

Introduction

1. Introducing the Problem: Structural Case Alterations

In this dissertation, I investigate the distribution and semantics of genitive Case-assignment to non-oblique verbal arguments in Russian. In certain environments, the direct object of a transitive verb or the subject of an intransitive verb may appear in genitive Case instead of the expected accusative or nominative. Typically, genitive Case-marking is optional in such configurations, but in some sentences, the alternative marking is unavailable. The alternation in Case is a complex and intricate issue; it is strongly interrelated with such notions as specificity, definiteness, existential commitment, number, aspect and mood, as well as syntactic configuration. The purpose of this dissertation is to propose an account of the semantics of the genitive arguments in a way that will make it possible to account for their interpretational properties as well as for their distribution.

Genitive Case-marking of direct objects is illustrated in (1).

1 a. Lena ne jela konfet.

Lena NEG ate(imp) candies(gen pl)

Lena didn't (use to) eat candies.

b. Dima ne čital statej.

Dima NEG read(imp) articles(gen pl)

Dima didn't read articles.

c. Dima ždjot čuda.

Dima wait(imp) miracle(gen sg)

Dima is waiting for a miracle.

(1a) and (1b) illustrate Genitive of Negation, a phenomenon whereby a non-oblique, typically internal argument of a verb may be assigned genitive Case under sentential negation. In turn, (1c) constitutes an example of a phenomenon sometimes referred to as Intensional Genitive (e.g. Bailyn (2004)). The term stands for genitive Case-assignment to objects of certain intensional verbs. In the linguistic literature on non-canonical genitive Case, the two phenomena are mostly analyzed independently from one another; however, I will argue, in the spirit of Neidle (1988), that Intensional

Genitive and Genitive of Negation constitute two instantiations of the same phenomenon and should thus be provided a unified account. As will be shown in Chapter 1, the number of properties that they share is too substantial to be accidental. In both environments, the genitive/accusative alternation is sensitive to the same semantic properties. For instance, genitive Case is more likely to be assigned to plural NPs than to singular ones, and genitive NPs tend to be interpreted as indefinite, non-specific and taking narrow scope. Moreover, genitive Case-marking in the two types of sentences is associated with a similar variation in native speakers' judgments and exhibits the same patterns regarding its historical and cross-linguistic development. It will be shown in this study that the operators that license genitive Case within the two sub-phenomena, i.e. negation and intensional predicates, have an important semantic property in common. These are non-veridical operators, which means that a sentence that contains one of these operators does not entail the truth of a proposition that appears within its scope. This dissertation will demonstrate that this property has important consequences for the semantics of the NPs that are interpreted within the scope of these operators and, therefore, for the licensing of genitive Case.

As mentioned above, genitive Case-assignment is associated with a number of semantic properties, such as indefiniteness, number and narrow scope. Yet, while the choice of Case is certainly sensitive to all these properties, none of them turns out to be sufficient to account for the alternation. For instance, both accusative and genitive NPs may be definite as well as indefinite, singular as well as plural, and so on. The point can be made especially clear by considering the examples in (2), in which the object NPs appear in the accusative Case, and comparing them to the sentences in (1).

- 2 a. Lena ne jela konfety.
 Lena NEG ate(imp) candies(acc pl)
 Lena didn't (use to) eat candies.
- b. Dima ne pročitao stat'i / *statej.
 Dima NEG read(perf) articles(acc pl)/(gen pl)
 Dima didn't read (the) articles.
- c. Dima ždjot rusalku / *rusalki.
 Dima waits(imp) mermaid(acc sg)/(gen sg)
 Dima is waiting for a mermaid.

The object NP in (2a) is interpreted in the same way as its genitive counterpart in (1a), at least with respect to the semantic properties listed above. Both sentences can receive an iterative reading, and under this reading, the object NP is likely to get a narrow scope, non-specific, indefinite interpretation. Still, both Case-assignment patterns are available.

In turn, in (2b), the object is obligatorily accusative, while in (1b), its imperfective counterpart, genitive Case-assignment is perfectly acceptable. However, both sentences seem to be perfectly compatible with a non-specific, indefinite, narrow scope interpretation of the NP. It is therefore unclear why genitive Case-marking is not available in (2b). After all, the two sentences differ only in terms of verbal aspect.

Finally, it is not clear why the object in (2c) cannot appear in genitive Case. The NP *rusalka* (mermaid) is indefinite and is certainly likely to take narrow scope relative to the intensional verb *ždat'* (wait). Crucially, this verb can take a genitive object, as demonstrated in (1c). Despite this fact, in (2c), only accusative Case-assignment is possible.

This dissertation argues that the distribution of genitive Case can be accounted for by means of the notion "existential commitment", to be defined in Chapter 4. In particular, I will introduce the notion of Relative Existential Commitment (REC), commitment to existence not only in the actual world but also in other possible accessible worlds. An object that appears in genitive Case must lack REC, i.e. it must lack existential commitment relative to any salient accessible version of reality. If such a commitment is present, accusative Case has to be assigned.

For instance, (1a) and (2a) above differ in terms of existential commitment. Thus, according to the genitive variant, (1a), it is certainly possible that there were no candies in the situation (or situations) in which the eating event is denied. If the speaker is willing to communicate that there were candies but Lena chose not to eat them (say, because she was on a diet), the accusative variant (2a) has to be used. Thus, existential commitment is compatible with accusative but not genitive Case-marking. Crucially, the same contrast cannot be accounted for in terms of scope. Under the habitual reading of both sentences, the object receives narrow scope

relative to the negative operator. The sentences assert that within each situation, no candies were eaten by Lena (and not merely that there were some candies that she did not eat).

Let us turn to the (b) examples above, which demonstrate that Case-assignment is sometimes dependent on the aspect of the verb. The unacceptability of genitive Case-marking in (2b) is related to the interpretation that negated sentences with perfective verbs receive in Russian. These sentences are typically interpreted as denying a particular event that was previously expected to take place. Thus, according to (2b), the speaker (and probably other discourse participants) had expected Dima to read articles, an event that ultimately was not instantiated (or at least did not reach its normal completion). An expectation that a certain event will occur is often accompanied by a commitment that the participants in this event do exist. For instance, a person who expects a reading event typically assumes that there exists a (potential) reader *and a material to be read*. Even if the instantiation of the event itself is negated, the existence of this material remains part of background information assumed by the speaker. Thus, existential commitment is present, and the assignment of genitive Case is ruled out. In contrast, a negative sentence with an imperfective verb need not deny a particular, expected event. Such sentences often simply assert that no event of the kind encoded by the verb and its arguments was instantiated. Thus, (1b) means roughly that, in the course of a certain temporal interval, Dima did not read any articles. Under this interpretation, the speaker need not presuppose existence of any relevant articles. As a result, genitive Case-marking is licensed. It can thus be seen that even the relation between Case-assignment and verbal aspect is mediated by the notion of REC.

Finally, consider the contrast between (1c) and (2c). At first glance, the choice of Case does not seem to be affected by existential commitment. The latter property seems to be absent in both these sentences. The speaker of the sentences is unlikely to believe either in the existence of mermaids or in the miracle that Dima is waiting for. However, a close consideration of the two sentences reveals that their semantics differs in a significant way, and the contrast is, in fact, related to the notion of existential commitment. In particular, (2c) contributes the information that Dima believes in the existence of mermaids, or at least believes that they *possibly* exist.

Otherwise, he would be highly unlikely to be waiting for one. Thus, we deal with a special type of existential commitment – commitment on the part of the subject of the sentence, or commitment to the existence of mermaids *within his worldview*. Dima believes that mermaids exist and is waiting for one of the already existing mermaids to arrive at the place where he is.

The meaning of (1c) is very different in this respect. This sentence does not entail that Dima believes that a miracle of the kind he is waiting for has already taken place (a belief that would signal existential commitment relative to Dima's worldview). On the contrary, in order to wait for a miracle, one has to believe that it has not yet been instantiated. (1c) asserts that Dima is waiting for the world to change in such a way that it would come to contain a new abstract object which, at the time of waiting, does not exist. Thus in this sentence, existential commitment is absent both relative to the speaker's vision of reality, and relative to the worldview of the subject. I will argue that it is this property, the absence of REC (i.e. existential commitment in the relative sense) that licenses the assignment of the genitive Case. Given that REC is present in (2c) but not in (1c), the Case-assignment pattern observed in these sentences is accounted for.

I am proposing that Case-assignment to direct objects in Russian is dependent on the notion of REC. The fact that overt grammatical features may be sensitive to such a relativized notion of commitment has already been reported in the linguistic literature. In particular, this notion has been argued to affect the indicative / subjunctive contrast in mood. According to Farkas (2003), unless additional restrictions intervene, subjunctive mood is only licensed in the absence of commitment that the proposition denoted by the clause is true in the actual world or in any alternative versions of reality introduced by intensional operators. Thus, the analysis of genitive Case proposed in this dissertation views this Case as a nominal counterpart of subjunctive mood: the subjunctive signals lack of commitment to truth and the genitive, lack of commitment to existence. In this study, it will be shown that numerous properties are shared by subjunctive clauses and genitive NPs, regarding both their distribution and semantic features. For instance, NPs modified by subjunctive relative clauses, similarly to genitive NPs, take narrow scope, receive an indefinite, non-specific interpretation and lack commitment to existence – not only in the actual world but

also in other versions of reality that are made salient in the sentence. More generally, it will be argued that the same semantic contrasts that affect the mood and the interpretation of clauses also determine the form and the interpretation of noun phrases, a fact that further contributes to our understanding of the parallels that hold between the nominal and the clausal domains.

2. Outline of the Dissertation

This dissertation is organized as follows. In Section 3 of the Introduction, I address the problem of variation in native speakers' judgments which characterizes the phenomenon investigated in this work. I discuss the sources of this variation and relate to the methodology of collecting judgments that I have used. In Section 4, I define a number of semantic concepts that will be used in this study.

In Chapter 1, I argue for the organization of the phenomenon that will be assumed in this work. I begin the chapter by introducing the three sub-phenomena which involve genitive Case-assignment to a non-oblique argument of a verb (this type of genitive Case is often referred to as *non-canonical genitive*). These include Partitive Genitive, Genitive of Negation and Intensional Genitive. I then argue that, as originally proposed by Neidle (1988), Genitive of Negation and Intensional Genitive constitute two instantiations of the same phenomenon and should be provided a unified account. The two types of genitive Case-assignment are characterized by the same semantic tendencies, are licensed in the presence of a local non-veridical operator and exhibit essentially the same pattern of historical development and cross-linguistic distribution. I conclude that these types of genitive instantiate the same phenomenon, which I refer to as Irrealis Genitive and which will constitute the focus of this dissertation. Finally, I argue that Partitive Genitive does not constitute another instance of Irrealis Genitive, as it differs substantially from the other types of non-canonical genitive Case in terms of its properties. Therefore, Partitive Genitive will not be discussed in the following chapters.

Chapter 2 contains a discussion of previously proposed analyses of non-canonical genitive Case. It reviews both syntactic and semantic approaches, some of which concentrate on Genitive of Negation only, while others constitute a unified analysis of two or three types of genitive Case.

Chapter 3 is devoted to subjunctive mood, a phenomenon which, as will be argued below, shares a number of important properties with Irrealis Genitive. The chapter introduces the subjunctive/indicative contrast in Romance languages and in Russian on a descriptive level. Then I review the analysis of subjunctive complement clauses proposed by Farkas (2003). The review is followed by a tentative discussion of possible ways to extend this analysis to additional environments. The approach developed by Farkas demonstrates the important role of the notion of commitment in the choice of mood; in the next chapter, I will argue that the same notion affects in an analogous way the choice of Case in Russian.

Chapters 4 and 5 present the analysis of Irrealis Genitive proposed in this dissertation. In Chapter 4 I argue that the availability of this Case is sensitive to the notion of commitment to existence. I distinguish between two types of existential commitment: Absolute Existential Commitment (AEC), commitment to existence in the actual world, and Relative Existential Commitment (REC), commitment to existence in any accessible world that is made salient in the given sentence (in a way to be specified below). I then formulate a restriction on the usage of Irrealis Genitive according to which this Case can only be assigned in the absence of REC. I further propose that this restriction results from the fact that genitive NPs denote properties, namely, functions from possible worlds to sets of individuals. I further demonstrate how this restriction accounts for the distribution of Irrealis Genitive in clauses that contain intensional verbs.

Chapter 5 extends the discussion to negative environments and semantic tendencies that govern the choice of Case. It is demonstrated how the REC restriction on the assignment of Irrealis Genitive accounts for a number of characteristics of genitive NPs, including their distribution under negation and semantic properties with which they are typically associated, such as indefiniteness and narrow scope. I also show that the proposed analysis captures a number of interpretational parallels that can be observed between genitive NPs and subjunctive clauses. In the last section of this chapter, I discuss genitive Case-assignment to proper names, which, though highly restricted, can be sometimes observed under negation. I argue that this phenomenon can be reconciled with the proposed analysis, despite the fact that proper names, by

virtue of their inherent semantic properties, carry existential commitment. In particular, I will propose that these NPs can appear in Irrealis Genitive only in those environments in which the relevant domain of existence undergoes a shift from a possible world as a whole to a given spatiotemporal location. (The notion of such a relativization is largely based on the approach to existential sentences formulated in Borshev and Partee (1998).) Existential commitment in these environments is reinterpreted as commitment to existence in a salient location, while such a commitment does not obligatorily characterize proper names.

Finally, Chapter 6 investigates the ways in which the choice of Case is affected by aspect and number. Irrealis Genitive tends to be assigned to plural NPs, rather than to singular ones, and to complements of imperfective, rather than perfective, verbs. In order to account for these tendencies, I will first present in some detail the approach to number and aspect that I am going to assume. Under this approach, aspect is treated as a counterpart of number within the verbal domain. The analysis treats plural morphology and imperfective aspect as semantically default. Turning to negative contexts, it will be shown that under negation, singular objects as well as objects of perfective verbs exhibit a tendency to carry existential commitment, a factor that rules out Irrealis Genitive. I will show that this tendency is derived from the semantically marked status of perfective aspect and singular morphology, compared to the default imperfective and plural forms.

3. Methodology, Data and Judgments

It is important to point out that the phenomena to be investigated in this work exhibit a considerable variation in native speakers' judgments. In the environments in which Genitive of Negation or Intensional Genitive is licensed, speakers often disagree as to whether genitive Case can be assigned in a given sentence. It is important that such a variation is not typical for judgments on Case-assignment in Russian.

Moreover, a disagreement of this kind can even be observed in the linguistic literature on the topic. For instance, it follows from the discussion in Neidle (1988) that genitive Case-assignment is less restricted than the accusative. Thus, she assumes that genitive Case may be assigned to NPs that receive both wide and narrow scope reading, whereas accusative Case-marking is only compatible with wide scope NPs. In

contrast, in more recent papers, including Bailyn (1997), it is the genitive Case that is assumed to be more restricted in its distribution. Here, the assumption is that genitive NPs must receive a narrow scope interpretation, whereas their accusative counterparts may take both wide and narrow scope. (The latter approach, which is consistent with the judgments of my informants and my own judgments, will be adopted in this dissertation.) Analogously, some researchers claim that genitive Case-marking is almost incompatible with definite NPs, while others provide sentences with definite objects as typical examples of genitive Case-assignment (e.g. see Neidle (1988:34)).

I believe that this considerable variation in judgments stems from two main sources. Firstly, as pointed out by Neidle (1988), a language change is taking place in Russian whereby accusative Case is taking over, whereas Genitive of Negation and Intensional Genitive are being used with decreasing frequency. Thus, in Old Church Slavonic, these two instances of non-canonical genitive used to be obligatory (see Section 3.2.5.1 of Chapter 1 for details), whereas in Modern Russian they alternate with accusative Case. It is well-known that a process of language change is always accompanied by a variation in native speakers' judgments, whereby some speakers prefer the new variant that is being absorbed by the language, the more conservative ones adhere to the older variant, and yet others accept and actually use both options. I believe that this is the state of affairs regarding the genitive/accusative alternations in Russian.

The second reason, which is possibly more controversial but, in my opinion, no less important, has to do with the fact that the choice of Case is dependent on semantic and pragmatic factors. Genitive of Negation and Intensional Genitive have been provided both syntactic and semantico-pragmatic analyses. Generally, within the syntactic accounts, it is acknowledged that the choice of Case is dependent on certain semantic features, a factor that is accounted for via the syntax-semantics interface. The approach to be developed below is semantic; I will argue that Case-marking is dependent on certain interpretational properties of the sentences. This dependence on the interpretation, and not only on the rules of grammar, is expected to make the judgment patterns more complicated. The judgments concern acceptability, rather than grammaticality, and they are therefore likely to depend on the way in which the individual speaker perceives the sentence. For different speakers, different

interpretations may turn out to be more salient. In addition, different speakers may place a given sentence in different contexts, a factor that may ultimately affect the interpretation of the sentence and of the object NP that it contains. For instance, the same NP may be interpreted by different speakers as either specific or non-specific, either carrying commitment to existence or not. Assuming that Case-assignment is sensitive to these properties, variation in judgments is predicted to result.

Naturally, such a considerable variation complicates substantially the purpose of formulating an analysis of the phenomena that would predict correctly the Case-assignment pattern observed. The problem is that no such unified pattern exists. At the same time, the situation is not as hopeless as it may seem. Firstly, there certainly exist core cases regarding which native speakers' judgments do not vary (everybody or almost everybody appears to agree as to which Case has to be assigned in given sentences). Secondly, regarding those sentences in which both genitive and accusative Case-marking may be accepted, a consideration of numerous examples and judgments reported by a sufficient number of speakers shows clear statistical tendencies in Case-assignment, which are certainly possible to analyze. These tendencies together with the core cases mentioned above form a unifying picture on the basis of which a formal account of the alternation in Case can be developed. This is the purpose of the present study.

