	<i>seemed/have seemed</i>	present/state
study	had studied	<i>have studied/was studying</i>	past/completive/anterior

leave	left	<i>*had leaved</i>	past
expect	didn't expect	<i>*was not expect</i>	past
think	thought	<i>have thought</i>	past
go	will go	<i>go/would go</i>	future prediction
arrive	arrives	<i>will arrive/arrived</i>	present tense marking
time		<i>/have arrived</i>	in the future
learn	will have	<i>will learn/learned</i>	future/completive
	learned	<i>had learned</i>	
enter	will enter	<i>entered/have entered</i>	future prediction
talk	were talking	<i>talked/had talked</i>	past continuous
know	do not know	<i>did not know</i>	present state
say	said	<i>are saying/were saying</i>	past
have	had	<i>have had</i>	past
like	didn't like	<i>don't like</i>	past
be	was	<i>is/have been</i>	past
get	did not get	<i>am not get/don't get</i>	past
		<i>will not get/am not getting</i>	
enter	will enter	<i>enter</i>	future prediction
live	will have	<i>live/have lived/</i>	future completive
	lived	<i>have been living</i>	

The list of target and non-target verb forms with their target meanings shows

¹³ In an informal second reading of the task, a native speaker I additionally consulted mentioned present/present perfect temporal context as acceptable in the second paragraph of the task, if focused on and prompted by the

several patterns. First, both states and events are marked in non-target ways. Second, L2 target present states tend to be past in non-target forms, while target past forms are examples of L2 misformations and the substitution of the present perfect for the past. Third, future predictions and completive events tend to shift between present and any perfect tense, present, past, or future; this tendency of substituting present for the past is repeated in the examples of the target past perfect marking completive and anterior past events. Last, even when only one or a few examples illustrate the non-target tendencies, they are worth identifying in order to point out that L2 English tense carries non-target forms in a variety of contexts, showing that the L2 English learners resort to the strategies of tense substitutions, misformations, as well as the highest variation in the temporal marking of perfect (past, present, future) or future predictions. The past-for- present substitution is limited primarily to states.

In Table 8 below, I present tense choices, i. e. types and instances, or tokens for Task 1.

Table 8 here

The results for Task 1 indicate significant individual variation but also non-target patterns in the future, past, and perfect/progressive forms. The percentage of non-target forms in the present tense (54%) is comparable to the percentage of tense overgeneralizations in the perfect or progressive (57%). Past non-target forms are lower by about a half (31%), close to the non-target future forms (25%). Overall, the results suggest that L2 tense is a challenge for these L2 learners, specifically in the L2 future and perfect or progressive forms; typically, in the learners' L1, Russian, the corresponding meanings/functions are expressed by aspectual distinctions: present

perfective for the future and past imperfective/perfective for the past. As stated before, Russian does not have perfect or progressive.

Among the target English tenses, then, past tense seems to be the default target tense for the L1 Russian learners of L2 English, while the majority of non-target tense forms indicate a tendency toward marking aspect rather than tense in the other temporal contexts. Temporal reference seems to be aspect-driven in expressing predicted future events and completed events in the past or future, with individual instances of perfect tense substitutions for the L2 present or past meanings. Although the percentage of these non-target forms and substitutions is not statistically high, the use of such non-L2 forms mostly when not referring to the past points to some consistent L2 tendencies.

Overall, in this task, L2 English data show variation in the use of L2 tenses. Completive meaning, for instance, is expressed by a number of tenses, while future predictions shift between the present and the perfect. This variety in tense marking suggests that the L2 learners tend to mark states and events by marking the internal temporal contouring rather than the temporal reference. The use of past to mark states in some instances can be explained by the L2 learners' tendency to use tense agreement (also known as sequence of tenses) as a consistent formal marking of a permanent state (e.g. 'People always told me that I was an adaptable person'); this tense-marking strategy may also be a result of instruction, a point that I will return to in the concluding chapter of the study.

In summary, The GDH predictions are supported in the following way:

(a) L2 tense use shows variation except for the use of the default, baseline

storytelling past; non-target tense use indicates that consistent aspectual meanings take over in the present, perfect and progressive.

(b) Although task-based, past target forms support the claim regarding a limited set of tense choices, i.e. past.

(c) The limited (past) tense use also shows in the aspectual functions with non-target tense markings, as in the progressive and perfect; L2 tense is limited and overgeneralized, or marked inconsistently regardless of meaning (to compensate for the lack of tense distinctions).

Task-based, target use of the default narrative past remains an important observation, which I return to in the conclusion in Chapter 6.

5.2.2. Task 2 Frog Story

L1 Russian/L2 English Frog Stories (n=11) indicate a more consistent pattern in the temporal/aspectual use, with a clear difference in length relative to the set of stories by L1 English/L2 Russian learners. Overall, the narratives in the L2 English group are longer, with a total of 644 clauses and the average narrative length of 59 clauses. This clause distribution is shown in Table 9 below.

Table 9 here

In order to clarify the main L1 English features, before going into the detailed discussion of the L2 English results, I summarize the baseline English Frog Story features. 11 written native speaker narratives were used as baseline stories. The stories were written by graduate students in the 1995 Linguistics Society of America Summer Institute, all participants in Slobin's graduate seminar on the crosslinguistic

L1 developmental study published as *Relating Events in Narrative* (Berman and Slobin 1994). As one of the participants, I was permitted to use these native speaker narratives in my dissertation research. Each Frog Story is divided into 24 episodes or narrative segments corresponding to the 24 pictures in the *Frog, Where Are You?* storybook. The narratives varied in length, averaging between 1 and 10 clauses per segment, a total of well over 264 clauses. The main narrative and tense-aspect characteristics are as follows:

(a) All the narratives are told from the third person perspective and include names for the main characters.

(b) Nine (9) stories are narrated entirely in the past tense, one (1) story switches from past to present in the final segments (18-24) of the narrative, and only one story is narrated entirely in the present tense. In general, tenses are used consistently throughout the narratives. Below is the example of the switch in the concluding segments of one of the narratives.

'Then the elk suddenly stopped at the edge of a cliff

Jason flying over the edge;

Scooter falling down with him.

Into a pond, the two fall with a splash.

Scooter climbs upon Jason's head.

Jason hears something.

What can it be?'

(c) Past perfect is frequently and consistently used to mark anteriority; progressive is not as frequently used; participles with matrix verbs are used as a

clausal sequencing strategy. Here are some examples.

*In his excitement, he didn't notice
that poor Dog had gotten his head stuck in the heavy jar.
"Ouch!" cried the boy.
A gopher had nipped him on the nose
The boy disturbed his sleep.*

Meanwhile, the boy was investigating the nearby tree.

*Now, Dog had begun to howl at the hive,
jumping at it
and pushing on the tree trunk.*

*Of course, he hadn't always lived in a jar in a little boy's room.
He'd once lived in a big forest on the edge of town.*

*The dog, who had been running alongside
fell over with him.*

*As the boy sat up,
with the little dog clinging to his head
they heard something.*

*The deer picked up the boy
and ran off
carrying him to the edge of a cliff.*

(d) Onomatopoeic expressions, such as *Crash! Splash! Shhhh! Ouch!* are used often, together with varied verb types, not found in the L2 Frog Stories. The examples of verbs are highlighted in bold, with one more example, of a phrasal verb, below.