Due to the existing variation in native speakers' judgments, I have distributed questionnaires to twenty five speakers of Russian, in order to figure out Case-assignment tendencies. These questionnaires contained negative sentences and sentences that involve intensional verbs, with the direct object appearing in either genitive or accusative Case. The subjects were asked to provide their judgments with respect to the acceptability of the sentences. While no two subjects provided identical answers for all the sentences, the overall results pattern systematically.

The data to be used below come from three main sources. Some examples are taken from the linguistic literature on the non-canonical genitive Case; in these instances, the source of the example is specified and the acceptability judgments are identical to the ones found in the source (unless stated otherwise). Another group is formed by real-life examples taken from fiction and TV programs or found in the internet.

Again, the source of such examples will be mentioned; these sentences, due to their status as real-life examples, will be treated as acceptable. (Of course, I have tried to make sure that the examples do not include slips of the tongue and the like. Generally, sentences that I take from the internet represent larger groups of sentences that exhibit the same characteristics as far as the purposes of the discussion are concerned.) Finally, some examples have been constructed by myself. These sentences were shown to up to twenty five native speakers of Russian, as stated above. (The number of informants for each given example depended on whether the sentence was estimated as likely to trigger variation in judgments.) The acceptability status of these sentences assumed in the following chapters is based on the obtained results.

Finally, a note should be made regarding the acceptability marking symbols to be used in what follows. The symbol "*" signals ungrammaticality, which, I will assume, can result from violation of morphosyntactic rules as well as semantic restrictions (I assume that violations of the latter type trigger problems in Logical Form). "?" marks a sentence as having a marginal acceptability status, considered by my informants not absolutely unacceptable but at the same time not perfect. Finally, "???" signals that a sentence is judged as infelicitous by the majority of my informants but some informants do find it acceptable.

4. Theoretical Framework

In this section I introduce and define a number of concepts that will be used in the following discussion.

4.1. Possible Worlds Semantics

For the purposes of this dissertation, I will assume a modal framework, whereby different versions of reality, actual as well as hypothetical, are represented as possible worlds (Carnap 1947, Kripke 1972, Kratzer 1981). Possible worlds semantics has been employed to provide formal accounts for a wide range of phenomena. For instance, sentences that contain modals, such as *can*, *may* and *must*, have been analyzed as involving quantification over possible worlds. Thus, a necessity operator, e.g. *must*, triggers universal quantification over possible worlds. In turn, possibility operators, such as *may*, involve existential quantification over versions of reality. The set of worlds that is being quantified over is restricted by an *accessibility relation*,

which relates the actual world (represented as w_0) to a certain set of worlds. (Under certain circumstances, the world of evaluation may be different from w_0 ; however, such cases will not be considered below.) For instance, the *epistemic* accessibility relation links the actual world to the set of worlds in which everything we know about reality holds. It is this set of epistemically accessible worlds that is most likely to be quantified over in (3).

- 3 a. John may be thirsty.
- b. John must be thirsty.

For example, (3a) asserts that among the worlds that conform to our state of knowledge, there is at least one world in which John is thirsty. (3b) asserts that John is thirsty in all the epistemically accessible worlds.

Alternatively, a sentence may involve quantification of a set of worlds that conform to a certain set of rules or regulations. In this case, the accessibility relation is *deontic*. For instance, in (4), the modal *must* quantifies over the set of worlds in which the child obeys all the rules imposed by her parents. The sentence entails that in all such worlds, the speaker's daughter cleans her room before going to bed.

- 4. My daughter must clean her room before she goes to bed.

w_0 need not belong to a set of deontically accessible worlds, since it is quite possible that in reality, certain rules are not obeyed.

The notion of possible worlds also provides us with a means to capture the meaning of sentences that contain propositional attitude predicates, such as *think* or *believe*. Consider, for instance, the sentence in (5):

- 5. Mary believes that John is thirsty.

(5) does not entail that John is thirsty in the actual world. However, it does assert that John is thirsty within Mary's vision of reality (which may differ from the speaker's). The worldview of a given individual can be represented as a set of possible worlds

that are compatible with her beliefs about reality (e.g. Heim (1992), Portner (1997), Farkas (2003)). Following Farkas (2003), I will refer to this set of worlds as $E^{i,w}$, where i is the individual whose epistemic (belief) state is being represented and w , the world of evaluation (by default, w_0), in which this epistemic state is asserted (or presupposed) to hold. The verb *believe* introduces an accessibility relation to the worlds that represent the epistemic state of its subject. Its complement is asserted to hold in all the worlds that belong to this set. Thus, (5) asserts that in every possible world that conforms to Mary's beliefs about reality, it is true that John is thirsty. At the same time, the sentence as a whole makes a statement about w ; namely, it attributes to Mary certain beliefs in w . The interpretation of (5) can therefore be formalized as in (5'), assuming that w_0 is the world of evaluation:

5'. $\forall w[w \in E^{m,w_0} \rightarrow \text{thirsty}(j,w)]$

As stated above, (5) does not entail that John is thirsty in w_0 . It does not presuppose this either, due to the fact that *believe* is a *non-factive* predicate (Kiparsky and Kiparsky (1970)). This predicate does not trigger a presupposition that the proposition denoted by its complement is true in the world of evaluation. In contrast, *know* is a factive predicate. The proposition contributed by its complement is presupposed to be true in the world of evaluation. In addition, the embedded proposition is entailed to hold in the worlds that represent the epistemic sense of the subject; in this sense, *know* is similar to *believe*. (A thorough discussion of the factive/non-factive distinction can be found in Kiparsky and Kiparsky (1970); Farkas (2003) provides a detailed analysis of *know* and *believe* which captures both the differences between the two verbs and the properties that they share.)

The denotation of individual linguistic items also depends on the notion of possible worlds. Thus, the notion of *denotation* should be divided into two types: *extension* and *intension*. The term *extension* stands for the interpretation of a linguistic constituent in a particular world (by default, the actual world). In contrast, *intension* corresponds to a more general, abstract, across-world meaning, which makes it possible to determine the extension of a linguistic item in any given world.

For instance, let us consider the denotation of sentences. I assume that every sentence, independently of its mood and force, is associated with a proposition p which constitutes its propositional content. For example, the propositional content of both the declarative sentence *John is thirsty* and the interrogative *Is John thirsty?* is the proposition *John is thirsty*. The intension of a declarative sentence is its propositional content, namely, the set of possible worlds in which the sentence is true (Carnap 1947). The intensional notion of a proposition can also be formalized as a function from possible worlds to truth values assigned to the proposition in each of these worlds. In turn, the extension of a clause in a given possible world is its truth value in that world. For instance, the intension of the sentence *Paris is the capital of France* is the set of worlds in which Paris is indeed the capital of France. The extension of this sentence in w_0 is the truth value True, i.e. the value that its intension receives in the actual world.

Noun phrases may also receive either intensional or extensional interpretations. Generally, the intension of an NP is a function from possible worlds to sets of individuals that satisfy the descriptive content of the phrase in these worlds. For instance, the intension of the NP *dogs* is a function from possible worlds to sets of dogs. Thus, the intension contains all the dogs that exist in all the possible worlds. This is an intensional *property* interpretation. Property interpretation constitutes the default denotation of common nouns and adjectives, but it has also been argued to characterize noun phrases in certain environments (for alternative possible interpretations of NPs, see discussion below). For instance, Zimmermann (1993) argues that NP complements of *opaque* verbs (i.e. verbs that trigger scope ambiguity of their complements), such as *seek*, denote properties. Additional intensional interpretations are possible for certain types of NPs, but the discussion of these interpretations will be omitted here, since it is irrelevant for the purposes of this dissertation.

Extensional interpretations of NPs can be of three basic types, depending on the properties of the phrase and the environment in which it appears. One option is the extensional property meaning, namely, a set of individuals which constitutes the value of the intensional property in a given world. For instance, the NP *dogs*, under the extensional property interpretation, denotes a set of all the dogs that exist in the world

in question (again, by default, w_0). Secondly, an NP may refer to a particular individual in the world. This interpretation is typical for proper names; for instance, the NP *John* denotes the individual John in the actual world. (An intension of a proper name is a function that for every possible world renders a singleton set containing exactly the same individual, e.g. John.) Thirdly, an NP may receive a quantificational reading, in which case its interpretation is associated with the presence of a generalized quantifier in the logical form. For instance, consider the sentence *John fed a cat*. This sentence entails that there is at least one cat that John fed in the actual world. Thus, we deal with existential quantification over a set of cats. As long as quantification is over a set of individuals in a given possible world, the interpretation of this type is extensional.

Finally, the context in which an utterance is made can also be represented via the notion of possible worlds. Intuitively, the (mutual) context includes all the information that is available to all the discourse participants. It can therefore be represented as a set of possible worlds in which all the mutual beliefs of the discourse participants are true. If we conceive of these beliefs as a set of propositions, then the context constitutes an intersection of all these propositions. The resulting set of worlds has been referred to in the literature as *context set*. (See Stalnaker (1978), Gunlogson (2001) and Farkas (2003) for a more detailed and elaborated approach to context on this line.)

4.2. Types of Operators

Operators interact scopally with other elements in a sentence. The notion *operator* includes, for example, quantifiers (e.g. the existential and the universal quantifier), connectives, such as negation, and opaque verbs, such as *seek*. In this section, I relate to two ways in which operators have been classified and which are going to be relevant for our purposes as we go on. One classification has already been referred to in the introduction; in particular, sentential operators can be divided into two groups: *veridical* and *non-veridical* ones. This distinction has been introduced by Giannakidou (e.g. 1994, 1998). An operator is considered veridical if it satisfies the condition in (6):

6. Op $p \rightarrow p$

Thus, an operator is veridical if Op entails that p is true. If (6) does not hold, then the operator is non-veridical.

For instance, as noted by Giannakidou (1998), conjunction is a veridical operator, regarding both its arguments. $p \wedge q$ entails that p is true, and it also entails that q is true. In contrast, the propositional attitude verb *believe* is a non-veridical operator, since *John believes that p* does not entail that p holds in the actual world. For instance, *John believes that it is raining* does not entail that it is raining in reality. Similarly, *want* is a non-veridical operator, given that *John wants Mary to leave* does not entail that Mary leaves in the actual world. Negation constitutes an additional example of a non-veridical operator, as $\neg p$ does not entail that p . On the contrary, if $\neg p$ is true, then p has to be false, given that negation reverses the truth value of a proposition. Thus, negation satisfies the following condition: $Op \rightarrow \neg p$. The subclass of non-veridical operators that satisfy the latter condition are referred to by Giannakidou as *antiveridical*.

An additional distinction that must be introduced is one between *intensional* and *extensional* operators. An operator Op is extensional if when it combines with a phrase α , then it is interpreted as a function which applies to the extension of α (by default in w_0). An operator Op is intensional if when it combines with a phrase α , it applies to the intension of α . Thus, a sentence that contains an intensional operator will involve some information regarding possible worlds other than the actual one, or at least will contain a constituent that will not be interpreted as its extension in the actual world.

It should be emphasized that the extensional/intensional contrast is not identical to the veridical/non-veridical one, even though the two classifications do overlap to a large extent. For instance, an epistemic necessity operator is veridical but intensional. It is intensional since it forces quantification over a set of possible worlds, and thus, the proposition it applies to is not restricted in its interpretation to a truth value in w_0 . At the same time, the operator is veridical since it satisfies the condition in (6) above: if p is true in all epistemically accessible worlds, then it has to be true in the actual world. An additional example that might distinguish the two classifications is provided by

the negative operator. Negation is non-veridical, as demonstrated above. At the same time, it is often considered to be an extensional operator since it reverses the truth value of a proposition in a given world. It applies to an extension of a proposition in a certain world and renders a different truth value in the same world. (However, the question of whether negation is indeed an extensional operator is controversial. For instance, see Farkas (1985), Palmer (2001) and Posy (2007) for relation between negation and modality and intensionality, and Kagan (2006) for an explicit discussion of properties that negation shares with intensional operators.)

4.3. Semantic Properties of NPs

As will be discussed in more detail below, the genitive/accusative and genitive/nominative alternations have been related in the literature to a number of interpretational properties of the NPs, including definiteness, specificity, scope and existential commitment. Since these properties are strongly interrelated but nevertheless not identical, I believe that it is important to formulate appropriate distinctions between them. Moreover, individual definitions of most of these properties are controversial and differ substantially in different linguistic sources. Therefore, below, I will refer to each of these properties individually and specify its definition that will be assumed for the purposes of the following discussion.

4.3.1. Definiteness.

Traditional accounts of definiteness can be divided into familiarity approaches and uniqueness approaches. Under the familiarity approaches, definite NPs are analyzed as NPs whose referent is familiar from the discourse (Heim (1982), among others). According to the uniqueness approaches, a definite NP is required to have a referent that is unique in the given context. Such an approach is taken in Russell (1905). Choosing between these two types of approaches is not crucial for the purposes of this dissertation. (See Farkas (2002) for discussion of these views of definiteness.)

One characteristic of definite NPs is the fact that they are normally unacceptable in existential sentences, as illustrated in (7):

7. *There was John in the room.

Definite NPs include proper names, personal pronouns, phrases that contain a demonstrative, such as *this* or *that*, and phrases that contain a definite article, in those languages in which one is present. The latter point leads us to a problem of talking about definiteness when analyzing Russian. This language lacks articles, definite as well as indefinite. Naturally, it has proper names, pronouns and phrases with demonstratives, as well as lexical items that unambiguously mark an NP as indefinite (similarly to the English determiners *some* or *any*). But the vast majority of NPs in Russian can get both a definite and an indefinite reading, depending on the context. Out of context, it is often unclear which of the interpretations is involved. For this reason, within numerous Russian examples in this dissertation, two possible English translations of NPs are provided: one with the definite article and the other, with the indefinite one.

Thus, determining out of context whether a given NP in Russian is definite or indefinite is often problematic. Conclusions based on whether or not the NP denotes a particular individual, rather than quantifying over individuals belonging to a set, is likely to lead to confusion between definiteness and specificity (to be discussed below). For this reason, in the sections below, I will restrict discussions of the interaction between Case-assignment and definiteness in Russian to examples that involve proper names and demonstratives. Personal pronouns will not be discussed, since their genitive and accusative forms are identical.

4.3.2. Scope.

The scope of an operator is the part of the sentence to which the operator applies. For instance, consider (8) below.

8. Melinda wants to buy a motorcycle. (Ioup 1977:233)

This sentence is ambiguous between two readings. According to one reading, represented in (8'a), it means that there is a particular motorcycle that Melinda wants to buy. Under this interpretation, the existential quantifier takes wider scope than the opaque verb *wants*. Alternatively, the sentence can mean roughly that Melinda wants to buy *any* motorcycle (8'b). Under this reading, the existential quantifier is in the scope of the operator *wants*.

- 8' a. $\exists x$ (motorcycle (x) \wedge want (Melinda, (buy (Melinda, x))))
 b. want (Melinda, $\exists x$ (motorcycle (x) \wedge (buy (Melinda, x))))

It is the relative scope of an NP and an intensional or negative operator that is going to be most relevant for the following discussion.

4.3.3. Specificity

This term is quite often referred to in the linguistic literature, including the literature on GenNeg, but its precise definition is unclear. Thus, some researchers treat specificity as a semantic concept and others, as a pragmatic one. Under the semantic approach, specificity is often essentially treated as scope (Karttunen (1976), Farkas (2002), among others). Thus, specific NPs are often analyzed as NPs that take widest scope possible, whereas NPs are treated as non-specific if they are interpreted within the scope of some operator. Alternatively, specificity has been provided an account within the framework of choice functions, functions that choose a member of a non-empty set (Reinhart (1997), Winter (1997), Kratzer (1998)). The content of an indefinite NP determines the set to which a choice function applies. Within the system developed by Reinhart (1997), the function variable is, in turn, bound by an existential closure operator, hence what seems to be the existential interpretation of the NP. Crucially, the existential operator that binds the function variable can be inserted at any compositional level. NPs that seem to receive a wide scope (and specific) interpretation, in fact, remain in situ. Wide scope is rather taken by the quantifier that binds the function variable. This results in what can be referred to as a specific reading of the NP. Within this framework, the two readings of (8) discussed above will be represented as in (8'')

- 8'' a. $\exists f$ (CH (f) \wedge want (Melinda, buy (Melinda, f(motorcycle))))
 b. want (Melinda, $\exists f$ (CH (f) \wedge (buy (Melinda, f(motorcycle))))
 (where CH (f) is a choice function)

(See also Kratzer's (1998) choice functions approach to specificity, which differs considerably from Reinhart's account.)

Under an alternative pragmatic approach (Groenendijk and Stokhof (1980), Kagan (2007)), the crucial component of specificity is identifiability to the speaker. Thus, the referent of a specific NP is identifiable, or known, to the speaker, whereas the referent of a non-specific NP is not. In other words, an NP is specific if the speaker utters it having a particular individual in mind, with the intention to refer to that particular individual. An NP is non-specific if this condition does not hold. In addition, the term specificity has been associated with such notions as noteworthiness, a noteworthy property by which the referent of the NP is characterized (Ionin 2006), and identifiability which is not necessarily by the speaker (Farkas 2007). (See Kagan (2007) for a more detailed discussion of previously proposed accounts of specificity.)

A detailed account of specificity will not be attempted here. In the following chapters, two views of specificity mentioned above will be considered. One analyzes specificity as a property identical to scope and the other treats it as speaker identifiability.

4.3.4. Existential Commitment

An NP carries existential commitment if and only if the sentence either entails or presupposes that this NP has a referent in the actual world or quantifies over a non-empty set. For instance, (9a) below entails that there exists a cat that John saw. Therefore, in order for this sentence to be true, there must exist at least one cat in the actual world. In this case, the presence of existential commitment is contributed by entailment.