*In running from the owl,
Joe ran right into a big rock.*

(e) Lexical expressions of aspect are used in only a few instances and with the verbs not used in such expressions in the L2 English narratives (shown in Table 11 later in the discussion of the L2 English results). Unlike the L2 English narratives, the infrequent lexical phasal aspect expressions include expressions with matrix verbs ‘try to+infinitive’ or ‘begin to +infinitive’; otherwise, these meanings are expressed by individual verbs, such as ‘realize’ instead of ‘decide to+infinitive’ or ‘set out on a quest in search of’ rather than ‘started to search’. One example of clausal sequencing with a lexical aspectual expression is given below.

*Dog sniffed inside the jar
Trying to find Frog’s scent.*

Now, I turn to the discussion of the L1 Russian/L2 English narratives. The L2 narrative trend to “weave” long narratives may be partly explained by the expectations of the narrative tradition in Russian learners. Longer narratives may have also contributed to more consistency in the L2 tense, primarily sequencing the Frog Story actions and events in the past.

Past tense markings are the most frequent, and the percentage of non-target tokens is lower across the 11 stories. As mentioned earlier, such general results can be ascribed to the task type as much as the influence of the narrative tradition. However, a detailed look at the emerging patterns provides a more adequate analysis of the L2 English tense-aspect in the collected Frog Stories.

In the next subsection, following the methodology I used with the imperfective/perfective aspects in the L1 English/L2 Russian learners, I identify tense as a type in both target and non-target forms and look specifically at the non-target tokens relative to the tense types. The results are presented in Table 10 and, as noted above, will be considered within the context of the GDH predictions that the L1 Russian learners will have a limited number of tense distinctions in L2 English; and that L2 progressive and perfect will be used for aspectual functions, showing a higher percentage of non-target tense markings.

In the subsequent subsection, I address the consistent, most frequent L2 tense patterns first. Next, I will present the relevant non-target forms in the categories parallel to those already discussed in the section on the L1 English/L2 Russian data: (a) tense-aspect substitutions (overgeneralizations), (b) morphological misformations, (c) lexical tense-aspect expressions, and (d) idiosyncratic clausal examples of the tense-aspect patterns.

Table 10 here

A major tense pattern emerging in the narratives is the use of the past tense in sequenced actions, states, and events. In all 11 narratives past is the dominant tense, marking verbs in the sequential segments of the storyline. Past is used in the highest

percentage, ranging from 50-90%, with the most frequently marked past ranging between 80-90% in 8 L2 Frog Stories. This pattern correlates with the use of the past as the default tense in the baseline, i. e. native speaker narratives and with the typical use of the past as the default tense in English narratives (Berman and Slobin 1994). Thus, the use of the past by L1 Russian/L2 English learners follows the target pattern of the prevalent use of the past tense in storytelling.

In parallel to the L1 English/L2 Russian results, I will now discuss the categories of relevant non-target forms in L1 Russian/L2 English, all illustrated in Table 10.

Tense shifting/Tense-Aspect Substitutions

A clearly emerging pattern in the L2 English Frog Stories is that tense substitutions/non-target tense markings do not occur frequently. In fact, only a small percentage of all verbs do not follow the dominant pattern of the past tense narrative and are marked by non-target forms. Despite a small number of non-target forms, mostly in the perfect forms, these are, in fact, the only verbs marked by non-target tenses; thus, this finding gives support to the GDH prediction that perfect or progressive forms will be overgeneralized and marked by non-target tense forms.

Furthermore, the consistently dominant past tense pattern across the L2 English narratives confirms the prediction that the L1 Russian/L2 English learners will have a limited number of (primary) tense distinctions. While this pattern follows the English baseline default use of past tense in storytelling, it also holds up to the prediction of a reduced number of tense markings in the L2 data.

As examples of tense-aspect substitutions, I will address perfect or

progressive first, followed by the use of base forms or a shift to present.

The use of perfect in the L2 English narratives indicates inconsistent tense marking, primarily as past perfect or pluperfect, in some cases shifting to the present perfect. Several patterns emerge in the small set of non-target verbs marked this way. First, a number of punctual or resultative meanings seem to emphasize additionally the completive or resultative meaning, thus underscoring the internal aspectual phase of the event rather than tense. Such examples include *(the dog) had gotten (it) stuck* instead of describing the event as *The dog stuck its head in the jar*, or *The dog's head got stuck in the jar*, where the agency shift in the L2 expression combines with the passive, resultative form.

Another similar example is the verb *break* used to refer to the breaking of the jar in the next narrative episode. The use of the aspectual, resultative, or ending phase *The jar was broken* instead of *The jar broke* further emphasizes the end-phase of the event rather than tense. Referring to the anterior result of the jar-breaking event, another L2 example *The jar had broken* seems to use past/pluperfect to mark the preceding result; The next such example, *The dog had wounded* seems to follow the same strategy in marking the end-result by using the past perfect tense.

The next set of examples are the plu-perfect forms *had decided*, *had seen*, *had been looking for*, and the shift to the present perfect *has been living*; these non-target tense forms refer to subsequent states, sequential activities, and one preceding state, respectively. Non-target tense marking seems to follow the pattern described above, in that the aspectual nature of the state or event does not parallel tense distinctions.

Unlike the perfect, the progressive does not follow the GDH-predicted over-

generalizing pattern. Only one verb *think*, is marked by the progressive rather than by the target simple past, emphasizing activity rather than state.

In the last set of examples of the substitutions, the shift to present occurs with states (*sounds*, *makes mad*) and one modal verb (*can + verb*). This tense shift can be included with the morphological misformations, where verb base forms follow the pattern of shifting to present within the same narrative. I will address these examples in the next subsection.

Morphological Misformations

Typically, base verbs that occur in clauses where past shifts to present seem to indicate the same tense shift pattern although morphologically the forms are not full verb forms, i.e. they are not marked in the third person singular by *-s* or *-es*. Most of these verbs are punctual, inceptive or resultative, with one exception, verb *run*, an activity used in the base form instead of the simple past *ran*. The punctual verbs have the function of introducing an event that opens another narrative segment or episode, such as *fall down*, *get out*, *check*, *pick up*, or *run away*. The states *become free* and *dislike* indicate a change of state or a result (*become free*) and a state that marks a subsequent narrative segment, a comment on the protagonist's feelings (*dislike*).

In this set of verbs, only a few are examples of past tense morphological misformations: *fallen down*, *didn't afraid*, *hitted*. Clearly, these are examples of past tense overgeneralizations. One of the examples, lexical aspect, *want to live* is not marked with the present tense morpheme, which puts it in the same category as the base forms above.

Lexical Aspectual Expressions (Preferred Use of Aspect)

Table 11 here

As table 11 shows, multi-verb lexical expressions of aspect are quite frequent in the L2 English narratives. However, matrix verb types are not diverse; in fact, only four are used to complement verb phrases: *start*, for inceptive/activities; *decide* as punctual or resultative with activities; *try*, modifying the meaning of the verb by emphasizing the start or effort in completing the activity; and *finish*, expressing the end of an activity. Such distribution of lexical expressions seems to indicate another aspectual strategy, contributing to the tendency to emphasize the aspectual phases of the event rather than tense. Although these lexical verb expressions are acceptable and occasionally appear in the baseline Frog narratives, L1 Russian/L2 English narrators use this strategy more frequently, substituting with these expressions for individual past tense verbs, more typical in L1 English, as mentioned above.

Idiosyncratic Examples of Tense-Aspect

In this subsection, I will list and comment on the most relevant idiosyncratic clausal examples of tense/aspect use in the L2 English Frog Stories. These will primarily include substitutions and tense-shifts indicating L2 tendencies in marking tense-aspect. The examples will be analyzed relative to the predictions of the GDH.

In the first narrative, for instance, the shift from active to passive marks the resultative phase of the event:

(19) [Subject 1]

18 *Tommy lost his balance*

19 *And fell down from the window.*

20 *The jar was broken.*

The last clause marks the result of the breaking, focusing on the aspectual end-point of the event.

A number of examples from the next narrative illustrate non-target tense shifting, while focusing on the internal phases of the event/situation.

(20) [Subject 2]

10 *Then Tusik jumped down*

11 *And the jar had broken.*

12 *Ben was frightened Tusik*

13 *Had wounded.*

The use of the past perfect for a subsequent event of the breaking of the jar after Tusik, the dog, jumped, seems to direct the narrator's attention to the effect or result of the breaking rather than the time it occurred, i.e. aspect rather than tense. Similarly, the effect of getting injured is reinforced aspectually by the use of the past perfect despite the nearly simultaneous nature of the situations of being frightened and getting 'wounded'.

The next set of examples illustrates the shift to the present, where present or base forms, as described above, may be morphological misformations rather than aspectual strategies.

(21) [Subject 2]

34 *The deer dashed with Ben on his spikes.*

35 *The deer unsaddled Ben*

36 *And Tusik also fall down.*

37 *They fall upsight down into the water.*

...

41 *Ben made up his mind*

42 *What is going on behind the log*

(22) [Subject 4]

44 *Dog forgot about me*

45 *And run to the river.*

...

53 *He took me*

54 *And throw in the small river together with my dog.*

...

58 *And suddenly I heard 'Kwa, Kwa'.*

59 *It sounds very suspicious.*

(23) [Subject 5]

01 *Somewhere in the middle of nowhere has been living a small boy called Tom.*

02 *And his best friend was his small dog Jack.*

...

37 *Being a good boy,*

38 *Tom made the very difficult for him decision*

39 *And left the frog at the river with his family.*

40 *But he visits the frog quite often*

41 *And they **are** good friends.*

Some additional examples of the shift to past perfect to mark subsequent events seem to be overgeneralizations of the perfect/perfective sense rather than the past time.

(24) [Subject 2]

38 *When Ben pulled himself together*

39 *He had heard a croak.*

...

43 *Ben saw frogs*

44 *and had decided to ask them about his frog.*

Contrary to the GDH prediction regarding the overgeneralization of the progressive, it is marked only infrequently and mostly accurately; one interesting non-target example is the use of the progressive with the punctual verb *fall*.

(25) [Subject 3]

22 *While he **was** falling with jar on his head*

23 *The boy noticed it.*

(26) [Subject 1]

24 *They were calling*

25 *and calling the frog.*

[Subject 6]

70 *The frog family were sitting on the log*

71 *And looking at them.*

(27) [Subject 10]

32 *Tommy fell into the river.*

33 *he was very unhappy*

34 *but he heard*

35 *how frogs singing.*

The lack of tense markings also shows in the following two examples of the target past perfect and the target future tense, respectively.

(28) [Subject 4]

07 *I found*

08 *that frog disappeared.*

...

21 *“O.K.”, I think.*

22 *if my froggy went out*

23 *I go*

24 *And try to find it in the forest.*

The examples in clauses 23 and 24 above are especially relevant if one takes into account the use of present perfective to mark future events in Russian.

Two narrators, Subject 7 and Subject 9, have the most frequent shifts from the past to the present. In each case, the shift seems to mark scene boundaries, leading from one set of sequential episodes that belong to one scene to the next. The following two examples illustrate this point.

(29) [Subject 7]

14 *Jerry and Marble are calling for the frog.*

15 *Jerry is seeking for the frog at someone's mink.*

16 *A groundhog appears from the mink.*

17 *Jerry is seeking for the frog at the hollow*

18 *When a furious owl emerged from the hollow*

19 *Jerry fell from the tree.*

(30) [Subject 9]

33 *Boy hears something, maybe some sounds of animals or even his frog.*

34 *He gets closer and closer.*

35 *He tries to get over a big hollow log*

36 *and suddenly he found a big frog family.*

An interesting example of a three-way tense shift below follows the same strategy although at the event boundary rather than the scene boundary.

(31) [Subject 10]

23 *Dan started barking*

24 *When had seen some bees.*

25 *That makes bees very mad*

26 *And they tried to bite the dog.*

In the last narrative, narrated by Subject 11, examples of tense-shifting also include morphological misformations, which occur the most frequently in this narrative.

(32) [Subject 11]

36 *These things were bees*

37 *Which dislike*

38 *That somebody touched them.*

39 *And suddenly bees' house fall down*

40 *And all bees tried to punish the dog for his doing.*

41 *It was so dangerous to be in the forest alone, without parents*

42 *But Jim was so brave boy*

43 *That didn't afraid anything.*

In the light of the GDH predictions for L1 Russian/L2 English, the following findings are relevant:

(1) L1 Russian learners of L2 English use primarily past tense as the default narrative tense in their Frog Stories. Even though the consistent use of the past tense mirrors the native speaker use of the narrative past in the baseline Frog Stories, when combined with the non-target tense shifts and morphological misformations, this tense use strategy confirms a GDH-predicted limited tense distinctions. While the main narrative tense is past, the target tense distinctions are limited to that tense, and other tense uses are marked largely by non-target forms.

(2) In the L2 Frog narratives, aspectual functions are expanded by the use of the perfect and lexical aspectual expressions while tense use is mixed and does not follow the native speaker baseline. Progressive, however, is used infrequently, similar to the native speaker narratives, but again marked by mixed tenses. Aspectual functions are expressed in various ways regardless of non-target tense choices, thus supporting the GDH statement regarding the aspectual 'bias' in L1 Russian/L2 English, except for the rare use of the progressive.

In this chapter, I have presented the results by L1/L2 group and task: L1

English/L2 Russian and L1 Russian/L2 English results on cloze task (Task 1) and the Frog Story task (Task 2). I have included the major baseline data features for both L1s. The L2 results are presented in the tables and in the discussion sections, divided into further categories of non-target forms-functions: tense-aspect shifting, lexical aspectual expressions, morphological misformations, and individual clausal examples. Based on the dominant patterns in the findings, the results suggest support for the GDH predictions regarding tense and aspect prominence; L2 Russian learners show a clear tendency toward ‘tense-bias’, whereas L2 English learners have a clear tendency toward ‘aspect bias’.

The findings that are parallel to the native speaker production are the use of the past as the narrative tense in both groups and small percentage of the progressives in the English Frog narratives. These results do not clearly support the statement and predictions of the GDH.

In the next, concluding chapter, I will compare and review the results, discuss them in the broader context of tense-aspect prominence (Bhat 1999) and ‘thinking for speaking’ (Slobin 1991). I will re-evaluate the GDH formulation and discuss the results relevant to the other L2 tense-aspect hypotheses. I will conclude with the discussion of any implications the tense-aspect prominence proposal and the GDH may have for further research and, potentially, for L2 instruction.

As mentioned, Tables 4-5; 7-11 will be presented on the final pages of Chapter 5.