9 a. John saw a cat.

b. $\exists x (\text{cat}(x) \wedge \text{saw}(\text{John}, x))$

Alternatively, an NP may carry existential presupposition (Frege 1892, Strawson 1950). In this case, the existence of the referent is not entailed but rather presupposed. This property generally characterizes definite NPs (although some exceptions will be discussed in the following chapters). For instance, (10a) presupposes that Bill has a brother. The existence of the brother is not part of the entailment of the sentence, as is demonstrated by the standard presupposition tests of negation and interrogatives. An entailment is not sustained under negation or in an interrogative. Thus, neither *John*

didn't see a cat nor *Did John see a cat?* entail the existence of a cat. In contrast, it follows from both (10b), which constitutes the negative counterpart of (10a) and from (10c), a polar interrogative based on (10a), that Bill has a brother, which demonstrates that this conclusion is based on a presupposition¹.

- 10 a. Bill's brother talked to Mary.
- b. Bill's brother didn't talk to Mary.
- c. Did Bill's brother talk to Mary?

For our purposes, it will turn out that existential commitment is a crucial notion. As will be demonstrated in Chapter 1, the genitive / accusative alternation under negation is sensitive to this notion. In particular, Genitive of Negation and Intensional Genitive are associated with the absence of existential commitment. (It should be pointed out that this marking strongly tends to contribute the absence of existential commitment, but not commitment to non-existence.) As for accusative Case, it will be demonstrated that it is perfectly compatible both with the presence of existential commitment and its absence.

4.4 Aspect

Finally, a considerable part of Chapter 6 is devoted to Russian aspect and the ways in which it interacts with Case-assignment. Therefore, in this section, I briefly discuss a number of key concepts related to theory of aspect that will be used in what follows.

One of the crucial aspectual distinctions that will be used in this study is one between telic and atelic event predicates. Roughly, a telic event predicate is a predicate whose denotation contains only completed events that include their initial as well as final boundaries (Krifka 1998). Its denotation does not contain proper parts of such events. Importantly, a telic predicate specifies an inherent endpoint which constitutes the final boundary of an event and beyond which the event cannot continue. For instance, *run a mile* is a telic predicate, as it denotes only completed, delimited events of running a mile, which involve an inherent terminal point (once a mile is over, an event of running a mile is completed). In turn, an atelic predicate does not include an inherent endpoint in its denotation. For instance, *run* is an atelic predicate, as it does not contribute a natural endpoint beyond which an event cannot continue; thus, it does not

trigger event delimitation. I will also use the terms *bounded/unbounded* as equivalent to *telic/atelic*, although see Depraetere (1995) for arguments in favor of distinguishing between the two notions.

Following Krifka (1992), I assume an approach to telicity according to which a telic predicate is quantized. The definition of quantization is provided in (11):

$$11. \forall P [\text{QUA}(P) \leftrightarrow \forall x,y [P(x) \wedge P(y) \rightarrow \neg y < x]] \quad (\text{Krifka 1992})$$

(where $<$ represents the proper part relation)

According to this definition, a predicate P is quantized iff for every x and y that fall under its denotation, y is not a proper part of x .

The view that telic predicates are quantized is also accepted in Filip's work on Slavic aspect, e.g. Filip (2000, in press) and Filip and Rothstein (2006).

I will further assume the distinction between four aspectual classes of events: *states*, *processes* (= *activities*), *accomplishments* and *achievements*. These aspectual classes are discussed extensively by Vendler (1957). Accomplishments and achievements are telic; the difference between the two classes has to do with the fact that accomplishments are durative and achievements are not. States and processes are atelic and durative; the two classes differ in that processes, unlike states, are dynamic. The distinction between the different aspectual classes has to do with lexical aspect: the classification of a given event predicate as belonging to one of these classes is dependent on lexical semantic properties of the verb and (in some cases) of its arguments. Lexical aspect should be distinguished from grammatical (or viewpoint) aspect, which can be exemplified by the progressive and the perfect in English (a detailed discussion of these viewpoints can be found in Reichenbach (1947), Bennett and Partee (1972), Smith (1991), among others).

Finally, it should be pointed out that Russian, similarly to other Slavic languages, involves a grammatical aspectual distinction between *perfective* and *imperfective* verb forms. For instance, the verb *čítat'* (to read) is grammatically imperfective, while the

verb *pročitat'* (to read) is perfective. Determining the semantics of the perfective/imperfective distinction is not a trivial matter. A considerable amount of linguistic literature is devoted to this issue; Russian aspect has been discussed by such researchers as Lomonosov (e.g. 1952), Jakobson (1957/1971) and Isačenko (1960); some recent formal accounts of the perfective/imperfective opposition are provided in Smith (1991), Krifka (1992), Filip (1999, 2000, in press), Borik (2002), Filip and Rothstein (2006), among others. A tentative approach to Russian aspect, partly based on some of the previous accounts, will be proposed in Chapter 6 of this study. At this point I will only note that the perfective/imperfective opposition has often been accounted for in terms of the telic/atelic contrast. As will be further discussed in Chapter 6, perfectivity is typically analyzed as entailing telicity. In turn, imperfectivity is generally treated as either encoding atelicity (e.g. Smith (1991)) or as a default aspect that is neutral with respect to telicity (e.g. Forsyth (1970)). A discussion of these two approaches can be found in Klein (1995).

Chapter 1. Non-Canonical Genitive: Reorganizing the Phenomenon

1. Genitive Objects and the Inherent/Structural Distinction

This dissertation investigates the semantic import of structural Case distinctions. In the linguistic literature on Case, a distinction is often made between two types of Cases: structural and inherent. Structural Case is defined in morpho-syntactic terms; it is a realization of Abstract Case assigned to a NP in a particular syntactic configuration. In contrast, the assignment of Inherent Case is closely related to the assignment of a thematic role by the head which selects the NP in question. The head is assumed to assign to its complement a certain thematic role and a certain inherent Case at the same level of representation (Deep Structure within the Government and Binding Theory). Thus, inherent, but not structural, Case is predicted to depend on semantic relations. In English, structural Case is exemplified by the Abstract (not realized phonologically) Nominative and Accusative. The former is assigned (or checked) in the specifier of T(ense)P position, and the latter, in the specifier of Agr_{OP} (object agreement phrase). Inherent Case, in turn, is assigned, for instance, by prepositions to their complements. An additional instance of the inherent Case in English is the genitive Case which is realized by the marker *of* and is assigned by certain nouns, adjectives or verbs (such as *persuade* and *approve*) to their complement NPs (Chomsky 1986).

However, as pointed out by Kiparsky (1998) and Butt (2006) among others, there are Cases that appear to constitute a problem for this division. The Finnish partitive is one such Case, as discussed in detail by Kiparsky. On the one hand, this Case is structural. It alternates with structural Cases (accusative and nominative) – which is not a property of inherent Cases (Vainikka and Maling 1996); it is not associated with an assignment of any particular theta-role; it can be assigned to objects of a very wide range of verbs, and its licensing seems to depend on the syntactic configuration, rather than on a presence of any particular lexical head. On the other hand, the assignment of the partitive Case correlates with the specific/non-specific and definite/indefinite contrasts and is clearly dependent on such a semantic factor as aspect. Of course, the latter property might be compatible with treating the partitive as a structural Case, as long as Aspect Phrase is introduced in the derivation, whose features determine Case-checking in Finnish. Still, the contrast between structural Case, which constitutes a

purely syntactic phenomenon, and inherent Case, which is dependent on semantic relations, is blurred.

This dissertation will discuss Russian genitive Case in its non-canonical uses, i.e. when assigned to a non-oblique argument of a verb (generally, the base-generated object) which typically appears in structural nominative or accusative. Similarly to the Finnish partitive, this Case constitutes a problem for the clear-cut inherent/structural division. Non-canonical genitive alternates with structural Cases. Its checking is strongly associated with a particular syntactic configuration: normally, it appears on NPs that are generated in the direct object position (though see Appendix to Chapter 2 for potential counterexamples to this generalization). Abstracting away for a moment from the different subtypes of non-canonical genitive, we can note that this Case is licensed on objects of a wide range of verbs. The fact that with numerous verbs, its appearance is possible under negation but not in affirmative clauses suggests that it is not dependent on thematic role assignment. All these facts suggest that the non-canonical genitive should be classified as a structural Case.

On the other hand, again, similarly to the partitive, non-canonical genitive is strongly associated with a number of semantic properties. Genitive NPs, in contrast to their nominative and accusative counterparts, strongly tend to get indefinite, non-specific, narrow scope readings and to lack existential commitment. In addition, the choice of Case appears to be sensitive to the properties of the head noun (e.g. whether it is proper or common) and the aspect of the verb (perfective as opposed to imperfective).

Thus, the investigation of non-canonical genitive Case contributes to our understanding of the relation between morphological Case and semantics and, more generally, of the ways in which semantic meaning can affect grammatical form in natural language. This dissertation will be concerned with the semantics and distribution of certain subtypes of non-canonical genitive.

2. Three Subtypes of Non-Canonical Genitive

Three types of genitive Case that alternates with another structural Case have been distinguished in the literature. These include the so-called Partitive Genitive, Genitive of Negation and Intensional Genitive. The question of whether these subtypes should

be provided a unified account or, rather, should be analyzed as independent phenomena remains controversial. Below, I introduce the three types of genitive on a descriptive level and then argue for an organization of the phenomenon that will be assumed in this dissertation. In particular, I will argue, in the spirit of Neidle (1988), that Genitive of Negation and Intensional Genitive constitute two instantiations of a single phenomenon and should therefore be provided a unified account. Further, I show that Partitive Genitive differs from these instantiations in a number of significant ways and should therefore receive a separate treatment. The following chapters of this dissertation will be concerned with the phenomenon formed by Intensional Genitive and Genitive of Negation.

2.1. Partitive Genitive

The first subtype of non-canonical genitive Case is the so-called Partitive Genitive. Partitive Genitive is licensed on objects of certain perfective verbs, as exemplified in (1b) and (2b). The assignment of genitive in this context is, at least superficially, optional; genitive freely alternates with the accusative.

- 1 a. Ja vypil vodu.
 I drank(perf) water(acc)²
 I drank the water.
- b. Ja vypil vody.
 I drank(perf) water(gen)
 I drank some water.
- 2 a. Ja kupil tebe jabloki.
 I bought(perf) you(dat) apples(acc pl)
 I bought (the) apples for you.
- b. Ja kupil tebe jablok.
 I bought(perf) you(dat) apples(gen pl)
 I bought you some apples.

This phenomenon, discussed extensively by Klenin (1978), Pesetsky (1982) and Franks (1995), among others, can be characterized by the following properties. Firstly, the genitive object is interpreted as indefinite, and seems to have some kind of a quantificational meaning, such as “some quantity of X” (or “some part of X”). In

contrast, the accusative counterparts tend to be interpreted as definite and are associated with wholeness and completeness.

In this sense NPs that appear in Partitive Genitive are similar to partitive objects in such languages as Finnish and French. Two examples from Finnish are provided below:

3 a. Hän pani kirjat pöydälle.

he put books(acc pl) table-on

He put the books on the table.

b. Hän pani kirjoja pöydälle.

he put books(part pl) table-on

He put (some) books on the table.

(Vainikka and Mailing 1996:185)

4 a. Join veden.

drank(1st sg) water(acc)

I drank the water.

b. Join vettä.

drank(1st sg) water(part)

I drank some water.

For instance, the contrast in (4) is essentially identical to the opposition in (1) above (but see note 2 for an additional reading of (4b)). The partitive object in (4b) has a quantificational interpretation and can be translated as *some water*. In contrast, its accusative counterpart in (4a) is associated with wholeness and is most likely to be interpreted as definite, referring to a contextually determined quantity of water.

Secondly, turning back to properties of Partitive Genitive, this Case can be assigned only to homogeneous objects, such as bare plurals and mass terms. Objects that are not homogeneous have to be marked accusative. This is demonstrated by the fact that while genitive Case-assignment is licensed in (1b) and (2b) above, in (5b) it is unacceptable.

5 a. Ja kupil tebe jabloko.

I bought(perf) you(dat) apple(acc sg)

I bought an apple for you.

b. *Ja kupil tebe jabloka.

I bought(perf) you(dat) apple(gen sg)

I bought an apple for you.

Once the object NP is count singular and, thus, heterogeneous, it has to appear in the accusative Case.

Thirdly, objects in Partitive Genitive are generally acceptable only with perfective verbs. If a verb is imperfective, its object is obligatorily accusative:

6. Ja pil vodu / *vody.

I drank(imp) water(acc)/(gen)

I was drinking water / I drank water.

Finally, it should be noted that the assignment of Partitive Genitive is highly restricted in Russian. Not every perfective verb can take a genitive object, and not every homogeneous object can be assigned the genitive Case in a given sentence. For instance, the object NPs in (7) below are obligatorily accusative. (Compare (7b) to the perfectly acceptable (2b) above, which involves the same perfective verb.)

7 a. *Ja s'jel jablok.

I ate(perf) apples(gen pl)

I ate some apples.

b. *Ja kupil tebe knig.

I bought(perf) you(dat) books(gen pl)

I bought some books for you.

Apparently, further semantic restrictions must be discovered that account for the distribution of the genitive objects.

2.2. Genitive of Negation

The second phenomenon exhibiting non-canonical genitive Case is Genitive of Negation (GenNeg). This is a phenomenon whereby a non-oblique argument of a verb may be assigned genitive Case under sentential negation, even if genitive Case-marking is not licensed in the corresponding affirmative clause (consider, for instance, (9b), as opposed to (8b)). GenNeg can be assigned to objects of transitive verbs, in which case it alternates with the accusative (9), or to the argument of some passive and intransitive verbs, in which case the genitive/nominative alternation is observed (10).

8 a. Ja pil vodu.

I drank(imp) water(acc)

I drank / was drinking water.

b. *Ja pil vody.

I drank(imp) water(gen)

I drank / was drinking water.

9 a. Ja ne pil vodu.

I NEG drank(imp) water(acc)

I didn't drink (the) water / I wasn't drinking water.

b. Ja ne pil vody.

I NEG drank(imp) water(gen)

I didn't drink (any) water.

10 a. Otvjet ne prišol.

Answer(nom m sg) NEG arrived(m sg)

The answer did not arrive.

b. Otveta ne prišlo.

Answer(gen m sg) NEG arrived(neut sg)

No answer arrived.

(Babby 1978:13)

GenNeg assignment has often been claimed to be optional since, as illustrated in (9) and (10), a genitive NP can often be substituted by its accusative or nominative counterpart. However, Bailyn (1997), among others, claims that GenNeg is, in fact, obligatory, since it is obligatorily assigned to NPs with particular semantic properties that appear in a particular syntactic configuration (for details on Bailyn's (1997)

account, see Chapter 2, Section 1.1; semantic properties associated with GenNeg assignment will be discussed in detail in Section 3 of this chapter). Similarly to Bailyn, I believe that characterizing GenNeg as optional is problematic. As will be demonstrated below, this Case is not always available in negated sentences, and its assignment often affects substantially the interpretation of a sentence. In addition, there does exist an environment in which the assignment of GenNeg is clearly obligatory: negated existential sentences.

11. V komnate net stul'jev / *stul'ja
 in room NEG-BE chairs(gen pl)/(nom pl)
 There are no chairs in the room.

Here, nominative (as well as accusative) Case is unavailable, and only Genitive of Negation can be assigned.

Genitive of Negation is very productive, much more productive than Partitive Genitive. Under negation, the alternation in Case is possible with both perfective and imperfective verbs and with different types of nouns – mass and count, plural and singular. There do, however, exist semantic properties in whose presence GenNeg is *especially likely* to be assigned. These properties will be discussed in detail in Section 3.2 below, in which Genitive of Negation will be compared to Intensional Genitive.

2.3. Intensional Genitive

Finally, the third phenomenon under discussion is Intensional Genitive, genitive Case-assignment to objects of certain intensional verbs. In Russian, there is a restricted group of intensional verbs that can take both accusative and genitive objects, independently of negation. These verbs include: *xotet'* (want), *zasluživat'* (deserve), *trebovat'* (demand), *prosit'* (ask), *ždat'* (wait), etc. All these verbs belong to the class of *weak intensional predicates* in the terminology used by Farkas (2003). The reasons for why it is precisely these verbs that license non-canonical genitive will be discussed extensively in Chapter 4. Both genitive and accusative Case-assignment with these predicates is exemplified in (12):

- 12 a. On ždal čuda / Dimu.
 He waited(imp) miracle(gen sg) / Dima(acc)
 He was waiting for a miracle / for Dima.
- b. On prosit vnimania / knigu.
 he asks(imp) attention(gen) / book(acc sg)
 He is asking / asks for attention / a book.
- c. Ty zasluživaeš medali / medal'.
 You deserve(imp) medal(gen sg)/(acc sg)
 You deserve a medal.

Interestingly, in some sentences, both genitive and accusative Cases are optionally available for the same NP, whereas in others, an NP can be assigned only one Case – either only genitive or only accusative. Thus, characterizing Intensional Genitive as optional is especially problematic. It should be pointed out that, whenever both genitive and accusative Case-marking is in principle possible, as in (12c), a considerable variation in native speakers' judgments as to which Case is preferable or even acceptable can be observed.

The Intensional Genitive phenomenon is relatively rarely discussed in the literature and seems to be in some cases confused with Partitive Genitive. Fowler (1996) does treat the verbs listed above as belonging to a separate group of verbs that can take genitive objects. However, he includes them in the same group with (extensional) verbs that can take genitive objects only (and thus do not allow the genitive/accusative alternation), probably via inherent Case-assignment. In addition, he does not mention the fact that the verbs in question are intensional. Polinsky (1996) seems to refer to the same phenomenon when she states that certain “verbs of emotional perception, aim, request, or achievement” (Polinsky 1996:36) lexically govern genitive Case-assignment. She acknowledges the fact that these verbs can take accusative objects as well, noting that the choice of Case depends on animacy and definiteness of the object. However, a Case that is lexically governed is not expected to alternate with a structural Case, as already mentioned above. Finally, Neidle (1988) and Bailyn (2004) do treat Intensional Genitive as a phenomenon whereby an object of an *intensional* verb can appear in the genitive Case; for details of these two analyses, see Chapter 2, Sections 2.1.2 and 2.2.2.