Table 4 (INF forms)

EVENT	IMPF	PERF	FUNCTION
fall ill		<i>zabolet'</i>	inceptive/punctual
call up		<i>pozvat'</i>	punctual
tell		<i>skazat'</i>	punctual
die		<i>umret'</i>	resultative/punctual
give		<i>dat'</i>	punctual
get		<i>polučit'</i>	punctual
decide		<i>rešit'</i>	punctual
help		<i>pomoch</i>	punctual
earn	<i>zarabativat'</i>	<i>zarabotat'</i>	habitual/completive
take a walk	<i>guljat'</i>		durative
come (up)		<i>priiti</i>	punctual
take		<i>vzjat'</i>	punctual
throw		<i>brosit'</i>	punctual
laugh		<i>zasmejatsja</i>	burst into laughter/punctual
run away/off		<i>pobežat'</i>	completive/punctual
understand		<i>ponjat'</i>	punctual
cheat		<i>obmanut'</i>	completive
do		<i>sdelat'</i>	completive
get/obtain/reach to		<i>dostat'</i>	punctual
scream		<i>zakričat'</i>	inceptive/punctual
work	<i>rabotat'</i>		durative

Table 5

Total subjects: 21

Total verbs: 33

Total tokens: 693

*can be either IMPF or PERF

VERB	T IMPERF	T PERF	L2 R IMPERF (n)	L2 R PERF (n)
fall ill		zbolel	bolel (6)	zbolel
call up		pozval		pozval
tell		skazal	govoril (1)	skazal
die		umru'	буду umirat' (3)	umru'
give		dai	davai (1)	dai
get		polučil	polučal (5)	polučil
decide		rešila		rešila
help		pomoč	pomogat' (10)	pomoč
give		dala		dala
tell		skazala	govorila (1)	skazala
tell		skaži	govori (2)	skaži
earn		zarabotal	zarabival (4)	zarabotal
take a walk	guljal		guljal 16	<u>po</u> guljal
come		prishol	prihodil (1)	prišol
give		dal	daval (1)	dal
take		vzjal	bral (2)	vzjal
throw		brosil	brosal (2)	brosil
earn		zarabotal	zarabival (5)	zarabotal
laugh		zasmejalsja	smejalsja (3)	zasmejalsja
run away		pobežal	bežal (1)	pobežal
understand		ponjala	ponjmala (2)	ponjala
cheat		obmanut'	<u>obmanjivat'</u> (10)	obmanut'
*earn	(nado) zarabivat'	(nado) zarabotat'	zarabivat'(10)	zarabotat'
work	rabotal		rabotal 20	porabotal
come		prishol		prišol
give		dal		dal
throw		brosil	brosal (1)	brosil
scream/cry out		zakričal	kričal (4)	zakričal
do		sdelal	delal (1)	sdelal
work	rabotal		rabotal 17	<u>po</u> rabotal
throw		brosil		brosil
get/obtain/reach to		dostal		dostal
earn		zarabotal	zarabival (5)	zarabotal
Total: 33	Total: 4	Total: 29	Total: 133	Total: 560
Total tokens: 693	4x21=84 (possible target # of IMPF)	29x21=609 (possible target # PERF)	Total (non- target tokens): 71/133=53%	Total (non- target) tokens: 10/560 1.8%

Table 7 L1 English/L2 Russian (Verbs/aspectual pairs)

T = target/baseline in Frog Story

L2 R = non-target use of aspect

* = examples of misformed aspect T ASPECT and L2R= PAST TENSE,
unless differently coded

L2 R Subjects 1-21

VERB	IMPERF	PERF	T ASPECT	L2R	FUNCTION
wake up	prosipatsja	prosnutsja	prosnulsja	prosipalsja *prosnalis'	punctual
get dressed	odevat' sja	odet' sja	odelisja	odevalsja	completive
see/catch sight of	videt'	uvidet'	uvideli	videl	punctual
fall (drop, fall in)	padat'	upast'	upal	padal *upasla popadali	punctual/ resultative
walk, set off come out	idti/hodit' šol-PAST (unidirectional) hodil-PAST (multidirectional)	poiti viidti	pošol	šol vihodil (multi- directional) *prihodili	inceptive
climb	lazit' (multidirectional)	polezt'	polez	lazil *ulezla *lezla	completive
throw	brostat'	brosit'	brosil	brosal	punctual
ask	sprašivat'	sprosit'	sprosil	sprašival	punctual
find	(nado) naiti	(nado) nahodit'	(nado) naiti INF	(nado) nahodit' INF	resultative
look, see, watch	smotret'	posmotret'	posmotrel	smotrel smotrala	punctual
cry out	kričat'	zakričat'	zakričal	kričal, *kričil	punctual/ inceptive
break: fracture	razbivat' (sja) lomat' (sja)	razbit' (sja) slomat' (sja)	razbil sja	razbival *razbal *slomala	resultative (break into pieces) resultative (break/ fracture)
continue	prodolžat' (sya)	prodolžit' (sya)	prodolžil	prodolžal	resultative
chase	gonjat/gnyat' (multi/unidirection al)	pognjat'	pognjali	gnjali	inceptive
turn up/appear	javljat' (sja)	javit' (sja)	javilsja	javljasja pojavljalas'	punctual
hear	slišat'	uslišat'	uslišal	slišal slušali	resultative
come up to	prihodit' (sja)	priiti (sja)	prišol	prihodil	completive

L2R Subjects 1-21 (Continued)

VERB	IMPERF	PERF	T ASPECT	L2R	FUNCTION
answer	otvečat'	otvetit'	otvetil	otvečal	punctual
bite, sting	kusat'	ukusit'	ukusil	kusal	resultative
ride, drive, go by vehicle	ezdit' (multidir.) chat' (unidir.)	poehat'	N/A (no context in story)	poezdal	inceptive
wound	ranit'	ranit' or poranit'	ranili	poranali	resultative
say good-bye	proščat' (sya)	prostit' (sya)	prostilas'	proščalas'	completive
run away	begat' (multidir.) bežat' (unidir.)	pobežat'	pobežal	bežal begal ubegal	punctual
meet	vstrečat' sja	vstretit' (sja)	vstretilis'	vstrečali	punctual
throw (oneself); nod;	kidat' (sja) kivat' (sja)	kivnut' (sja)	brozil	kidal	punctual
like	nравит' (sja)	ponравt' (sja)	nравilas'	nравilos'	state
hit, get to, turn up	popadat' sja	popast' sja	neither should be: u-pali	popali meaning: fell from;	punctual
push out	viitalkivat'	viitolknut'	(ne smog) viitolknut'	(ne smoga) *vitašcat'	completive
hinder, impede, stir, mix	mešat'	pomešat'	pomešala	mešala	resultative
hang, be suspended	viset'	poviset'	viseli	*visili	state
follow	sledovat'	posledovat'	posledovali	sledovali	inceptive
hold, keep, support	deržat' (sja)	poderžat' (sja)	poderžalsja	deržal	punctual
smile	uljibat' (sja)	uljibnut' (sja)	ulybnulis'	ulybalis'	punctual
surprise	udivljat' (sja)	udivit' (sja)	udivilsja	*udivilsja	punctual
carry	nosit' (multidir.) nesti (unidir.)	ponesti	pones	*prine nesla	inceptive
help	pomogat'	pomoč	pomog	pomogal	resultative
sit down: sit, be sitting	sadit' (sja) sidet'	sest' posidet'	sideli, sidela	sidilsja sudela	progressive
be located	nahodit' (sja)	naiti (sja)	nahodilsja	*nahozhdilsja	state
jump	prigat'	prignut'	prignula	prigal	punctual
open	otkrivat'	otkrit'	otkril	otkrival	punctual
feel	čuvstovat' (sja)	počuvstovat' (sja)	čuvstvuju (sja)	*čustavaju	state
dress, get dressed (wanted to get dressed)	odevat' (sja)	odet' (sja)	(hoteli) odet' sja	(hoteli) otdenjat'	completive
welcome, greet		privetstvovat'	privetstvovala	*privetvsvala	punctual
Total: 43				IMPF 24/43 = 56 %	

Table 8 L1 Russian/L2 English

Total subjects: 7 x 27 tokens = 189 tokens

T= target/baseline English tenses L2 E= non-target tenses in L2 English

VERB	T PRES	T FUT	T PAST	PERF/PROG	L2E PRES	L2E FUT	L2E PAST	L2E PERF/PROG
tell				have told	tell		told	
be	(I) am				(I) am		was	
come			came				came	
find out			found out				found	
be	(I) am				(I) am		was	had been
seem	seem				seem		seemed (saw)	have seemed
study				had studied had been studying				had studied had been studying have studied was studying
leave			left				left	had leaved
expect (to have)			didn't expect to have				didn't expect was not expect	
think			thought				thought	have thought
go		will go			go	will go would go	came	
arrive	arrives				arrives arrive	will arrive	arrived	have arrived
learn		will have learned				will learn	learned	had learned
enter		will enter				will enter	entered	have entered
talk				were talking			talked told	had talked
know	do not know				don't know		did not know	
say			said		say		said	are saying were saying
have			had		have		had	have had
be			was		is		was	
like			didn't like		don't like		didn't like	
be			was		is		was	
be			was		is		was	have been
get (into)			didn't get		am not get don't get	will not get	did not get	am not getting
enter		will enter			enter	will enter		
live				will have lived/will have been living	live			will have been living will have lived have been living have lived
Total: 27	6	4	12	5	# of non- target/ target tokens for all subjects: 23/42= 54%	# of non- target/ target tokens for all subjects: 7/28= 25%	# of non- target/ target tokens for all subjects: 26/84= 31%	# of non- target/ target tokens for all subjects: 20/35= 57%

Table 9
Median Length of narrative (average number of clauses) for L2 English Frog Stories (n=11)

Narrative	1	2	3	4	5	6	7	8	9	10	11	average
Length (number of clauses)	75	50	79	83	40	71	36	33	38	41	98	(644/11) 59

Table 10 L2 English = L2E
(Verbs/target tense; L2E non-target/function)
T = target/baseline tense in Frog Story
L2E = examples of non-target tense forms

VERB	T tense	L2E target	L2E non-target	FUNCTION
lose	had lost	had lost		past anterior completive
get stuck	had got stuck		(he) had gotten it stuck	past anterior completive
break	broke		(the jar) was broken	punctual
call	called/were calling	were calling		progressive/continuative
sit	were sitting	were sitting		state/continuative
break	broke		had broken	past/punctual
wound	had got injured		had wounded	past anterior/state/resultative
fall	fell		fall down	punctual
get out	got out		get out	punctual
decide	decided		had decided	punctual
fall	was falling	was falling		continuative
check	checked		check	punctual
go	will go		go	punctual/inceptive
run	ran		run	action/sequential
sound	sounded		sounds	state/past
live	lived		has been living	state/past
think	thought		was thinking	state/past
look for	looked for/was looking for		had been looking for	action/continuative
see	saw		had seen	past/sequential
make (mad)	made (mad)		makes mad	state/past
can + verb	could + verb		can + verb	modality/past
fall down	fell down		fallen down	punctual
become free	became free		become free	state
dislike	disliked		dislike	state
be afraid	wasn't afraid		didn't afraid	state
hit	hit		hitted	punctual
pick up	picked up		pick up	punctual/inceptive
run away	ran away		run away	punctual
want to (live)	wants (to live)		want (to live)	state

Table 11 Lexical (complex verb) expressions of aspect L2 E

VERB EXPRESSION	FUNCTION
start looking	inceptive/action
start calling out	inceptive/action
start barking	inceptive/action
start to attack	inceptive/action
start crying	inceptive/action
start swinging (the tree)	inceptive/action
start chasing	inceptive/action
start speaking	inceptive/action
start running	inceptive/action
start to pursue	inceptive/action
decide to continue search	punctual/action
decide to climb up	punctual/action
decide to ask	punctual/action
decide to go	punctual/action
try to bite	inceptive/action
try to call	inceptive/action
try to find	inceptive/action
try to escape	inceptive/action
try to get over a log	inceptive/action
try to figure out	inceptive/state
try to protect	inceptive/action
try to shake out (his boot)	inceptive/action
finished chasing	punctual/completive/action

Chapter 6

Conclusion

6.1. Concluding remarks

In the preceding chapters, I presented a proposal to view L2 tense-aspect acquisition from a perspective that has not been advocated in the L2 tense-aspect research thus far: to focus on the typological notion of *tense-prominence and aspect-prominence* (Bhat 1999) as a possible language-specific criterion in acquiring a second language. I termed this approach *language-specific conceptual approach* in order to emphasize language-specific form-concept links as a factor in L2 acquisition of complex grammatical domains such as tense-aspect.

Although the idea that specific L1 forms and meanings have an impact on the acquisition of L2 is widely accepted and virtually an axiom in L2 acquisition research, L2 tense-aspect studies have not sufficiently addressed the L1 influence as a specific contributing factor in the acquisition of L2 tense-aspect forms and functions. Moreover, the idea that a difference in tense-aspect prominence in L1 and L2 can have an effect on the L2 acquisition has not been researched at all.

My study is an attempt to expand the research on L2 tense-aspect acquisition by introducing the theoretical proposals of prominence (Bhat 1999) and language-specific lexicalization patterns (Berman and Slobin 1994, Slobin 1991) as ways to research L2 acquisition tendencies and difficulties for specific, mismatching L1/L2 pairings. To pursue that research goal, I looked specifically at Russian and English, two typologically different languages in terms of tense-aspect prominence: Russian as aspect-prominent and English as tense-prominent.

Language-specific nuances related to aspect prominence and tense prominence were predicted as the discriminating factors in L2 tense-aspect acquisition in the statement of the Grammatical Domain Hypothesis (GDH). The predictions for two groups of learners, L1 English/L2 Russian and L2 Russian/L2 English were tested on two tasks, looking for evidence that L1 English (tense-prominent)/L2 Russian learners ‘favor’ tense and use it more accurately and prominently than aspect; and that L1 Russian (aspect-prominent)/L2 English learners ‘favor’ aspect and use it more accurately and prominently than tense.

When the results of the two groups of L2 learners coming from the opposite prominence typologies are compared, the major predictions of the GDH have the support to consider them upheld. The analysis was based on several criteria, from morphology to tense-aspect substitutions to lexical expressions of aspect and clause-level idiosyncratic examples. In other words, even though the raw numbers in the token analysis do not indicate robust, significant percentages, a detailed analysis in all four of the above categories point to *significant tendencies* and, thus, speak to the predictions of the GDH.

In a nutshell, L1 English/L2 Russian learners ‘favor’ past tense in both tasks. They make more imperfective errors, use lexical aspectual expressions to compensate for the lack of perfectives, exhibit incomplete, i.e. misformed morphology, and limit aspectual choices further by applying one form-one meaning strategy, i. e. choosing either imperfective or perfective as individual lexical items rather than aspect.

The other group, L1 Russian/L2 English learners, ‘favors’ aspectual meanings while mixing tenses and exhibiting morphological tense misformations in Task 1. In

Task 2, they continue with inconsistent tense marking, especially when using the pluperfect and, in a few cases, the present perfect. Expressing aspect is generally 'favored' relative to tense, as shown in tense errors and the tendency to use lexical aspectual expressions, typically with punctual and inceptive meanings.

However, the L2 English narratives 'mirror' baseline narratives in the use of the past as the default narrative tense and in the very low percentage of the progressive. These two findings, the consistent use of the past tense and the rare instances of the progressive, which is not overgeneralized as predicted, present a problem for the GDH prediction.

With the two caveats above, I have, therefore, found general positive support for my research question whether or not tense-prominence and aspect-prominence will have an impact in the L2 tense-aspect acquisition of learners from L1 Russian and L1 English.