3. Reorganization of the Subtypes of Non-Canonical Genitive

3.1. Three Types of Non-Canonical Genitive in Previously Proposed Accounts

Different relations between the three phenomena discussed above have been assumed within the different analyses proposed for the non-canonical genitive Case. In this section, I discuss a number of patterns that have been proposed. A detailed discussion of the approaches to non-canonical genitive that will be mentioned below can be found in Chapter 2.

Genitive of Negation has been discussed in the literature especially extensively, and has often been treated as an autonomous phenomenon, whose licensing is only possible in the presence of Negation Phrase (NegP) in the syntactic structure of a sentence. Under these approaches (e.g. Bailyn (1997), Brown (1999), Babyonyshev (2003), Harves (2002a,b), Kim (2003)), GenNeg is argued to be assigned, or checked, by the Neg head, whereas accusative and nominative Case-features are checked by the heads of different functional projections. Naturally, once such an approach is assumed, other instances of non-canonical genitive Case require a separate treatment, as they can be observed in the absence of NegP projection.

In contrast, Pesetsky (1982), whose analysis of non-canonical genitive is quite influential, has proposed to unify Genitive of Negation and Partitive Genitive (he does not discuss Intensional Genitive as a separate phenomenon). Pesetsky argues that both these Cases are assigned by a phonologically empty quantifier. The motivation for this approach largely comes from the fact that in Russian, numerous overt quantifiers assign genitive Case to their complement NPs, as in *mnogo stolov* (many tables_{GEN}). A support for this analysis, as well as a further reason for unifying the two phenomena in question, comes from the assumption that in both cases, we deal with genitive NPs that carry quantificational meaning. As demonstrated above, Partitive Genitive is intuitively associated with a kind of partitive, "some quantity of" interpretation. In turn, NPs that appear in Genitive of Negation may be translated to English as phrases containing such overt quantifiers as *no* or *any*:

13. Lena ne jela jablok.

Lena NEG ate apples(gen pl)

Lena didn't eat any apples / Lena ate no apples.

Thus, Genitive of Negation may be understood as involving quantification, possibly just like Partitive Genitive but within the scope of negation.

These two approaches do not discuss Intensional Genitive at all, and, more generally, it can be stated that this Case is relatively rarely discussed in the generative literature, compared to the other two types of the genitive. In the literature of the 1980's and 1990's, Intensional Genitive is especially unlikely to be mentioned. An important exception is constituted by Neidle (1988). Contrary to most other researchers, Neidle focuses on Genitive of Negation and Intensional Genitive and proposes a unified account of these two phenomena³ - to the exclusion of Partitive Genitive.

Below, I will argue for the same organization of the phenomenon as proposed by Neidle. In Section 3.2, I provide evidence in favor of treating Genitive of Negation and Intensional Genitive as a single phenomenon. Section 3.3 is devoted to a comparison of this (unified) phenomenon on the one hand and Partitive Genitive, on the other. I will demonstrate that numerous substantial differences can be found between these types of non-canonical genitive, suggesting that they require a separate treatment.

3.2. Genitive of Negation and Intensional Genitive as a Single Phenomenon

As stated above, I agree with Neidle (1988) that Genitive of Negation and Intensional Genitive constitute different instances of a single phenomenon and should therefore be provided a unified account. In this section, I present evidence that supports this claim.

3.2.1. Genitive/Accusative Alternation

Firstly, and most obviously, both phenomena involve a genitive/accusative alternation in the Case of the object⁴. Moreover, within both phenomena, in some sentences, only one of these Cases can be assigned, whereas in others, both genitive and accusative marking is acceptable.

3.2.2. Native Speakers' Judgments

Secondly, both alternations are associated with a considerable amount of variation in native speakers' judgments. Thus, native speakers of Russian often disagree as to

whether an NP can appear in the genitive Case in a given sentence or not. It is important to point out that speakers who are relatively reluctant to accept Genitive of Negation are similarly reluctant to accept Intensional Genitive. This variation in judgments is at least partly a by-product of the process of language change taking place in Russian, which is mentioned by Neidle (1988). She notes that, within both phenomena under discussion, accusative Case is now used with increasing frequency, a factor that on its own constitutes a property shared by the two alternations.

Semantic parallels that can be observed between these two types of genitive demand a more detailed discussion.

3.2.3. Semantic Properties that Affect Case-Assignment

Crucially, the same semantic factors appear to affect the choice of Case within both phenomena, which is pointed out in Neidle (1988). Below, I list a number of properties to which Case-assignment is sensitive and provide relevant examples from the two phenomena. The relation between some of these properties (to the exclusion of existential commitment, specificity and scope) and Genitive of Negation is discussed extensively in Timberlake (1986). The fact that the choice of Case is affected by such properties as definiteness, specificity and scope is pointed out by many researchers (e.g. Bailyn (1997), Harves (2002a,b), Babyonyshev (2003)). Finally, the fact that Intensional Genitive is sensitive to some of the properties to be listed below is pointed out in Neidle (1988) (see also references therein). Thus, the facts to be demonstrated in this section are mostly not new. The main contribution of the section is rather in providing a detailed and systematic comparison of the relation between these properties and each of the two phenomena. Hopefully, this comparison will make especially convincing the claim that GenNeg and Intensional Genitive demand a unifying analysis.

Before I turn to listing the semantic properties in question, it is important to emphasize that all of them merely create *tendencies* in the choice of Case; none of them is sufficient to account for the genitive/accusative alternation either under negation or following an intensional verb.

i) Abstract / Concrete

Firstly, NPs headed by abstract nouns are more likely to be assigned genitive Case than NPs headed by concrete ones. This tendency is demonstrated in (14) for Genitive of Negation and in (15-16) for Intensional Genitive. (14b is based on an example taken from Timberlake (1986:342).)

14 a. On ne našol ???sčast'je / sčast'ja.
he NEG found happiness(acc)/(gen)

He didn't find happiness.

b. On ne našol cvetok / ???cvetka.

he NEG found flower(acc sg)/(gen sg)

He didn't find a / the flower.

15 a. Dima ždjot čuda / *čudo.

Dima waits miracle(gen sg)/(acc sg)

Dima is waiting for a miracle.

b. Dima ždjot posylku / *posylki.

Dima waits parcel(acc sg)/(gen sg)

Dima is waiting for a parcel.

16 a. On iščet prikliučenij / ?prikliučeniija

he seeks adventures(gen pl)/(acc pl)

He is seeking adventures.

b. On iščet knigi / *knig.

he seeks books(acc pl)/(gen pl)

He is seeking books.

Although a certain degree of variation in native speakers' judgments is possible, the abstract NP in (14a) is strongly preferred with genitive Case-marking, while for the concrete one in (14b), accusative Case is preferable. In (15) and (16), abstract objects of intensional verbs appear in genitive Case (whose assignment is either obligatory or at least preferable), while objects of the same verbs that are headed by concrete nouns are obligatorily accusative.

ii) Number

In addition, genitive is more often assigned to plural NPs than to singular ones. Thus, Genitive of Negation is acceptable in (17a) but is much worse in (17b) (identical to 14b), at least according to my informants. Similarly, my informants prefer (18a), in which the object of the verb meaning *to wait* is plural, to (18b), its singular counterpart. (Neither of the sentences in (18) is considered perfectly acceptable by *all* the speakers; still, (18a) is judged as acceptable much more often – under the meaning according to which the speaker is waiting for a plant to blossom.)

17 a. Ja ne našol cvetov.

I NEG found flowers(gen pl)

I didn't find (the) flowers.

b. Ja ne našol ???cvetka.

I NEG found flower(gen sg)

I didn't find a / the flower.

(Timberlake 1986:342)

18 a. Ja ždu cvetov.

I wait flowers(gen pl)

I am waiting for flowers.

b. ??? Ja ždu cvetka.

I wait flower(gen sg)

I am waiting for a flower.

It should be mentioned that Case-marking is sensitive to number only if the object is headed by a concrete noun. Abstract nouns strongly tend to appear in the genitive independently of their number – again, both under negation and in the complement position of an intensional predicate.

iii) Definiteness

Thirdly, genitive is more likely to be assigned to indefinite NPs than to definite ones. The NP *novyje ukrašenija* (new jewels) is more likely to appear in the genitive Case than *eti ukrašenija* (these jewels) in both (19), which involves negation, and (20), which contains an intensional verb. Russian is a language that lacks articles; however, the NP *eti ukrašenija* can be classified as definite since it contains the demonstrative *eti* (these).

19 a. Lena ne kupila eti ukrašenija / ???etix ukrašenij

Lena NEG bought [these jewels](acc pl)/(gen pl)

Lena didn't buy these jewels.

b. Lena ne kupila novyje ukrašenija / novyx ukrašenij.

Lena NEG bought [new jewels](acc pl)/(gen pl)

Lena didn't buy new jewels.

20 a. Lena potrebovala eti ukrašenija / ???etix ukrašenij

Lena demanded [these jewels](acc pl)/(gen pl)

b. Lena potrebovala novyje ukrašenija / novyx ukrašenij.

Lena demanded [new jewels](acc pl)/(gen pl)

iv) Proper / Common

Among definite NPs, proper names are less likely to be marked genitive than NPs headed by common nouns. Thus, the proper name *Lena* in (21a) cannot appear in the genitive Case, in contrast to the definite NP *etot razgovor* (this talk) in (21b), which contains a demonstrative. A similar pattern holds in (22).

21 a. Ja ne pomnila Lenu / *Leny.

I NEG remembered Lena(acc)/(gen)

I didn't remember Lena.

b. Ja ne pomnila etot razgovor / etogo razgovora.

I NEG remembered [this talk](acc sg)/(gen sg)

I didn't remember this talk.

22 a. Ivan ždjot Annu / *Anny.

Ivan waits Anna(acc)/(gen)

Ivan is waiting for Anna.

b. Ivan ždjot ???etu vstreču / etoj vstreči.

Ivan waits [this meeting](acc sg)/(gen sg)

Ivan is waiting for this meeting.

The acceptability of genitive Case-marking in (21b) and (22b) shows that the unlikelihood of definite NPs to appear in genitive Case is only a tendency. As mentioned above, the same holds for all the other properties discussed in this section. For instance, even proper names may appear in Genitive of Negation, although this is

possible in a highly restricted range of environments. (See Section 4 of Chapter 5 for a treatment of genitive proper names.)

v) Specificity and Scope

In addition, genitive NPs are normally interpreted as non-specific and taking narrow scope. Their accusative counterparts may get either wide or narrow scope readings. Similarly, they may be interpreted as either specific or not (under any approach to specificity). Sensitivity of Case-marking to these properties, both under negation and with intensional verbs, receives much attention in Neidle (1988). However, Neidle claims that accusative NPs are consistently specific and obligatorily take wide scope, whereas genitive objects can take both wide and narrow scope. In contrast, I agree with Bailyn (1997), among others, that in modern Russian, genitive Case-assignment to objects is strongly associated with narrow scope and non-specific interpretation, whereas accusative NPs allow different readings (although in some negative sentences with accusative NPs, wide scope interpretation of the object is indeed preferred).

Neidle treats specificity and scope as essentially the same feature. The relation between the two properties depends on the definition of specificity, as discussed above. Below, I try to provide examples that are equally relevant for both scope and specificity, whichever analysis of the latter phenomenon is adopted.

23 a. Anna ne kupila knigi.

Anna NEG bought books(acc pl)

Anna didn't buy (the) books.

b. Anna ne kupila knjig.

Anna NEG bought books(gen pl)

Anna didn't buy (any) books.

(Harves 2002b:38)

24 a. Dima iščet švedskije marki.

Dima seeks [Swedish stamps](acc pl)

Dima is seeking Swedish stamps.

b. načal'nik trebujet pribyli.

boss demands profit(gen)

The boss demands profit.

Under the salient reading of (23a), the NP *knigi* (books) takes wide scope relative to the negative operator, and the sentence means that there is a particular set of books that Anna did not buy. The books may be identified by the speaker, although this is not obligatory. In fact, the wide scope interpretation is not obligatory either. Thus, (23a) may mean that Anna did not buy any books, although this reading is less salient than the one provided above. In turn, (23b) can only mean that Anna did not buy any books, i.e. the object NP is interpreted within the scope of negation. Naturally, under this reading, speaker identifiability is absent. Thus, the genitive NP receives a non-specific interpretation.

Turning to intensional verbs, an accusative complement of such a predicate may take either wide or narrow scope. Thus, (24a) may mean either that there is a particular set of stamps that Dima is seeking (wide scope reading) or that he is looking for any Swedish stamps (narrow scope reading). In this sentence, genitive Case-marking is unavailable (see Section 3.2 of Chapter 4 for a proposed explanation of this Case-marking pattern).

In turn, genitive objects of intensional verbs consistently get narrow scope readings. For instance, (24b) can only mean that the boss demands that the employees work in such a way that there be profit. Namely, the genitive NP does not denote an entity that exists in the actual world but rather gets interpreted within the scope of the intensional predicate. The sentence cannot mean that there is particular sum of money that constitutes the profit, and the boss demands that this money be given to him. This reading is obtained, however, once an accusative object instead of the genitive one is used. (Section 3.2.4 of Chapter 4 contains a more detailed discussion of this opposition and other minimal contrasts on the same line). Importantly for our current purposes, the genitive object can only take narrow scope.

vi) Existential Commitment

Finally, genitive NPs typically lack existential commitment, in contrast to accusative objects, for which existential commitment is certainly possible, though not obligatory. The strong relation between the genitive/accusative alternation under negation and existential presupposition is discussed, for instance, by Kim (2003). Existential

presupposition, in turn, constitutes a subtype of existential commitment (see Section 4.3.4 of the Introduction).

Consider the contrast in (25):

- 25 a. Dima ne našol sledy.
Dima NEG found traces(acc pl)
Dima didn't find the/any traces.
- b. Dima ne našol sledov.
Dima NEG found traces(gen pl)
Dima didn't find any traces.

(25a) is likely to be uttered in a context whereby some traces were actually left, but Dima failed to find them. Namely, (25a) suggests that the extension of *sledy* ((relevant) traces) is not empty, although nothing that belongs to this set was found by Dima. (25b), in contrast, makes salient the possibility that no traces exist at all, and that is why they were not found.

Another example is provided by the two variants of (21b), provided as two separate sentences in (26) below:

- 26 a. Ja ne pomnila etot razgovor.
I NEG remembered [this talk](acc sg)
I didn't remember this talk.
- b. Ja ne pomnila etogo razgovora.
I NEG remembered [this talk](gen sg)
I didn't remember this talk.

Although the interpretational contrast between the two sentences is rather subtle, my informants do perceive a difference. In particular, (26a) suggests that the speaker believes that the talk in question had taken place, but she failed to remember it at the time of the event encoded by the sentence. In contrast, in (26b), the commitment that the talk took place is absent. The sentence clearly leaves open the possibility that the

speaker did not remember the talk in question because there had not been any such talk.

Let us now turn to complements of intensional verbs. The fact that accusative NPs are compatible with existential commitment is demonstrated in (22a), in which a proper name appears in the accusative Case. (27) and (28a) below, in turn, demonstrate the fact that genitive NPs do not normally carry a commitment to existence.

27. Ja budu s neterpeniem ždat' vašix novyx rasskazov.

I will with impatience wait [your new stories](gen pl)

I will be waiting impatiently for your new stories.

(27) means that the speaker will be waiting for the addressee's new stories *to be written*; namely, the object NP does not have a referent in the actual world at the time of speech. According to my informants, the sentence does not mean that the speaker is waiting to receive copies of already existing stories. Note, however, that even if this latter interpretation was possible, the availability of the first reading is sufficient to demonstrate that existential commitment is not obligatory. Essentially, in a dialect that would accept both these readings, it would be undefined whether the stories in question exist or not. Both possibilities would be compatible with (27), which, in turn, would mean that commitment to existence is not contributed by the genitive NP (similarly to commitment to non-existence).

28 a. Lena ždjot gorjačej vody.

Lena waits [hot water](gen)

Lena is waiting for hot water.

b. Lena ždjot gorjačuju vodu.

Lena waits [hot water](acc)

Lena is waiting for hot water.

Consider the sentences in (28). Before I discuss the difference in interpretation between (28a) and (28b), it should be pointed out that not all the speakers consider (28a) acceptable. For those speakers who accept only (28b), the semantic contrast to be discussed below is not dependent on Case-assignment; under both readings, the

object NP will be accusative. However, for those speakers who accept both genitive and accusative Case-assignment, the following contrast results. (28a) must be uttered in the following kind of context: the water is currently cold, and Lena has turned on a boiler in order to heat it. So, basically, she is waiting for the water *to become hot*. Crucially, according to this sentence, the NP *hot water* does not refer to (or quantify over) an entity that exists in the actual world. Thus, existential commitment is absent. Let us now turn to (28b). Speakers who accept (28a) consider (28b) strange when uttered out of context. However, it becomes acceptable for them under the scenario according to which Lena knows that a maid is bringing her hot water in some vessel. Under this reading, *hot water* refers to an entity that exists in the actual world. The scenario that licenses accusative Case-assignment ensures the presence of existential commitment. Thus, the minimal pair in (28) demonstrates that Case-assignment to objects of intensional verbs is sensitive to existential commitment.