In order to more broadly examine how the results fit the GDH predictions, and if and how they inform the field of L2 acquisition of the language-specific L1 effects, the findings should be evaluated in the light of the other L2 tense-aspect hypotheses, the Aspect Hypothesis, the Discourse Hypothesis, and the Prototype proposal. All three theoretical models are based on Vendler's verb categorization into states, activities, achievements, and accomplishments.

Briefly, the claims of the three hypotheses are as follows. The Aspect Hypothesis states that perfective past markings spread from achievements to accomplishments to activities to states; imperfective past appears later than perfective past and spreads from states to activities to accomplishments and achievements;

progressive marking begins with activities and extends to accomplishments and achievement verb; progressive marking is rarely incorrectly overextended to states.

Expanding on the claims of the Aspect Hypothesis, the Prototype Hypothesis makes a claim that some tense-aspect associations are prototypical and, therefore, acquired first, are extended to similar associations, and spread onto the least prototypical ones. For example, progressive aspect is prototypically ‘action in progress’, marking activities, while achievements are prototypically marked by past morphology first as ‘telic, punctual results.

Last, the Discourse Hypothesis states the predictions regarding the correlations between verb semantics and grounding in narrative discourse: the verbs in the foreground are marked by past (perfective) regardless of their semantic category, while the verbs in the background are not morphologically marked. (Please see Chapter 2 for a full review of the proposals).

One problem with the comparison of the results in my study against the other theoretical proposals is methodological. In the study, I did not specifically use Vendler’s taxonomy of four verb semantic categories. Furthermore, this is not a longitudinal or a cross-sectional developmental study. The L2 data came from only one level of L2 learners, intermediate-high intermediate, and the results do not show a developmental trend, i. e. the spread of perfective and imperfective, as predicted by the Aspect Hypothesis, and, by theoretical extension, by the Prototype Hypothesis.

As far as the Discourse Hypothesis, the methodological problem arises from the fact that I did not specifically code and research the tense-aspect distribution for the verbs used in the foreground and the verbs used in the background of the Frog

Stories. L2 tense-aspect acquisition was analyzed at the clause level, and any discourse-level findings were described as interclausal L2 tense-aspect strategies rather than in terms of narrative grounding.

Taking the methodological limitations into account, several points are in order.

(1) The tendency of L1 English/L2 Russian learners to mark tense consistently and reduce the aspectual choices can be supported by tense-prominence in L1 English. Similarly, consistent aspectual expressions and mixed, non-target tense use in L1 Russian can be supported by aspect-prominence in L1 Russian. These tendencies fit the tense-aspect prominence-based GDH predictions.

(2) Most L2 Russian errors are the imperfectives; the Aspect Hypothesis, which also states that the imperfective emerges later than the perfective, can explain this finding. Together with the morphological and semantic complexities of the Russian imperfective, the later L2 acquisition of the imperfective can be a plausible explanation for the non-target use of the imperfective in my study. The GDH does not make any predictions specific to either the perfective or the imperfective and, thus, offers the limited use and overgeneralization of aspectual choices as the alternative explanation.

(3) The finding that L2 Russian target imperfectives mark activities, whereas target perfectives commonly mark punctual meanings can be explained by the telic/non-telic distinction and the claims of the Aspect Hypothesis and the Prototype Hypothesis. However, since there is a lot of variation in aspectual substitutions and other expressions of aspect in the L2 Russian data, the GDH provides an alternative

explanation.

(4) Although not frequent, the idiosyncratic switch from past to present for perfective functions, as shown in the L2 Russian results analysis, may be interpreted as supporting the Aspect Hypothesis claim that aspect is acquired before tense.

This comparison to the Aspect Hypothesis can be seen as potentially problematic for the GDH. However, since the individual instances also indicate that this clausal strategy is part of marking perfective meanings where the target perfective forms are missing, the strategy can also be due to limited formal aspectual choices, as, in fact, predicted by the GDH. Furthermore, such examples also point to the more prominent use of tense forms, which is predicted by the GDH for the L1 English/L2 Russian learners. Additionally, the past-present tense shifting is an acceptable temporal strategy in L1 English narration, possibly making the L2 Russian tense-shifting an L1 effect in the L2 narratives.

(5) Lexical expressions of aspect are found in both groups, which, again, can be seen as a need to express aspect rather than tense and as evidence that aspect is acquired before tense, which is predicted by the Aspect Hypothesis. However, the lexical expressions vary from one group to the other. L1 English/L2 Russian learners use them primarily instead of the target perfectives, whereas L1 Russian/L2 English learners use them more than the baseline English speakers and with the verbs not typically used by native English speakers in such verb constructions. These trends reflect L2 aspectual strategies, limited aspect in L2 Russian, and reflective of L1 Russian aspect-prominence in the L2 English data.

This suggests that the GDH has a more plausible explanation to be upheld

than the Aspect Hypothesis.

(6) The use of the past tense in both tense-prominent group (L1 English) and aspect-prominent group (L1 Russian) and regardless of the narrative discourse grounding can be potentially problematic for the GDH. One way to look for an explanation is to compare the results to the predictions of the Discourse Hypothesis. Although the Discourse Hypothesis would be supported if telic foregrounded events in the L2 Frog Stories were coded and found to be marked by the simple past, this is not the case. Instead, the majority of the L2 verbs, foregrounded and backgrounded, are, in fact, marked by the past.

One way to explain this finding is that the use of past in narration is a common default narrative strategy crosslinguistically; if this general narrative strategy is taken into account, both the GDH and the Discourse Hypothesis may be incomplete as claims regarding tense-aspect acquisition.

(7) In L1 Russian/L2 English group, as well as the baseline English speaker group, progressive is not commonly used. This finding begs a separate explanation, as it does not support the GDH or provides evidence for the claims about activities being marked by the progressive, as stated in the Aspect Hypothesis or the Prototype proposal.

In summary, while a few findings could be supported or explained by the alternative hypotheses, the majority of the findings specific to the L2 group tense-aspect nuances support the GDH predictions. Within the scope of and with the methodology used in the study, the GDH predictions regarding the L1 specific influence are largely supported by the L2 results.

6.2. Potential problems with the study

As a novel way of looking at and evaluating L2 tense-aspect acquisition, my study also has potential methodological shortfalls and calls for further inquiry and explanation regarding some of the findings.

First, the study was designed under the realistic research circumstances at the time of data collection and access to the L2 learners with specific L1s and a specific, comparable stage of acquisition in an instructional, formal college setting. Finding the corresponding number of subjects and collecting the data turned out to be daunting tasks. Gathering the written data from the same level of instructed L2 learners was my main goal in keeping the design of the crosssectional bi-directional study methodologically consistent. In the end, the L1 English/L2 Russian subject pool was larger (N=21) than the L Russian/L2 English subject pool (N=11), and I had to eliminate some Task 1 responses from the latter L2 group. Potentially, this creates a problem for the token analysis and the study's reliability.

Despite the difference in the subject pool, however, the two tasks elicited a sufficient number of tokens in all the targeted tense-aspect forms, i.e. types. In that respect, the collected data were sufficient as potential evidence for or against the GDH.

Another potential issue in the study is the task type. To balance the data between two task types, I used a controlled and a naturalistic task. The controlled, cloze task was from textbooks for the instructed L2 learners at the intermediate-high intermediate level, and the naturalistic task was the spontaneous production of the

written Frog Story. The cloze task was also a narrative for both language groups, which made narrative discourse a consistent discourse type across both tasks. In this task, a number of verb forms were repeated, which gave the subject a 'second chance' to choose the target form. The repeated forms, as noted in the earlier L2 studies (Bardovi-Harlig 2000), inflate the total number of targeted forms; to avoid the problem, these tokens can be eliminated from the analysis. However, since there were only a few such instances in Task 1 in my study, and since I was looking for data in specific tense-aspect contexts, these tokens were not eliminated from the task results.

Furthermore, some L2 subjects, especially in the L1 Russian/L2 English group, made varied non-target decisions on repeated tokens. Therefore, even in repeated, 'highlighted' contexts, they showed the L2 tendencies as on the rest of the task. As much as the repetition of token/type can be problematic, I see these results as more evidence for my research questions and needed in the analysis.

In terms of findings, the potential problems in the study are the lack of robust numbers, i. e. more data for statistical significance, and the issues of default past tense, insufficient target progressives, and partly circular results regarding aspect. As discussed above, this leads to potentially plausible explanations outside of the GDH predictions.

The use of past as a default narrative tense can be expected as a discourse feature in narration. This suggests that the discourse type, or, specifically the task type, precipitated the consistent use of the past and influenced the results, making the GDH predictions regarding consistent use of tense in the L1 English/L2 Russian group more questionable. However, the non-target aspectual choices in this subject

pool, among them the use of the future tense instead of present to mark perfective future meaning, suggests that tense is grammatically ‘favored’ as opposed to the limited aspect use by the L1 English learners.

Past tense use in both groups remains a task-based issue, however. Together with the low number of progressives to evaluate, this issue can be resolved by constructing controlled tasks that would elicit the progressives and other low number tense-aspect forms and have more varied tense-aspect options, including a reduced number of possible past contexts. In that case, the task might not be a naturalistic original narrative, which would change the task type in terms of reliability but would also take away the advantage of naturalistic, spontaneous production.

Similarly, repeated lexical expressions of aspect in both L2 groups should be examined further, possibly by adding more task contexts where these verb expressions can be an option. This would possibly clarify the question of how frequently and in what L1-influenced or non L1-influenced aspectual constructions such expressions are typically used by L2 learners. The GDH predictions about tense-aspect prominence offer only a partial answer.

6.3. Potential contribution of the language-specific conceptual approach and its pedagogical implications

Despite its methodological and some data issues, this study shows that a language-specific conceptual approach to L1 effects in L2 learning opens a fresh inquiry into the connection between the typology of tense-prominent/aspect-prominent languages and the research on L2 acquisition of tense-aspect. The study

posits that language-specific form-function links in complex grammatical domains such as tense-aspect influence L2 acquisition in ways that can be predicted, tested, and evaluated in order to gain a better understanding of the L2 acquisition process and the effects that L1 has in it.

The Grammatical Domain Hypothesis (GDH) was largely supported in this study on several counts:

(a) The L1 English/L2 Russian data show consistent target use of tense and limited, overgeneralized aspectual choices to compensate for the lack of aspectual distinctions.

(b) The L1 Russian/L2 English data show consistent expression of aspectual functions and limited, overgeneralized tense choices to compensate for the lack of tense distinctions.

(c) Overall, L1 English/L2 Russian learners had more problems marking aspect than tense (English is tense-prominent). L1 Russian/L2 English learners, on the other hand, had more problems marking tense than aspect (Russian is aspect-prominent).

(d) Out of the four tested categories of data - aspectual substitutions (tense-aspect substitutions), morphological misformations, lexical expressions of aspect, and idiosyncratic examples of clausal sequencing - the most problematic for the L1 English/L2 Russian learners were aspectual substitutions and morphological misformations; complex morphological forms and aspectual meanings in Russian were a challenge for these learners. For the L1 Russian/L2 English learners, the most challenging target form-function links showed in tense-aspect substitutions and

misused tenses while resorting to aspectual functions, including lexical expressions of aspect.

The GDH is not clearly supported and its predictions were problematic due to the inconclusively consistent use of the past tense. The GDH predictions about the overgeneralization of the progressive in the L2 English data were also not supported. The use of lexical aspectual expressions and the non-target overuse of the imperfective also merit further research

In order to re-test the GDH and look further into tense-aspect prominence as an L2 acquisition factor, it would be necessary to collect more data with a larger variety of target tense-aspect options, and to adjust the task type to the research inquiry. At the discourse level, other than clausal sequencing, it would improve the analysis to look at adverbials and other clause-level elements such as noun phrases, especially objects to the transitive verbs and expressions of definiteness. These clausal elements can contribute to tense-aspect at the discourse level but were not investigated in detail in this study.

Clearly, the notion of tense-aspect prominence and the idea that L2 learners start from 'L1 thinking in L2 learning' (Slobin 1991) have a potential in researching language-specific L1 effects in L2 acquisition. The forms (and functions) that are grammaticalized, obligatory, systematic, and pervasive (Bhat 1999), or 'highlighted' in L1 serve as the initial 'filter' in the acquisition of L2 forms (and functions); such L1 'filtering' through the salient L1 forms-functions should be particularly expected in very complex language domains where multiple links between forms and functions need to be acquired, such as in tense-aspect systems.

An approach that looks in detail at the preferred ‘filtering’ mechanisms in L2 learning can inform L2 research about the important connections between the existing L1 knowledge, and the target L2 knowledge, and the specific ways in which the grammar of L2 in adult L2 acquisition comes into shape starting from the grammar of L1. More research questions and hypotheses like the GDH will provide more details for evaluating the L1 language-specific effects in L2 acquisition in a new, typology-focused way.

Last, but not the least, the idea of prominence in a language and the research model of *the language-specific conceptual approach* can have an impact on L2 instruction of tense-prominent and aspect-prominent languages. Although the findings and observations in this study are only preliminary, some possible pedagogical implications should be noted.

In a classroom setting, where so much depends on ‘the teaching moment’, these moments can be enhanced by focusing on more relevant or more prominent forms first and for a prolonged period of time. For instance, an L1 English/L2 Russian learner can acquire more quickly Russian tense distinctions but should be exposed the most to the most frequent and, gradually, the most complex aspectual pair distinctions. On the other hand, an L1 Russian/L2 English learner can learn the tense distinctions by using the aspectual functions to access the meaning and then should gradually add the temporal distinctions to those functions.

Instead of rigorous scheduling of both tense and aspect, often organized by sets of morphological forms under specific aspect or tense names, as is commonly the case in traditional L2 grammars, tense-prominent and aspect-prominent languages

could be taught from a revised curriculum: aspect-focused for the L1 tense-prominent L2 learners and tense-focused for the L1 aspect-prominent L2 learners. This way, attention-channeling and noticing (Schmidt 1990) would help L2 learners to be repeatedly exposed to the L2 language-specific features that are less 'highlighted' or absent in their L1s, leading to a cognitively efficient 'filtering' strategy in acquiring the L2 grammar.

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Appendix A

Cloze Task 1 (Russian)

U odnogo starogo čelovjeka byl syn.

‘An old man had a son.’

Odnadždi starik bolel/zabolele.

‘One day, the old man fell ill-IMP/PERF’

On zval/pozval ženu

‘He called-IMPF/PERF his wife’

I kazal/skazal ei

‘And told-IMPF/PERF her’

Kogda ja budu umirat’/umru

‘When I die-IMPF-PERF’

Davai/dai moi vešči čužomu čeloveku

‘Give-IMPF/PERF my things to a poor man’

Naš syn lenivii čelovek

‘Our son is a lazy man’

On ne ljubit’ rabotat’

‘He doesn’t like to work’

I ne znaet’

‘And he doesn’t know’

Čto značit trud.

‘What effort means’

Ja ne hoču

‘I don’t want’

Čtoby on polučal/polučil moi denjgi i vešči.

‘For him to get-IMPF/PERF my money and my things’

Mat’ rešala/rešila pomogat’/pomoč synu.