As pointed out at the beginning of this section, none of the properties under discussion is sufficient to predict the choice of Case either under negation or following intensional predicates. For instance, as demonstrated above, both Genitive of Negation and Intensional Genitive can be assigned to NPs that are concrete (e.g. 23b, 28a), singular (21b, 22b) and definite (21b, 22b). Genitive Case-assignment is especially strongly linked to such properties as narrow scope and lack of existential commitment. However, these properties are insufficient to account for the alternation in Case either, since in some sentences, object NPs that are characterized by them still obligatorily appear in the accusative. For instance, the objects in (29) can receive a narrow scope interpretation under which commitment to existence is absent; still, they cannot appear in genitive Case.

29 a. Dima ždjot rusalku / *rusalki.

Dima waits mermaid(acc sg)/(gen sg)

Dima is waiting for a mermaid.

b. Ja ne našol cvetok / ???cvetka.

I NEG found flower(acc sg)/(gen sg)

I didn't find a / the flower.

To sum up this section, I have listed a number of properties that affect Case-assignment both to complements of intensional verbs and to objects under negation. The fact that in both these environments, the choice of Case is sensitive to exactly the same semantic properties suggests that the two phenomena should be unified.

3.2.4. Licensing Operators

As stated above, objects assigned Genitive of Negation and Intensional Genitive quite consistently lack existential entailment, i.e. they are not entailed to quantify over a non-empty set. This fact signals that the operators which license these two Cases have a certain property in common. More specifically, these are non-veridical operators (Giannakidou 1994, 1998). A sentence that contains one of these operators does not entail the truth of a proposition that appears within its scope. The fact that the operators that license GenNeg and Intensional Genitive share this property has already been pointed out in the Introduction. To illustrate, consider the sentences in (30) and (31) and their logical forms in (30') and (31'), respectively.

30. John didn't find a unicorn.

30'. $\neg \exists x$ (**unicorn (x) \wedge found (j,x)**)

31. Mary wants John to find a unicorn.

31'. want (m, $\exists x$ (**unicorn (x) \wedge find (j,x)**))

Within each of the logical forms, the formula in bold represents the proposition that is interpreted within the scope of the relevant operator (negation in (30) and the verb *want* in (31)). For the sake of convenience, this proposition is also formally represented in (32).

32. $\exists x$ (unicorn (x) \wedge found (j,x))

Neither (30) nor (31) entails (32), as predicted by the fact that both sentences contain a non-veridical operator. This property also results in the absence of existential entailment: the sentences in question do not entail existence of unicorns in the actual world.

Of course, not all non-veridical operators license non-canonical genitive. However, non-veridicality does unify negation and intensional verbs. This suggests that the presence of a non-veridical operator constitutes a necessary but not sufficient condition for the assignment of the type of genitive Case under discussion. Further restrictions on the availability of this Case will be investigated in Chapter 4.

3.2.5. GenNeg and Intensional Genitive Cross-Linguistically

Finally, it appears that across Balto-Slavic languages, there is a strong correlation between the presence and the obligatoriness of GenNeg on the one hand and of Intensional Genitive on the other. The tendency is the following. In those languages, in which GenNeg is obligatory, intensional verbs in question consistently take genitive objects as well. In those languages in which GenNeg is optional as it is in Russian, in the sense that under negation, both genitive and accusative Case-marking is possible, intensional verbs also license both genitive and accusative objects. Finally, if GenNeg is essentially absent in a language, Intensional Genitive is also absent, most intensional verbs normally taking accusative complements. There do exist certain exceptions to this correlation, however. Below, I first discuss in some detail languages in which the correlation is observed, and then refer to the two languages which constitute an exception. A summary of the cross-linguistic facts to be presented below is provided in Section 3.2.5.5.

3.2.5.1. Obligatory GenNeg and Intensional Genitive

i) Old Church Slavonic

In Old Church Slavonic, the only non-modern language I will discuss, Genitive of Negation is obligatory. Although it is impossible to check native speakers' judgments, Intensional Genitive also seems to be obligatory in this language, which can be concluded on the basis of available texts. The following are some of the intensional verbs consistently taking genitive objects in Old Church Slavonic, which are listed in Lunt (1955): *alkati* (hunger for), *zhelejoť* (desire), *zhdati* (wait), *zhedati* (thirst for), *iskati* (look for), *prositi* and *v'sprositi* (ask, beg), *trebovati* (demand), etc. Thus, both GenNeg and Intensional Genitive appear to be obligatory.

ii) Lithuanian

Among modern Balto-Slavic languages, the same pattern holds in Lithuanian. In this language, genitive Case is obligatorily assigned to objects of both negated and intensional verbs. According to Dambriunas (1980), verbs of the latter type include *ieškóti* (look for, hunt for), *prašýti* (ask for, request), *noréti* (wish, want), *láukti* (expect, wait for).

iii) Polish

Polish seems to follow the same pattern as Old Church Slavonic and Lithuanian; however, it contains a couple of intensional verbs that constitute an exception to this generalization, as will be discussed in Section 3.2.5.4 below.

3.2.5.2. Optional GenNeg and Intensional Genitive

In turn, Russian, Ukrainian and Latvian are Balto-Slavic languages in which genitive Case alternates with accusative under negation, as well as in the complement position of an intensional verb. The state of affairs in Russian is discussed in detail in this dissertation. Below, I briefly relate to the alternations in Case in Ukrainian and Lithuanian.

i) Ukrainian

The relevant examples from Ukrainian, taken from Pugh and Press (1999), are provided in (33)-(36):

33 a. Vin ne prodav stola.

he NEG sold table(gen sg)

He did not sell a table.

b. Vin ne prodav cej stil.

he NEG sold [this table](acc sg)

He did not sell this table.

34 a. Likar ne propisuvav likiv

physician NEG prescribed medicine(gen pl)

The physician did not prescribe medicine.

b. Likar ne propisivav ci liki.
physician NEG prescribed [this medicine](acc pl)
The physician did not prescribe this medicine.

35 a. Mi čakali avtobusa.
we waited bus(gen sg)
We were waiting for a bus.

b. Mi čakali p'jatij avtobus.
we waited [fifth bus](acc sg)
We were waiting for bus no. 5.

36. Xočemo spokoju (miru)
want(1st pl) peace(gen)
We want peace.

(33) and (34) above demonstrate that under negation, both genitive and accusative Case-assignment to an object is possible. Pugh and Press point out that Case-marking under negation is dependent on definiteness, accusative Case being assigned to definite objects. The fact that this property affects Case-assignment in Russian as well has been demonstrated in Section 3.2.3 above.

(35a) and (36) illustrate genitive Case-assignment to objects of intensional verbs. In turn, (35b) demonstrates that in Ukrainian, an intensional verb can take an accusative complement as well. In general, Pugh and Press state that genitive Case can be assigned to objects of “verbs of wanting, desiring, demanding, and wishing” (Pugh and Press 1999:256) – namely, the same classes of verbs that license Intensional Genitive in Russian. They also point out that Case-assignment to objects of these verbs is dependent on the semantics of the NP. In particular, genitive Case is preferred if the NP “refers to an abstract noun, a concept, or if it is non-specific or unknown” (Pugh and Press 1999:256). Again, the same properties have been demonstrated to affect the choice of Case in Russian. It can be concluded that in Ukrainian, both Genitive of Negation and Intensional Genitive are optional in the same sense in which they are optional in Russian. In addition, it seems that the choice of Case within these phenomena in Ukrainian is affected by the same semantic properties as it is in Russian. Still, it is certainly possible that factors that determine Case-assignment are not completely identical in the two languages. However, a detailed survey of the

genitive/accusative alternation in Ukrainian is beyond the purposes of this dissertation. My current purpose was only to demonstrate that Genitive of Negation and Intensional Genitive pattern together in this language with respect to optionality.

ii) Belorussian

The state of affairs is similar in Belorussian. Again, both under negation and following intensional verbs, genitive objects alternate with accusative ones. The genitive/accusative alternation under negation is illustrated in (37):

- 37 a. ja ne čytau hety raman.
 I NEG read [this novel](acc sg)
 I haven't read this novel.
- b. ja ne čytau hetaha ramana
 I NEG read [this novel](gen sg)
 I haven't read this novel. (Mayo 2002:932)

It follows from Mayo (2002) that Genitive of Negation is likely to be assigned to NPs headed by abstract nouns, while proper names and topicalized NPs usually appear in the accusative. Given that NPs functioning as topics tend to get a wide scope interpretation and to carry existential commitment, the phenomenon seems to be sensitive to essentially the same properties as in Russian and Ukrainian.

iii) Latvian

In addition, both Genitive of Negation and Intensional Genitive appear to be optional in Latvian, which is a Baltic language. According to Nau (1999), in Latvian, the object of a verb under negation can be either genitive (38a) or accusative (38b).

- 38 a. Bet viņ-š ne-kā ļaun-a ne-darīj-a
 but (3rd nom m) NEG-what(gen) bad(gen) NEG-do(past 3rd)
 But he didn't do anything bad. (ak-323)
- b. jūs ne-es-at ne-ko slikt-u izdarīj-uš-i
 (2nd pl nom) NEG-aux(present 2nd pl) NEG-what(acc) bad(acc) performed(m pl)
 You haven't done anything bad. (ep-359) (Nau 1999:59)

Nau points out that in these sentences, the alternation in Case correlates with the difference in tense/aspect; however, she did not find a systematic correlation between these two properties. In this dissertation, no claim will be made about Latvian in this respect. However, Chapter 6 contains a detailed discussion of the relation between Case and aspect in Russian and provides an explanation for the fact that Genitive of Negation is more likely to be assigned to objects of imperfective verbs than to complements of perfective ones (as noted e.g. by Timberlake (1986)).

Intensional Genitive is also optional in Latvian, in the sense that genitive objects of intensional verbs alternate with either accusative objects or PP complements. According to Nau, the verbs *gaidīt* (wait for), *meklēt* (search) and *vajadzēt* (need) can take both genitive and accusative complements. In addition, she lists a number of verbs whose genitive object alternates with a complement headed by a preposition, e.g. *alkt* (crave for), *kārot* (desire), *baidīties* (fear), *vairīties* (avoid, evade). Complements of these verbs do not exhibit the genitive/accusative alternation; however, in a certain sense, these verbs do pattern together with the predicates that license both Case-marking patterns. Crucially for our purposes, with both types of verbs, genitive Case alternates with an alternative marking, realized either as accusative Case or as a preposition and the Inherent Case it requires. Thus, in both cases, Intensional Genitive is optional in the sense discussed above.

Interestingly, it seems to follow from Nau (1999) that the genitive/accusative alternation in Latvian is characterized by optionality to a larger extent than it is in Russian. Crucially, a larger degree of optionality can be observed in Latvian both under negation and following intensional verbs. For instance, GenNeg is obligatory in Russian negated existential sentences. In contrast, in Latvian, the theme in these sentences can be assigned either genitive or nominative (although Nau notes that traditional grammarians consider genitive to be the standard marking).

39 a. tur ne-vien-s nav.
 there NEG-one(nom) NEG-BE(3rd)
 There is nobody.

b. tur ne-vien-a nav.
there NEG-one(gen) NEG-BE(3rd)

There is nobody.

(Nau 1999:59)

With respect to complements of intensional verbs, Nau points out that accusative objects or PP complements are generally preferred in modern Latvian over genitive objects. (Similarly, she notes that accusative objects are preferred over their genitive counterparts under negation.) I doubt, however, that the same claim with respect to intensional verbs can be made about Russian. It is true that in Russian, apparently as well as in Latvian, language change is taking place in the course of which accusative is taking over. Still, at this stage, for numerous verb-object combinations, especially if the object is abstract, only genitive Case-assignment is possible. In addition, although Intensional Genitive is generally optional in Russian, some intensional verbs do almost obligatorily take genitive objects. For instance, *izbegat'* (avoid) and *bojat'sja* (fear) take accusative objects very rarely, mainly if these are proper names or definite NPs that contain a demonstrative, and even for such NPs, not every speaker will except accusative marking. In addition, it seems that the verb *žadždat'* (thirst for) can take only genitive complements. In contrast, complements of verbs with these meanings in Latvian need not be genitive. Moreover, according to Nau, these verbs are more likely to take accusative or PP complements. To sum up, in Latvian, both Genitive of Negation and Intensional Genitive are optional and, moreover, both phenomena are characterized by a stronger degree of optionality than in Russian.

3.2.5.3. GenNeg and Intensional Genitive Lost

Finally, in certain Slavic languages, Genitive of Negation has been essentially lost, and in these languages, Intensional Genitive is essentially absent as well. This is the state of affairs in Serbo-Croatian and Czech.

i) Serbo-Croatian

Browne (2002) makes the following statement about Genitive of Negation in Serbo-Croatian: “In present-day Serbo-Croat such genitive objects are archaic and elevated in style except in fixed phrases and in two further circumstances...” (Browne 2002:362). In particular, the constructions in which GenNeg is still productively used in modern Serbo-Croatian are sentences that contain a negated verb meaning *to have*

(and, thus, have an interpretation similar to that of existential sentences) and phrases that contain a negative polarity item. In addition, GenNeg is assigned in existential sentences which contain the negated verb *ne biti* (not to be). Thus, Genitive of Negation is not completely absent in this language, but its use is highly restricted, and the genitive/accusative alternation is almost lost.

It appears that Intensional Genitive is also essentially absent in Serbo-Croatian, or at least present to a very limited extent. According to my informants, intensional verbs in this language normally take accusative or PP complements, and genitive Case-assignment is not generally available, or at least not common, unless we deal with Partitive Genitive (which is characterized by a quantificational interpretation and is restricted to homogeneous NPs). This is demonstrated in (40)-(41):

40 a. On izbegava rizik. (Boban Arsenijevic, p.c.)

he avoids risk(acc)

b. ??/*On izbegava rizika.

he avoids risk(gen)

41 a. To zahteva dobru koncentraciju. (Boban Arsenijevic, p.c.)

this demands [good concentration](acc)

b. To zahteva ?(*dobre) koncentracije.

this demands [good concentration](gen)

It should be noted that in Russian counterparts of these sentences, genitive Case-marking is not only possible, but even obligatory, due to the abstract nature of the object. In Serbo-Croatian, in contrast, accusative Case is assigned. It thus follows that in Serbo-Croatian, as well as in the other languages discussed above, Genitive of Negation and Intensional Genitive pattern together. In this language, both phenomena are perhaps not completely absent from the language, but are present to a very limited degree, not common in spoken language and not productive.

ii) Czech

In addition, both Genitive of Negation and Intensional Genitive are essentially absent in modern Czech. According to Short (2002), GenNeg on objects “survives as a feature of archaizing styles only” (Short 2002:511) in this language. The

genitive/accusative alternation survives in some semi-idiomatic phrases, but even in these, accusative is preferred. Genitive of Negation is still assigned instead of the nominative in existential sentences, as well as to NP arguments of the verbs *zůstat* (remain) and *zbyť* (be left).

As for Intensional Genitive, according to my informants, intensional verbs do not take genitive objects in Czech. The verbs in question take either accusative objects or NP complements marked with an inherent Case, or PP complements.

3.2.5.4. Exceptions to the Correlation

Finally, Polish and Slovenian are the two languages in which the discussed correlation does not seem to hold.

i) Polish

In fact, Polish may not constitute a strict counterexample, as it exhibits a pattern rather similar to the one observed in Old Church Slavonic and Lithuanian. Genitive of Negation on objects is obligatory in this language; namely, an object under negation is obligatorily assigned genitive Case, and cannot appear in the accusative:

42. Ewa nie czyta gazet / *gazety. (Błaszczak 2007:129)

Ewa NEG reads newspapers(gen pl)/(acc pl)

Ewa does not read / is not reading newspapers.

Most relevant intensional verbs, similarly, obligatorily take genitive complements and do not allow accusative Case-marking. Thus, according to my informants, the NP complement of the verbs *szukać* (seek), *żądać* (demand), *unikać* (avoid), *oczekiwać* (await), *życzyć* (wish) is obligatorily genitive. The verbs *czekać* (wait-for) and *zasługiwać* (deserve) consistently take a PP complement; therefore, they are irrelevant for the purposes of the current discussion (they do not exhibit an alternation). The verbs that suggest that Intensional Genitive, in contrast to Genitive of Negation on objects, is not completely obligatory in Polish are *chcieć* (want) and *prosić* (ask-for). The former takes both genitive and accusative objects, similarly to *xotet'* (want) in Russian. The complement of the latter can be realized as either a PP or an NP. If an NP, it appears in the accusative Case. Thus, in Polish, Genitive of Negation on objects

and Intensional Genitive do tend to pattern together, the object of both a negated and an intensional verb generally being obligatorily genitive; however, within Intensional Genitive, certain exceptions do exist. (It should be noted, however, that Genitive of Negation on subjects is not obligatory and alternates with the nominative in this language (e.g. (Błaszczak 2007)). It thus follows that both GenNeg and Intensional Genitive are optional in some environments and obligatory in others.)

ii) Slovenian

Slovenian constitutes a more substantial exception to the correlation between the two phenomena under discussion. In this language, GenNeg is obligatory and Intensional Genitive, optional. According to Priestly (2002), in Slovenian, the object NP is obligatorily genitive under negation (43a), unless constituent negation is involved. Similarly, the subject of existential sentences appears in the genitive Case (43b).

43 a. Jánez ní razbil ókna.

Janez NEG broke window(gen sg)

Janez did not break the window.

(Priestly 2002:436)

b. očéta ni domâ.

father(gen sg) NEG at-home

Father is not at home.

(Priestly 2002:437)

In contrast, intensional verbs can take both genitive and accusative complements in Slovenian. The verbs meaning *to want*, *to wish*, *to seek*, *to deserve* license both Case-marking patterns. The following examples are provided by Lanco Marusic, p.c.

44 a. on hoče knjigo / *knjige.

he wants book(acc sg)/(gen sg)

He wants a book.

b. on hoče pozornosti / ?pozornost.

he wants attention(gen)/(acc)

He wants attention.

45 a. on si želi knjige/knjigo.

he refl wishes book(gen sg)/(acc sg)

He wishes for a book.

- b. on si želi pozornosti/pozornost.
 he refl wishes attention(gen)/(acc)
 He wishes for attention.
- 46 a. on išče knjigo / *knjige.
 he seeks book(acc sg)/(gen sg)
 He is seeking a book.
- b. on išče pozornost / pozornosti.
 he seeks attention(acc)/(gen)
 He is seeking attention.
- 47 a. on si zasluži nagrado / *?nagrade.
 he refl deserves prize(acc sg)/(gen sg)
 He deserves a prize.
- b. on si zasluži pozornost / pozornosti.
 he refl deserves attention(acc)/(gen)
 He deserves attention.

It can be concluded that in Slovenian, Intensional Genitive is optional, in contrast to Genitive of Negation.

3.2.5.5. Cross-Linguistic Facts: A Summary

It thus follows that cross-linguistically, Genitive of Negation and Intensional Genitive do not always pattern together with respect to their presence and (non-)optionality. Still, in most Balto-Slavic languages, the correlation does hold. Table 1 below summarizes the data discussed in this section.

Table 1

Language	Genitive of Negation	Intensional Genitive
Old Church Slavonic	obligatory	obligatory
Lithuanian	obligatory	obligatory
Russian	optional	optional
Ukrainian	optional	optional
Belarusian	optional	optional
Latvian	optional	optional
Serbo-Croatian	essentially absent	essentially absent
Czech	essentially absent	essentially absent
Slovenian	obligatory	optional
Polish	obligatory	?obligatory / ?optional

The correlation observed above suggests that Genitive of Negation and Intensional Genitive may constitute two instances of a single phenomenon, which is why they have developed similarly in most Balto-Slavic languages. This conclusion is supported by additional similarities between the two phenomena that have been discussed above. It is possible that in Slovenian, a reanalysis of one of the phenomena has taken place, which has led to the contrast in optionality. For instance, Genitive of Negation may have been reanalyzed as a purely syntactic restriction on the object in a negated clause, whereby it has become a separate phenomenon, independent of Intensional Genitive. Of course, a much more detailed investigation is needed to get a conclusive explanation of the facts summarized in Table 1, which is beyond the scope of this study. At this stage it can only be stated that cross-linguistic facts seem to reveal a certain similarity between Genitive of Negation and Intensional Genitive.

3.2.6. Genitive of Negation and Intensional Genitive: A Summary

To sum up thus far, the two types of genitive Case-assignment under discussion exhibit a number of striking similarities. In both environments, we deal with a genitive/accusative alternation on the object which is sensitive to the same semantic properties, such as number, definiteness, specificity, abstract/concrete distinction, etc. Within both instantiations of the phenomenon, a non-veridical operator licenses genitive Case-assignment to an NP that appears within its scope, receives a non-

specific interpretation and lacks existential commitment. Moreover, the phenomena are characterized by a similar variation in native speakers' judgments within Russian and pattern together in terms of their presence and optionality in most Balto-Slavic languages. On the basis of these facts I conclude that Genitive of Negation and Intensional Genitive constitute different instantiations of a single phenomenon, which I will refer to below as Irrealis Genitive. This dissertation will be concerned with the semantics and distribution of this type of non-canonical genitive.

Before developing an analysis of Irrealis Genitive Case, it is important to determine whether the third type of non-canonical genitive discussed in the literature, Partitive Genitive, constitutes an additional instantiation of the same phenomenon. In the next section, I argue against this view. I will provide evidence that Partitive Genitive constitutes a separate phenomenon that should be distinguished from Irrealis Genitive and demands an independent treatment. Consequently, the following chapters will not be concerned with Partitive Genitive.

3.3. Irrealis Genitive as Opposed to Partitive Genitive

On the surface, Partitive Genitive seems to constitute another instantiation of the same non-canonical genitive Case as the phenomena discussed in the previous section. After all, the term *Partitive Genitive* corresponds to optional genitive Case-marking on an object of the verb, which alternates with the accusative Case and is associated with a non-referential, non-specific interpretation of the NP. However, a more detailed comparison shows numerous and striking differences between Partitive Genitive on the one hand and Genitive of Negation and Intensional Genitive, on the other (as discussed by Neidle (1988) and Franks (1995) for Partitive Genitive and GenNeg). In this section, I list the properties that distinguish Partitive Genitive from Irrealis Genitive.

3.3.1. Properties of the NP

3.3.1.1. Homogeneity

As pointed out in Section 2.1, Partitive Genitive can only be assigned to homogeneous NPs, i.e. NPs headed by either mass or count plural nouns. In contrast, Irrealis Genitive can be assigned to count singular NPs as well (Neidle 1988), even though it is assigned to homogeneous NPs somewhat more often. Thus, both (48a)

and (48b) are perfectly acceptable, even though the genitive NPs in these sentences are count singular. Such NPs could never be assigned Partitive Genitive Case.

48 a. Ja ždu zvonka.

I wait call(gen sg)

I am waiting for a call.

b. Ja ne uvidel v komnate kovra.

I NEG saw(perf) in room carpet(gen sg)

I didn't see a carpet in the room.

3.3.1.2. Scope and Existential Commitment

As discussed in detail in Section 3.2.3, NPs that appear in Irrealis Genitive consistently receive a narrow scope interpretation. The same cannot be stated about Partitive Genitive NPs since this Case may be assigned in the absence of an operator relative to which the NP could take narrow scope. This seems to be the case in such sentences as (1b), repeated below.

1 b. Ja vypil vody.

I drank(perf) water(gen)

I drank some water.

This is an important contrast between Irrealis Genitive and Partitive Genitive, which is interrelated with additional distinctions. It has been concluded above that Irrealis Genitive is always assigned in the presence of a non-veridical operator, and that NPs that appear in this Case lack existential commitment. All of this does not hold for Partitive Genitive. Non-veridical environment is not needed in order for this Case to be licensed (there are no non-veridical operators in (1b)), and as a result, NPs that appear in this Case can, and often do, carry existential commitment. Thus, (1b) entails that there exists a certain quantity of water that the speaker drank.

3.3.1.3. Quantificational Interpretation

Partitive Genitive carries an intuitively perceived quantificational flavor; NPs that appear in this Case typically receive a partitive "some (quantity) of" interpretation. Thus, (1b) above does not entail that the speaker drank the whole contextually

provided quantity of water, but rather some part of it. Determining whether or not Genitive of Negation should be assigned quantificational meaning, an assumption made in empty quantifier approaches to this Case (e.g. Pesetsky (1982)), is not a trivial issue. A sentence like *Lena ne jela jablok* (Lena didn't eat apples_{GEN}) could be interpreted as involving negative quantification (Lena ate no apples). However, it has also been proposed that genitive objects under negation are property-denoting (Kagan (2005), Partee and Borshev (2004)); under this analysis, quantification is not involved.

It is therefore much easier in this respect to compare Partitive Genitive to Intensional Genitive; both phenomena need not involve the complication introduced by the presence of negation. Here, it can be seen clearly that Intensional Genitive is not characterized by the quantificational, partitive meaning of the type associated with Partitive Genitive. Thus, (49) below does not mean that the speaker is waiting for some quantity or some part of a miracle.

49. Ja ždu čuda.

I wait miracle(gen sg)

I am waiting for a miracle.

Thus, the partitivity meaning component that consistently characterizes Partitive genitive need not accompany Irrealis Genitive.

3.3.2. Verbal Aspect

Partitive Genitive is licensed by perfective verbs and is generally unacceptable with imperfective ones, as noted in Section 2.1. In contrast, Irrealis Genitive is perfectly compatible with imperfective aspect. Moreover, in those cases in which the assignment of Irrealis Genitive appears to be sensitive to aspectual properties, it is with *imperfective* verbs that this Case is more easily licensed. Timberlake discusses this tendency with respect to Genitive of Negation. He points out that this Case is more likely to be assigned to objects of imperfective verbs than to objects of perfective ones. The tendency is reflected in (50). (An explanation of this tendency is proposed in Chapter 6).

- 50 a. Dima ne čital statej.
 Dima NEG read(imp) articles(gen pl)
 Dima didn't read articles.
- b. Dima ne pročitai stat'i / *statej.
 Dima NEG read(perf) articles(acc pl)/(gen pl)
 Dima didn't read (the) articles.

A similar contrast regarding Intensional Genitive is illustrated in (51). Genitive Case-marking is licensed on the object of the imperfective intensional verb *zaslužival* (deserved) but not on the complement of its perfective counterpart *zaslužil*.

- 51 a. On zaslužival medal' / medali.
 He deserved(imp) medal(acc sg)/(gen sg)
 He deserved a medal.
- b. On zaslužil medal' / *medali.
 He deserved(perf) medal(acc sg)/(gen sg)
 He has merited / deserves a medal.

In fact, in most cases the availability of Intensional Genitive is independent from verbal aspect. In any event, crucially for our current purposes, its assignment is perfectly compatible with imperfective aspect, which differentiates it (as well as GenNeg) from Partitive Genitive.

3.3.3. Variation in Native Speakers' Judgments

The two types of Irrealis Genitive are characterized by substantial variation in the judgments of native speakers. For instance, some speakers accept genitive Case-marking in (51a) above, while others do not. The same kind of disagreement is associated with negative sentences. In contrast, Partitive Genitive is not associated with the same degree of variation. Although disagreement regarding some particular sentences might be observed, it is at least possible to define a considerable group of core cases in which it is absent. For instance, for sentences that contain perfective verbs of consumption and mass or count plural objects, there is a general consensus that both genitive and accusative Case-marking is perfectly acceptable. Those of my informants who are consistently reluctant to accept Intensional Genitive or Genitive

of Negation consider these Cases possible only in those sentences in which the alternative accusative (or nominative) marking is truly unavailable. However, the same informants easily accept sentences that involve Partitive Genitive, even though this Case can be easily substituted by the accusative.

3.3.4. Cross-Linguistic Data

Finally, Partitive Genitive exhibits a different cross-linguistic pattern of development than Irrealis Genitive. The fact that the cross-linguistic behavior of Partitive Genitive is not identical to that of GenNeg is demonstrated in Franks (1995), who shows that these two Cases pattern differently in Polish, Serbo-Croatian and in Slovenian. It has been demonstrated in Section 3.2.5 that both Genitive of Negation and Intensional Genitive are obligatory in Old Church Slavonic and Lithuanian, optional in Russian, Ukrainian, Belorussian and Latvian, and virtually absent in Czech and Serbo-Croatian. Partitive Genitive exhibits a completely different pattern. It is found in almost all of these languages (with the exception of Czech, in which, according to Franks (1995), it is no longer productive), and it is consistently optional, in the sense that it can always or almost always be substituted by the accusative. Certain cross-linguistic differences are certainly present; for instance, the assignment of Partitive Genitive in Ukrainian is less restricted than it is in Russian. But crucially, the cross-linguistic behavior of this Case differs substantially from that of Intensional Genitive and GenNeg. In Lithuanian and Old Church Slavonic (and mostly in Polish) the latter two Cases are obligatory and do not alternate with the accusative, whereas Partitive Genitive is optional. In Serbo-Croatian, Irrealis Genitive is almost absent, restricted to frozen expressions and a small range of constructions, whereas Partitive Genitive is productive (Franks (1995)). This pattern suggests that, at least in a number of Balto-Slavic languages, Partitive Genitive does not constitute the same phenomenon as Irrealis Genitive Case.

3.4. Conclusion

On the basis of the discussion above, I conclude that the following treatment of non-canonical genitive should be assumed. Intensional Genitive and Genitive of Negation should be unified as two instances of the same phenomenon, Irrealis Genitive. This is a phenomenon whereby an argument of the verb that is interpreted within the scope of a non-veridical operator may appear in genitive Case, rather than the more typical

accusative or nominative. Partitive Genitive constitutes a different phenomenon whereby optional genitive Case-marking creates a partitive interpretation, independently from such properties as scope and non-veridicality. In what follows, I will focus on Irrealis Genitive; the goal of analyzing Partitive Genitive will not be pursued in this work.

It is not impossible, in fact, that on a certain highly abstract level these types of non-canonical genitive can be unified. I believe, however, that in order to understand the nature of Irrealis Genitive and develop a formal approach that would capture the properties of this Case discussed in the present chapter, it is essential to analyze it independently from Partitive Genitive, which differs from it in numerous respects.

Chapter 2: Previous Analyses

In this chapter, I review several approaches to non-canonical genitive Case that have been proposed in the literature. Some of these analyses have been briefly referred to in the previous chapter. Below, they are considered in more detail. Genitive of Negation has received an especially thorough investigation in the linguistic literature. Therefore, some of the approaches discussed below focus exclusively on this phenomenon, while others cover a wider range of types of non-canonical genitive Case.

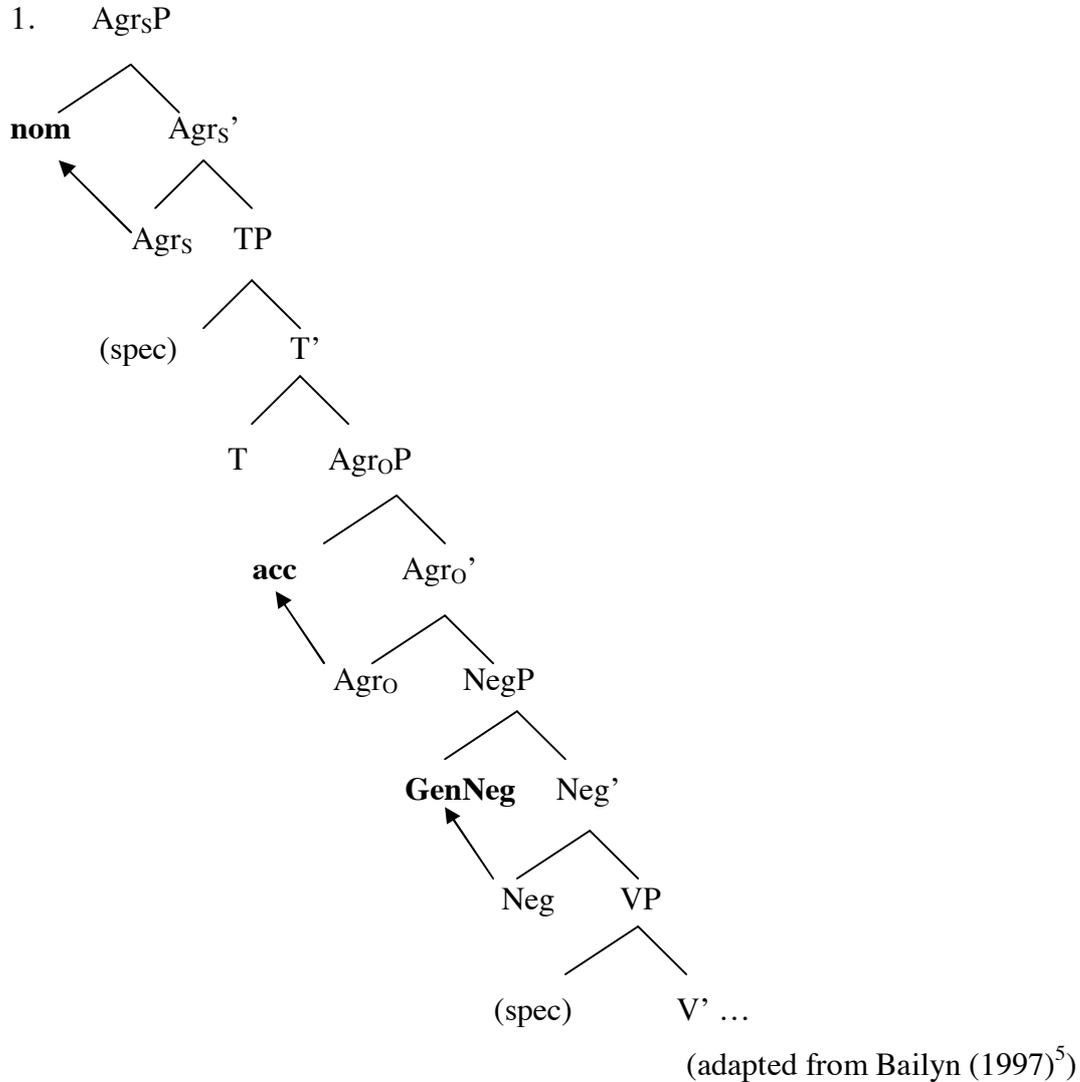
1. Configurational Approach

For instance, Genitive of Negation is analyzed as a separate phenomenon under the configurational approach. Within its framework, the Case of an NP is claimed to depend on the structural position it occupies. Genitive, accusative and nominative Cases are claimed to be checked (or assigned) by different functional heads. Therefore, the Case of a base-generated object is determined by the syntactic configuration involved. Thus, the theories focus largely on the syntactic Case-checking mechanisms. In turn, different syntactic positions are associated with different semantic features, which results in interpretational differences between the genitive NPs on the one hand and the nominative/accusative ones, on the other. Below, I discuss some of the configurational accounts, with the main focus on the analyses proposed by Bailyn (1997) (Section 1.1) and Harves (2002a,b) (Section 1.2). In Section 1.3, the shortcomings of these approaches will be considered.

1.1. Bailyn (1997)

Bailyn (1997) proposes a configurational analysis to account for GenNeg in Russian. According to Bailyn, genitive, nominative and accusative Cases in negative clauses are checked in different structural positions. Accusative is checked in [spec, AgrOP], nominative, in [spec, AgrSP], and genitive, in [spec, NegP]. (According to the first version of the account, genitive NPs occupy the [spec, VP] position, genitive Case being assigned by the higher Neg head under government. The choice between the two approaches is a matter of the theory of Case-assignment that is assumed. Bailyn states explicitly that this matter is not crucial for the purposes of his analysis.) NegP, in turn, is a projection which is licensed under clausal negation and which appears

immediately above the VP. Each Case is thus associated with a separate structural position. A tree diagram for a clause that involves sentential negation is presented in (1) below.