‘Mother decided-IMPF/PERF to help-IMPF/PERF the son’

Ona davala/dala emu denjgi
 'She gave-IMPF/PERF him the money'

I govorila/skazala
 'And said-IMPF/PERF'

Govori/Skaži otcu
 'Tell-IMPF/PERF father'

Čto ty zarabotyval/zarabotal eti denjgi.
 'That you earned-IMPF/PERF the money'

Celjii den' syn guljal/poguljal
 'All day the son took walks-IMPF/PERF'

A večerom prihodil/prišol k otcu
 'And in the evening came up-IMPF/PERF to father'

I daval/dal emu denjgi.
 'And gave-IMPF/PERF him money'

Otec bral/vzjal denjgi
 'Father took-IMPF/PERF the money'

I brosal/brosil ih v ogonj.
 'And threw-IMPF/PERF it into the fire'

Eti denjgi zarabotyval/zarabotal ne ty
 'That money you didn't earn-IMPF/PERF'

Skazal otec.
 'Said father'

Syn smejalsja/zasmejalsja
 'The son laughed-IMPF/PERF'

I bežal/pobežal na ulicu k družjam.
 'And ran away-IMPF-PERF onto the street and to his friends'

A mat' ponimala/ponjala
 'And mother understood-IMPF/PERF'

čto nelzja obmanyvat'/obmanut' otca.
 'that father should not be tricked-IMPF/PERF'

na drugoi denj, ona skazala synu

‘The next day, she told the son’

Tebe nado zarabotivat’/zarabotat’ denjgi samomu.
 ‘You have to earn-IMPF/PERF money by yourself’

Syn ušol
 ‘The son went out’

I vsju nedelju rabotal/porabotal.
 ‘And all week he worked-IMPF/PERF’

Kogda on prihodil/prišol domoi
 ‘When he came-IMPF/PERF home’

I daval/dal denjgi otcu,
 ‘And gave-IMPF/PERF money to father’

otec opjat’ brosal/brosil denjgi v ogonj.
 ‘Father again threw-IMPF/PERF the money into the fire’

Syn kričal/zakričal
 ‘The son shouted-IMPF/PERF’

Čto ty delal/sdelal!
 ‘What have you done-IMPF/PERF’

Ja rabotal/porabotal vsju nedelju
 ‘I worked-IMPF/PERF all week’

A ty brosal/brosil moi denjgi v ogonj.
 ‘And you threw-IMPF/PERF my money into the fire’

I syn dostaval/dostal denjgi iz ognja.
 ‘And the son took/reached for-IMPF/PERF the money out of the fire’

Togda otec skazal
 ‘Then father said’

Teperj ja verju
 ‘Now I believe’

Čto eti denjgi zarabotival/zarabotal ty sam.
 ‘That you earned-IMPF/PERF the money yourself’

Cloze Task (English)

People (always/tell) _____ me that I (be) _____ an adaptable person. However, when I (come) _____ to the United States to study, I (find) _____

Out that I (be) _____ not as adaptable as I (seem) _____. I (already/study) _____ six years of English before I (leave) _____ my country of Indonesia. I (study) _____ conversational English with an American teacher for about a year before I (leave) _____. So I really (not, expect) _____ to have any problems communicating with Americans. I (think) _____ to myself, "I (just/go) _____ to my classes and learn everything I can. Then by the time the TOEFL test (arrive) _____, I (learn) _____ everything I need to get 550 on the TOEFL. I (enter) _____ the local university for my m. B. A."

Well, I really wasn't ready for my first months there. At the first orientation meeting at the English school, the Americans (talk) _____ to me so fast that all I did was smile and nod. I still (not/know) _____ what they (say) _____ to me.

I (have) _____ more surprises—my accent (be) _____ hard to understand, I (not/like) _____ the American food at the cafeteria, the pace in the city (be) _____ too fast. But the biggest surprise (be) _____ my progress in English. I (not/get) _____ into that university right away.

I'm still studying English. In fact, I've been studying for two semesters now. If all goes as planned I (enter) _____ the M. B. A. program next semester. I (live) _____ in the United States for an entire year by then. I can understand just about everything, and most people can understand me. But guess what? I'm still not used to American food!

Appendix B
Participant Questionnaire/Survey

Before you start writing, please respond to the following questions;

1. What is your native language?
2. How long have you been studying _____?
3. Where have you studied _____ so far? (List courses, tutoring, self-instruction, study/travel abroad, contact with native speakers). Include length of time in weeks/months/years.
4. Use one of the numbers below to describe your fluency in _____:
1—basic
2—good
3—fair
4—good
5--very good
5. List any other language/s you know. How fluent are you?

CURRICULUM VITAE

Aida Martinovic-Zic

Place of birth: Split, Croatia

Education

B. A., University of Belgrade, Serbia, June 1979

Major: English/Linguistics

M. A., University of Wisconsin-Milwaukee, May 1996

English

Dissertation Title: Tense or Aspect? Effects of L1 Tense/Aspect Prominence
in L2 Acquisition

Academic Honors and Awards

Andrew Mellon dissertation Fellowship, National Foreign Language Center
at Johns Hopkins University, September 1998-May 1999

Center for International Studies, University of Wisconsin-Milwaukee
Research Assistantship for study/research in Russian, 1997-1998

Fellowship for re-Doctoral research, Educational Testing Services (ETS),
Princeton, NJ, summer 1997, TOEFL/Test of Written English research project

Phi Kappa Phi National Honor Society, University of Wisconsin-Milwaukee
Chapter, 1996

Sigma Tau Delta National Honor Society, Lambda Theta Chapter

U.S. Department of Education Foreign Language and Area Studies (FLAS),
Fellowship for Russian, summer 1996, 1996-1997

Linguistic Society of America Fellowship, LSA Linguistic Institute, summer
1995

University of Wisconsin-Milwaukee Teaching Assistantship, 1993-1998

University of Wisconsin-Milwaukee Project Assistantship, 1994-1996

Publications

“Satellites as local trajectories: the case of English and Serbo-Croatian”, 1997
 In A. Sorace, C. Heycock, and R. Shillcock, Eds. *Proceedings of Gala '97
 Conference on Language Acquisition: Knowledge Representation and
 Processing*, Edinburgh, UK, University of Edinburgh.

“You are what you speak: language choice in bilinguals as a strategy in power
 relations”, 1998, *Center for Applied Linguistics ERIC database*

“Conceptualization of motion and language-specific constraints in first
 language acquisition”, with Jelena Jovanovic, 2003, *MIT Working Papers in
 Linguistics* 26,

Discourse Across Languages and Cultures, co-edited with Carol Lynn Moder,
 2004, Amsterdam: John Benjamins.

“Why manner matters: Contrasting English and Serbo-Croatian typology in
 motion description”, with Jelena Jovanovic, 2004, Amsterdam: John
 Benjamins.

Teaching Experience

Associate Professor, Montgomery College, 2001-present

Adjunct Professor, Montgomery College, 1990-2001

Graduate Teaching Assistant, University of Wisconsin-Milwaukee,
 Department of English, 1993-1998

ESL Instructor, English Language Study Center, Rockford College,
 1991-1993

Graduate Teaching Assistant, University of Maryland College Park,
 1988-1990

EFL Instructor, Institute for Foreign Languages, Belgrade, Serbia,
 1979-1988

Memberships

Linguistic Society of America

American Association of Applied Linguistics

Languages

English: native-like fluency

Serbo-Croatian: native fluency

Russian, German, Italian: fair reading, writing, speaking skills

Recommendations and Credentials
Available upon request

Fred Eibman *12/15/09*

Major Professor Date