An object of a transitive verb can thus check (or be assigned) Case in two different positions: [spec, AgrOP], in which case it will be marked accusative, and [spec, NegP], in which case it surfaces as genitive. Similarly, an underlying object of a passive or unaccusative verb will move either to [spec, AgrSP], to get (or check) nominative Case, or to [spec, NegP], where GenNeg is assigned. Crucially, under the configurational analyses, the unaccusativity approach to Genitive of Negation is assumed. Namely, it is assumed that all the intransitive verbs that license GenNeg are unaccusative (i.e. intransitive verbs whose argument is internal), and, thus, this Case is only assigned to base-generated objects (see Section 1.3.1 below and the Appendix

for a further discussion of this issue). External arguments are apparently assumed to be generated relatively high on the tree, which makes it impossible for them to move to the [spec, NegP] position.

This syntactic approach also allows Bailyn to account for certain semantic differences between genitive NPs and their nominative/accusative counterparts. In particular, Bailyn notes that while genitive NPs receive an indefinite or existential interpretation, their accusative (and presumably nominative) counterparts “can be either existential *or* definite” (Bailyn 1997:102).

This contrast is explained in the following way. Bailyn accepts the Mapping Hypothesis in Diesing (1992), according to which, “there is a direct mapping from the syntactic structure to the semantic notions of the restrictive clause and the nuclear scope” (Bailyn 1997:99). In particular, the mapping is organized in the following way:

Material from VP is mapped into the nuclear scope.

Material from IP is mapped into a restrictive clause. (Diesing 1992: 15)

This analysis predicts that NPs that appear above the VP projection (either at Spell-Out or possibly after Spell-Out, at the stage when the sentence is interpreted) will get specific, presuppositional readings, whereas their counterparts that stay lower than VP on the tree will be interpreted as indefinite and non-specific. Indeed, such interpretational contrasts can be observed in various natural languages, including certain Germanic languages and Russian (for details, see Diesing (1992), Brown (1999), among others).

Bailyn assumes, however, that the Tree Splitting applies immediately above NegP rather than VP (NegP is treated as a kind of extended VP). Thus, NegP and all the arguments that appear below this projection are mapped into the nuclear scope and are bound by the existential closure (in the line of Diesing (1992)). This is crucial for our purposes since, as a result, the [spec, NegP] position belongs to the existential closure, in contrast to [spec, AgrOP] and [spec, AgrSP]. As a result, genitive NPs obligatorily fall within the existential closure; hence their existential, indefinite interpretation. In

turn, the nominative and accusative NPs can be interpreted as either definite or indefinite for the following reason. When these NPs move from a VP-internal position to check their Case-feature, a chain is created. Crucially, the tail of this chain is located within the existential closure (in the VP), whereas its head appears within the restrictive clause and, thus, outside the domain of existential closure. As a result, the NPs can be interpreted as either existential or not, depending on whether the interpretation is determined by the tail of the argument chain or by its head. In contrast, with genitive NPs, both the tail and the head of the chain appear within the existential closure; therefore, the specific and definite readings are unavailable⁶.

The analysis proposed by Bailyn has been further developed by other researchers, including Brown (1999), Babyonyshev (2003) and Kim (2003), among others. These accounts differ in terms of the particular Case-checking mechanisms and triggers for movement invoked. However, all these analyses seem to agree on the following points:

- i) GenNeg is assigned / checked by the Neg head.
- ii) The semantic differences between the genitive NPs and their nominative or accusative counterparts correlate with their different syntactic positions and are accounted for in the line of Diesing's Mapping Hypothesis.

In the next section, I briefly review the analysis proposed by Harves (2002a,b). Following Bailyn, Harves accepts the assumption in (i) above; however, she rejects the assertion in (ii) and provides a different account of the semantic contrast.

1.2. Harves (2002a,b)

Harves (2002a,b) proposes the following configurational account of Genitive of Negation. She argues that both genitive and accusative Cases are checked in situ, in the object position, in which the NPs are base-generated. Genitive is checked by a Neg head if the sentence contains a defective V that lacks an object agreement feature, in which case the accusative is unavailable.

In turn, in order to account for the interpretational differences between the genitive and accusative objects, Harves adopts the approach to scope-checking developed by

Beghelli and Stowell (1997). According to their analysis, Quantifier Phrases (QPs) move to different scope positions at LF. For instance, referentially independent QPs move to [spec, RefP] position, RefP being a functional projection immediately above CP. According to Harves, the movement is triggered by the need to check the [+ Ref] feature. In turn, the Neg head carries the [+ NQP] (negative quantifier phrase) feature.

Under the analysis proposed by Harves, referential NPs cannot appear in GenNeg for the following reason. A genitive NP must check its Case-feature against the Neg head. Once it does so, it enters into agreement relation with the Neg head. As a result, “any other remaining features that *can* potentially match those of the probe, *must* do so” (Harves 2002a:107). If the genitive NP is referential, it carries a [+ Ref] feature, which will clash with the [+ NQP] feature of Neg. The derivation is thus predicted to crash. Therefore, genitive objects are obligatorily non-referential. In contrast, an accusative NP can be referential and can move successfully to [spec, RefP] to check its [+ Ref] feature, since it does not have to check any features against Neg. Thus, Harves predicts the fact that genitive NPs cannot have referential readings without recourse to Diesing’s Mapping Hypothesis.

1.3. Configurational Approach: The Shortcomings

In this section, I will discuss several problems shared by most configurational analyses of GenNeg.

1.3.1. Unaccusativity Hypothesis

First, as mentioned above, the configurational approach is based on the assumption that Genitive of Negation can only be assigned to internal arguments which are base-generated in the object position. This means that intransitive verbs that take genitive objects under negation are predicted to be unaccusative. However, the unaccusativity approach to GenNeg is controversial. For instance, Babby (2001) argues that unergative verbs (intransitive verbs that take only an external argument) do license Genitive of Negation as well and provides the following examples to support his claim:

2 a. [S tex por kak] na etom zavode sokratili zarplatu, tam ne rabotaet
 since on this factory lowered wages there NEG work(neut sg)
 ni odnogo inženera
 not [one engineer](gen)

Since the wages were cut at the factory, there hasn't been a single engineer working there.

b. V xorovode ne pljasalo ni odnoj devuški (odni parni).

In round-dance NEG danced(neut sg) not [one girl](gen) [only guys](nom pl)

There wasn't a single girl dancing in the round dance (only guys).

(Babby 2001:50)

It should be pointed out that the sentences in (2) are not considered felicitous by all native speakers of Russian, but some of my informants certainly do find them acceptable. And indeed, the verbs found in (2) are most likely to be analyzed as unergative.

Determining conclusively whether the unaccusativity hypothesis is correct is not an easy matter. It is not perfectly clear whether Russian has a reliable unaccusativity diagnostics that can be systematically applied to a sufficient number of representative examples in order to evaluate the hypothesis. See Appendix to this chapter for a somewhat more detailed investigation of the unaccusativity approach to GenNeg and further evidence suggesting that this Case can, as argued by Babby, be assigned to the argument of an unergative verb.

Importantly for our current purposes, if the unaccusativity hypothesis turns out to be incorrect, the configurational approach will turn out to be inadequate as well, at least as long as it attempts to provide a unifying account for both the genitive/accusative and the genitive/nominative alternations.

1.3.2. Not All Passive and Unaccusative Verbs License GenNeg

In addition, even if it can be proved that all intransitive verbs that license genitive objects are unaccusative, the distribution of GenNeg is still not fully accounted for within the configurational approach. It is clearly true that not all unaccusative and passive verbs allow genitive arguments, independently from the semantic properties

of the latter. For instance, intransitive verbs of disappearance and externally caused verbs of change of state, classified in Levin and Rappaport Hovav (1995) as unaccusative, typically disallow GenNeg assignment, as illustrated in (3).

- 3 a. *Dokumentov ne iščezlo.
documents(pl gen) NEG disappeared(neut sg)
(The) documents did not disappear.
- b. *čašek ne razbilos'.
cups(gen pl) NEG broke(refl neut sg)
Cups weren't broken into pieces.
- c. *Vody ne kipelo.
water(gen) NEG boiled(neut sg)
Water didn't boil.

It should be noted that the NPs in the sentences in (3) may but need not be interpreted as definite or specific. In any event, they cannot be marked genitive. In general, the arguments of the verbs belonging to the two verb classes mentioned above clearly can be non-specific and indefinite. As a result, the configurational approach predicts GenNeg assignment to these NPs to be acceptable. Still, they generally have to appear in the nominative Case (but see Appendix to this chapter for a discussion of exceptions to this generalization).

Similarly, not all passive verbs license genitive Case-marking on their argument. Thus, the sentences in (4) below are unacceptable, even though, again, the genitive NPs may get an indefinite, non-specific interpretation.

- 4 a. *Ne bylo razbito čašek.
NEG [was broken](neut sg) cups (gen pl)
No cups were broken into pieces.
- b. *Ne bylo perezpisano dokumentov.
NEG [was rewritten](neut sg) documents (gen pl)
No documents were rewritten.

Since the genitive NPs are merged in the object position and can be interpreted existentially, the configurational approach fails to account for the unacceptability of (4)⁷.

1.3.3. GenNeg Assignment to Specific and Definite NPs

The third problem has to do with semantic differences between genitive NPs on the one hand and accusative/nominative ones, on the other. As is often mentioned in the literature, accusative and nominative NPs tend to have definite, specific, presuppositional readings, whereas genitive NPs are normally indefinite and non-specific (e.g. see Timberlake (1986), Bailyn (1997), Pereltsvaig (1998, 1999), Brown (1999), Harves (2002a,b), Borschev and Partee (2001), Kim (2003), Babyonyshev (2003), and the discussion in Chapter 1 above). However, as already stated above, these are merely tendencies. Accusative and nominative NPs are sometimes interpreted as indefinite and non-specific, and genitive NPs can, in fact, be definite and sometimes even specific (e.g. genitive proper names to be investigated in Chapter 5). The first fact can be accounted for within the framework of most configurational analyses (although not all of them). Thus, as mentioned above, according to Bailyn (1997), an accusative NP can be interpreted as either definite or indefinite, depending on whether the tail or the head of a chain is considered. However, configurational theories have a difficulty with the second generalization made above; namely, that genitive NPs can be definite and/or specific, as illustrated in (5), even though GenNeg assignment to such NPs is indeed restricted.

5 a. Dimy net doma.

Dima(gen) NEG-BE at-home

Dima is not at home.

b. Ja ne videl tam Erielly.

I NEG saw there Eriella(gen)

I didn't see Eriella there. (from K. Kurtz, *The Chronicles of the Deryni*)

c. Tvoj otčot ne soderžit etix faktov.

Your report NEG contain [these facts](gen pl)

Your report doesn't contain these facts.

Researchers working within the framework of the configurational approach have proposed explanations for certain instances of GenNeg-assignment to proper names and other specific definites. These accounts mostly focus on existential sentences, such as (5a). Babyonyshev (2003) provides a syntactic account for a wider range of facts, as her approach predicts the acceptability of both (5a) and (5b). Firstly, Babyonyshev discusses existential sentences. She notes that in these sentences GenNeg is equally acceptable with both definite and indefinite NPs. Following Stowell (1981), she assumes that existential sentences contain a small clause, which functions as a complement of the verb. This clause, in turn, contains the NP that is existentially quantified over and a PP which denotes a location. The relevant part of the structure of existential sentences can be represented as follows (SC standing for Small Clause):

6. [_{VP} V [_{SC} NP [_{SC} SC PP]]]

Babyonyshev further points out that according to Percus (1995), arguments of the verb are subject to existential closure, but NPs that are more deeply embedded within the VP are not. Thus, the NP *the* appears in [_{spec,SC}] position is not subject to existential closure; it appears too low in the structure. Crucially, this is precisely the position of the genitive NP in negated existential sentences in Russian. As a result, the NP is allowed to be definite. Since it is not bound by existential closure, no incompatibility results between its definiteness feature and the demands of existential closure, in particular, the requirement that the referent of an NP bound by existential closure be unfamiliar (Heim 1982). Therefore, the NP is allowed to stay in its base-generated position, where, according to Babyonyshev, genitive NPs appear.

The same mechanism, according to Babyonyshev, accounts for the acceptability of such sentences as (5b), in which GenNeg is assigned to a definite object of a perception verb. Babyonyshev assumes that some verbs of perception can take small clauses as their complements. The NP generally analyzed as the theme (or stimulus) argument appears within such a small clause and, as a result, does not fall within existential closure. As a result, it can appear in GenNeg even if it is definite, the same way as definite NPs can be assigned GenNeg in existential sentences.

Still, this account of GenNeg assignment to definite NPs faces a number of problems. Firstly, the small clause analysis of sentences with perception verbs, such as (5b), is quite controversial, as it assumes that the theme does not function as an argument of the perception predicate. It is beyond the scope of the present discussion to investigate this issue in detail, however. More importantly for our current purposes, the analysis proposed by Babyonyshev does not account for the acceptability of GenNeg assignment in (5c). This sentence does not contain a perception verb, and it is not an existential sentence in terms of its syntactic structure. Even assuming that existential sentences involve a small clause which contains the theme and the location argument, (5c) is very unlikely to do so. Here, the phrase that can be analyzed as a location is realized as an NP and functions as the subject of the sentence, while the theme appears in the object position. The two phrases do not form a constituent and do not appear in a small clause. Thus, the syntactic analysis fails to account for the acceptability of GenNeg marking on the object NP in (5c), which is clearly definite (since it contains a demonstrative) and is at least likely to get a specific reading, and which at the same time is not embedded in a small clause.

Note, however, that, although it does not constitute an existential sentence formally, (5c) has something in common with existential sentences in terms of its interpretation. Thus, similarly to negated existentials as analyzed by Borshev and Partee (1998, 2002a) (see Section 3 below), it denies existence of the theme in a certain location. This suggests that it is the semantics of such sentences as (5a) and (5c), rather than their syntax, that is responsible for the licensing of GenNeg assignment to definite and specific NPs.

Thus, although definite and specific NPs strongly tend to be assigned accusative, in certain environments, they can be marked GenNeg, and the configurational approach does not succeed to account for all the instances of specific genitive objects.

1.3.4. Further Shortcomings

In addition, semantic properties other than definiteness/specificity seem to affect the Case of an object as well. For instance, GenNeg is more likely to be assigned to plural NPs rather than to count singulars and to objects of imperfective rather than perfective verbs, tendencies that will be investigated in Chapter 6. Once again, these are

tendencies that allow exceptions. Still, it is not clear how the configurational approach can account for these facts.

Finally, an important disadvantage of this approach is the fact that Genitive of Negation has to be dissociated from other instances of non-canonical genitive Case-assignment. (This problem is also discussed in Bailyn (2004).) Genitive objects that appear in affirmative clauses cannot of course check their Case against the Neg head. However, as demonstrated in Chapter 1, Intensional Genitive shares numerous properties with GenNeg. As a result, it seems desirable to treat the two instances of non-canonical genitive as the same phenomenon and thus to provide a unifying account for both – which is impossible under the approach to GenNeg under discussion.

2. The Empty Quantifier Approach

Empty quantifier approach constitutes a different treatment of the non-canonical uses of genitive in Russian. According to this approach, non-canonical genitive is assigned to an NP by a phonologically empty quantifier or by a formal Q(uantifier) feature. This analysis has been originally proposed for Russian by Pesetsky (1982), was adopted in Yadroff (1995) and developed by Franks (1995), Franks (1997), Pereltsvaig (1998, 1999) and Bailyn (2004), and by Neidle (1988), though her account diverges in significant ways from Pesetsky's approach. Also, an analysis on the same line has been proposed for some of the uses of the partitive in Finnish (in particular, the use that is similar to the Russian Partitive Genitive phenomenon) (Kiparsky (2001a), Kratzer (2002)) and in French (Muller 1997). Below, I discuss several accounts of non-canonical genitive based on the empty quantifier approach. Even though all of these accounts have something to say about both syntactic and semantic properties of genitive NPs, I will distinguish between analyses that focus primarily on the syntactic Case-assignment (or Case-checking) process and approaches that concentrate to a large extent on the semantics of the Case alternation and the syntax/semantics interface.

2.1. Syntactic Approaches

2.1.1. Pesetsky (1982)

Pesetsky (1982) argues that non-canonical genitive in Russian is assigned by an empty quantifier. In particular, this quantifier is claimed to be responsible for the Partitive Genitive and the Genitive of Negation (Pesetsky does not discuss Intensional Genitive as a separate phenomenon). This approach is supported by a number of similarities that can be observed between non-canonical genitive constructions (especially Partitive Genitive) and constructions that involve overt quantifiers. Firstly, genitive is the Case assigned by most quantifiers to the quantified NP:

7 a. pjat devoček

five girls (gen pl)

b. mnogo čašek

many cups(gen pl)

Secondly, as noted in Chapter 1, Partitive Genitive is always associated with a quantificational, partitive meaning “some X”, “some part of X”. This interpretational property is exemplified in (8). As indicated in the translation, the genitive NP is interpreted as *some water*.

8. Ja vypil vody.

I drank(perf) water(gen)

I drank some water.

This fact is naturally accounted for if one assumes that the genitive is assigned by an empty existential quantifier whose semantics is in part similar to that of the English *some*.

Thirdly, in Russian, a very restricted number of nouns have a special partitive morphological form consisting of a suffix *-u / ju* added to the stem. This form can always be substituted by a common genitive form, but not vice versa; the use of this form is more restricted. In particular, the morphological partitive is available only with quantifiers or nouns denoting quantity:

9 a. bol’še saxaru / saxara

more shugar(part)/(gen)

b. tarelka supu / supa

plate soup(part)/(gen)

a plate of soup

c. ostatki *supu / supa

remnants soup(part)/(gen)

the remnants of the soup

In the non-quantificational use of genitive Case in (17c), the partitive form is unavailable.

Crucially, the partitive form is possible when Partitive Genitive is used:

10. Ja vypil čaju / čaja.

I drank(perf) tea(part)/(gen)

I drank some tea.

This fact is predictable if it is assumed that (18) involves an empty quantifier.

For further similarities between NPs assigned non-canonical genitive Case and constructions with overt quantifiers, see Pesetsky (1982) and Franks (1995). Note also that the empty quantifier analysis accounts both for the syntactic Case-checking and for some of the semantic properties associated with the genitive Case – especially, the semantics of the Partitive Genitive construction. Syntactically, the genitive Case-feature is checked by the empty quantifier. In turn, the “some quantity of X” meaning of partitive genitives, as well as the indefinite, non-specific interpretation associated with non-canonical genitive in general, results from the existential semantics of the quantifier.

However, this approach has an important disadvantage. The problem of Pesetsky’s analysis is its failure to account for the numerous differences between the Partitive Genitive phenomenon on the one hand and other subtypes of non-canonical genitive, on the other. One such difference has to do with the morphological partitive form discussed above, as pointed out by Franks (1995), who investigates contrasts between

Partitive Genitive and Genitive of Negation. He shows that morphological partitive is acceptable under the former phenomenon but not under the latter.

11. On ne videl kon'jaka / *kon'jaku.

he NEG saw cognac(gen)/(part)

He didn't see any cognac.

The unacceptability of the partitive form of the object in (11) demonstrates that partitive is not licensed under GenNeg. If both GenNeg and Partitive Genitive are assigned by an empty quantifier, this fact is surprising.

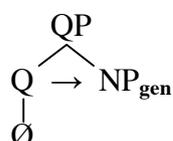
A considerable number of additional differences between Partitive Genitive and Genitive of Negation (as an instantiation of Irrealis Genitive) have been discussed in Section 3.2 of Chapter 1. For instance, it has been demonstrated that GenNeg can be assigned count singular (heterogeneous) NPs, in contrast to Partitive Genitive. This is an unexpected contrast if the two types of genitive are assigned by exactly the same quantifier.

I therefore agree with Franks (1995) that while the empty quantifier approach may constitute an adequate account of the Partitive Genitive phenomenon, it fails to account for a range of properties of other instances of non-canonical genitive.

2.1.2. Bailyn (2004)

Bailyn (2004) makes an even stronger claim than Pesetsky (1982). He proposes that an empty Q(uantifier) head is responsible for the assignment not merely of all the instances of *non-canonical* genitive Case but of *all* the instances of non-lexical (not Inherent) genitive in general, including such a purely canonical and widespread phenomenon as adnominal genitive. Bailyn proposes the following rule for (non-lexical) genitive Case-assignment:

12. Unified configuration for genitives:



The advantage of this analysis is the fact that a unifying syntactic account for the assignment of the genitive Case is provided. However, this account shares the main problem of Pesetsky's approach: it fails to explain numerous differences between the various instances of the genitive. For instance, it does not capture the differences between Partitive Genitive and GenNeg discussed in the previous section. A comparison between these types of genitive and adnominal genitive (genitive Case assigned within an NP as illustrated in (13)) reveals further contrasts. For example, there is a strong tendency for non-canonical genitive to be assigned to indefinite, non-specific NPs (this is true with respect to all the phenomena discussed in Chapter 1). Proper names are especially unlikely to appear in the genitive Case. However, no such restrictions are present when adnominal genitive is involved, as demonstrated in (13).

13 a. mašina Saši

car Sasha(gen)

Sasha's car

b. mašina moego djadi

car [my uncle](gen sg)

my uncle's car

c. mašina učitelja

car teacher(gen sg)

a teacher's car / the teacher's car

Adnominal genitive is freely assigned to definite and specific NPs (13a, 13b). In turn, the NP *učitelja* (teacher) in (13c) is ambiguous between a definite and indefinite reading; the interpretation is determined by the context. However, crucially, genitive Case-marking does not eliminate a definite or specific reading.

To sum up, the unifying analysis formulated in (12) fails to account for the fact that the different phenomena that involve genitive Case-assignment are subject to different restrictions and semantic tendencies. While some contrasts may be accounted for by the differences between environments in which the QPs are licensed, most of them remain unexplained.

2.2. Semantic Approaches

2.2.1. Pereltsvaig (1998,1999)

Pereltsvaig (1998,1999) uses the empty quantifier approach to account exclusively for the Genitive of Negation phenomenon. She proposes that GenNeg is always assigned by an empty quantifier (**q**). She further argues that **q** is a strict negative polarity item (NPI), since it cannot appear in other downward-entailing environments, such as antecedents of conditionals, relative clauses headed by universal quantifiers, etc. Pereltsvaig accounts for semantic properties of genitive objects by proposing the Referentiality Constraint, formulated in (14):

14. REFERENTIALITY CONSTRAINT:

If the object participant is individuated / referential, it cannot be quantified over, and is thus assigned Accusative. On the other hand, if the object participant is non-individuated / non-referential, it can be quantified over, and is thus assigned Genitive.

(Pereltsvaig 1998, page 21 of the manuscript)

It should be noted that the precise definition of the term *referential* is not perfectly clear. According to Pereltsvaig, referential NPs are NPs that cannot be quantified over. Since GenNeg is assigned by a quantifier, then, naturally, it can be assigned only to those NPs that can be quantified over – thus, the non-referential ones.

The approach proposed by Pereltsvaig accounts successfully for numerous facts. Indeed, in many cases, accusative NPs are referential in the sense of Pereltsvaig, contrary to genitive objects. However, certain counterexamples to this approach can be found. Firstly, accusative NPs can be non-referential, as exemplified in (15).

15. Ja nikogda v žizni ne kormil sobaku.

I never in life NEG fed dog(acc sg)

I have never fed a dog in my life.

Here, the object NP can receive a non-referential reading; if it is interpreted within the scope of negation, the sentence means that the speaker has never fed *any* dog. Still, The NP is marked accusative.

More importantly, non-referential NPs are not always allowed to be marked genitive, as illustrated below.

16. ???Obyčno ja ne otstiryvaju pjaten.

Generally I NEG wash-out stains(gen pl)

Generally, I don't (succeed to) take stains out.

The example in (16) is a habitual sentence, and the direct object is interpreted non-referentially. This is a statement about stain-washing in general, rather than about a specific set of stains. Thus, the object NP does not refer to any particular set; rather, stains vary with situations. Still, accusative Case not only *can* be assigned in this sentence, but it is the only Case available. Thus, in some cases, GenNeg cannot be assigned to non-referential NPs.

An additional disadvantage of the analysis of Pereltsvaig is the same as discussed in Section 1.3.4 above with respect to configurational approaches. In particular, this analysis obligatorily dissociates Genitive of Negation from Intensional Genitive and does not allow a unifying account of the two phenomena. Since **q** is a strict NPI, which is licensed only under sentential negation, it cannot be available in affirmative clauses that contain intensional verbs. Moreover, as demonstrated in the previous chapter, non-referential complements of intensional verbs sometimes obligatorily appear in the accusative Case, similarly to the object in (16); therefore, the Referentiality Constraint cannot account for this phenomenon.

2.2.2. The [+/-Q] Feature: Neidle (1988)

Finally, Neidle (1988) provides a unifying account specifically of Genitive of Negation and Intensional Genitive. She notes that under both phenomena, the choice of Case depends on specificity and scope. She proposes that the choice of Case is determined by the [Quantifying] feature ([+/-Q]). The feature [+Q] is contributed to the VP node both by the negative operator and by intensional verbs, and it functions as a scope marker. This feature further spreads to the object NP if the latter appears within the scope of the operator. In this case, the object will be marked genitive. In contrast, the feature [+Q] will not spread to an NP that takes *wide* scope relative to negation or an intensional verb. Such an NP will appear in the accusative Case.

The fact that this approach allows for a unifying account of Genitive of Negation and Intensional Genitive is an important advantage of this analysis. However, it has two substantial shortcomings. Firstly, scope relations are not sufficient to account for the Case alternation in either of the two environments since accusative NPs can take both narrow and wide scope relative to negation or an intensional verb. Thus, while the accusative proper name *Masha* in (17a) is interpreted outside the scope of the intensional verb, the accusative NP *rusalku* (mermaid) in (17b) is most likely to take narrow scope, under the reading according to which it is Dima, and not the speaker, that believes in mermaids.

17 a. Petja ždjot Mašu.

Petja wait Masha(acc)

Petja is waiting for Masha.

b. Dima iščet rusalku.

Dima seek mermaid(acc sg)

Dima is seeking a mermaid.

Another way to formulate the problem would be to say that narrow scope NPs may appear both in genitive and in accusative Case. Even more crucially, such NPs are sometimes obligatorily accusative, genitive Case-assignment being unavailable despite the narrow scope reading received. This happens to be the case in (17b)⁸.

Thus, an analysis that is based on the contrast in scope cannot account for the genitive/accusative alternation.

Secondly, it is not perfectly clear why the [+Q] feature should be contributed by negation and intensional verbs but not by numerous additional operators that introduce quantification over individuals, situations or possible worlds, such as, for instance, the generic operator, modals like *možet* (can, may) and adverbs like *obyčno* (usually) or *inogda* (sometimes). An NP can appear either within or outside the scope of any of these operators; still, their presence is insufficient to license genitive Case-assignment to objects (18).

18. Obyčno Lena jest frukty / *fruktov.
 Generally Lena eats fruit(acc pl)/(gen pl)
 Generally, Lena eats fruit.

3. Perspectival Center: Borschev and Partee

This section is devoted to a semantico-pragmatic account of the genitive/nominative alternation under negation. As stated above, configurational analyses assume the unaccusativity approach to GenNeg and provide a unified account for the genitive/accusative and genitive/nominative alternations in negative contexts. In turn, Borschev and Partee (2001) and Partee and Borschev (2004) propose an analysis specifically for the genitive/nominative alternation and remain agnostic to the question of whether GenNeg can be assigned to an external argument of an intransitive verb.

The genitive/nominative alternation is illustrated in (19) - (20) below. (The examples in (19) are originally from Ickovič (1974); they are quoted and discussed by Borschev and Partee (2002a).)

- 19 a. Moroz ne čuvstvovalsja.
 frost(nom m sg) NEG felt(refl m sg)
 The frost was not felt.
- b. Moroza ne čuvstvovalos’.
 frost(gen m sg) NEG felt(refl neut sg)
 No frost was felt.
- 20 a. Moloko ne v xolodil’nike.
 milk(nom) NEG in refrigerator.
 The milk is not in the refrigerator.
- b. V xolodil’nike net moloka.
 in refrigerator NEG-BE milk(gen)
 There is no milk in the refrigerator.

Following work by Babby, B&P treat as negated existential sentences (NES’s) not only existential sentences in the traditional sense of the term but also all the sentences with intransitive verbs whose argument is assigned GenNeg. In turn, their

counterparts with nominative subjects are referred to as negated declarative sentences (NDS's). According to B&P, both types of sentences deny existence of the theme (THING) in a certain location (LOC). They therefore formulate the 'Existence Is Relative' Principle:

21. Existence (in the sense relevant to AES's [affirmative existential sentences] and NES's) is always relative to a LOC(ation).

(Borshev and Partee 2002a:18)

Thus, for example, both sentences in (20) involve a denial that milk exists in a particular location – the refrigerator; however, its existence in the world in general is not denied.

The relevant location may be either explicitly specified, as in (21a), or implicitly present, as in (22b).

22 a. Kefira v magazine ne bylo.

Kefir(gen) in shop NEG was(neut sg)

There was no kefir in the shop.

(Borshev and Partee 2002a:9)

b. Kefira ne bylo.

Kefir(gen) NEG was(neut sg)

There was no kefir.

In the case of (22b), the relevant location is expected to be identifiable from the context. However, the sentence is clearly unlikely to assert that there was no kefir in the whole world.

Thus, NES's, which contain different intransitive verbs, are consistently interpreted as a denial of existence of the theme in a location. B&P capture this fact by formulating the presupposed equivalence principle that holds for NES's, quoted in (23).

23. PRESUPPOSED EQUIVALENCE

V (THING, LOC) ↔ BE (THING, LOC)

(Borshev and Partee 2002a:19)

In other words, the interpretation of the verb that appears in a NES is presupposed to be essentially equivalent to that of “existence predicate”, or the verb *byt’* (to be).

It is important to note, however, that many of the verbs that can appear in NES’s have lexical meaning which differs from pure assertion / denial of existence. This is certainly true for such verbs as *čuvstvat’ sja* (be-felt), which can take a genitive NP as its argument, as demonstrated in (19b). Then how can its meaning be equivalent to that of the verb *to be*? B&P propose that in NES’s, the interpretation of the verbs becomes weakened, coerced into existential meaning. A NES is acceptable only as long as such a weakening of the verb, when it is combined with the given genitive argument, is possible. This weakening is made possible by axioms of various kinds, which hold for the sentence in question in the given context. These axioms help to yield the equivalence in (23) in a given sentence (even though in other contexts, the verb in question may have lexical meaning other than that of the verb *to be*.) An example of one type of the axioms, in particular, the dictionary axioms, taken from B&P (1998), is provided in (24) below.

24 a. Ne belelo parusov na gorizonte.

NEG shone-white(neut sg) sails(gen pl) on horizon

No sails were shining white on the horizon.

b. Presupposed Equivalence:

Na gorizonte belet parus ↔

on horizon shone-white(m sg) sail(nom m sg) ↔

Na gorizonte byl parus

on horizon was(m sg) sail(nom m sg)

A sail shone white on the horizon. ↔ There was a sail on the horizon.

c. ‘Dictionary axiom’ (part of lexical semantics)

belet’ ↔ byt’ belym (in the field of vision)

to shine-white ↔ to be white

d. Dictionary or encyclopedic axiom; ‘common knowledge’:

Parus kak pravilo belyj

sail(m sg) as a rule white(m sg)

Sails as a rule are white.

The general idea is the following. We know that *belet'* (to shine-white) essentially means *to be white*, this constituting part of our knowledge of the lexical semantics of this verb. We also know, this time as part of our knowledge of the world, that sails are generally white. These two axioms together ((24c) and (24d)) essentially render the equivalence in (24b). The statement that a sail shone white on the horizon becomes essentially equivalent to the statement that there was a sail on the horizon. In turn, it follows that (24a) means that there were no sails on the horizon.

Providing an exhaustive list of such axioms is, of course, impossible. B&P list several axioms of different types in order to demonstrate the mechanism by which the meaning of the verbs is weakened in NES's. As a result of this weakening, the sentences come to be interpreted as a denial of existence (relative to a location.)

B&P (2002a) and Partee and Borshev (2004) further propose that NES's, in which GenNeg is assigned, and NDS's, in which the NP argument is marked nominative, differ in terms of *Perspectival Structure*. In particular, Case-assignment depends on whether the THING or the location functions as *Perspectival Center*, "the participant chosen as the point of departure for structuring the situation" (Partee and Borshev 2004:6). If THING is chosen as Perspectival Center, then one considers the situation in terms of the THING and makes a statement about the THING. In particular, the speaker states about the THING where it is or is not located and possibly what its other properties are. In turn, if LOC is the Perspectival Center, then location is made the point of departure. In this case, the sentence speaks about the location, and a statement is made as to which entities occupy (or do not occupy) the location. If THING is made Perspectival Center, the NP referring to it is assigned nominative Case. This is what happens in NDS's. If LOC functions as Perspectival Center, then the NP referring to the THING is assigned GenNeg. This is the case in NES's. For instance, in the NDS in (20a) above, Perspectival Center is milk. It is asserted about milk which location it does not occupy. Therefore, nominative Case is assigned. In contrast, (20b) is an existential sentence with LOC, the refrigerator, functioning as Perspectival Center. It is asserted about the refrigerator what is not located in it; in particular, that there is no milk in this location. As a result, GenNeg is assigned.

The Perspectival Structure approach reveals important facts about the semantics and information structure of NES's and NDS's. However, this analysis cannot be extended to account for the genitive/accusative alternation. It is indeed true that genitive objects of transitive verbs are very unlikely to function as Perspectival Center. However, their accusative counterparts need not fulfill this function either. For instance, in many cases, the nominative subject may be chosen as Perspectival Center, independently of whether accusative or genitive Case is assigned to the object (although this state of affairs is not obligatory). Consider, for example, (25), which constitutes the negative counterpart of (18), discussed above.

25. Obyčno Lena ne jíst frukty / fruktov.

Generally Lena NEG eats fruit(acc pl)/(gen pl)

Generally, Lena doesn't eat fruit.

Intuitively, (25) is a statement about Lena and her properties, rather than about fruit, no matter which Case is assigned to the object. Thus, the genitive and the accusative variants cannot be distinguished in terms of Perspectival Structure, and a different analysis is required.

4. Property Type Hypothesis

Finally, an additional semantic approach that unifies Genitive of Negation and Intensional Genitive has been developed. Under this approach, genitive objects are analyzed as property-denoting. Thus, they differ from nominative and accusative NPs in the restrictions imposed on their semantic type. Their nominative and accusative counterpart may be refer to or quantify over individuals; presumably, they may be of the property type as well. In contrast, genitive NPs obligatorily denote properties.

This analysis is argued for in Kagan (2005), and suggested in Partee and Borshev (2004) and further discussed and evaluated in their recent work (e.g. Partee and Borshev (2007)). It is based to a large degree on Zimmermann (1993), who argues that objects of intensional verbs denote properties. The analysis is also related to other work on property-denoting NPs, e.g. van Geenhoven (1998) and van Geenhoven and McNally (2005). The Property Type Hypothesis successfully accounts for the fact that genitive NPs receive indefinite, non-specific, narrow scope readings, since this is

exactly the kind of interpretation that property-denoting NPs are supposed to get. An additional advantage of this approach is constituted by the fact that it unifies Genitive of Negation and Intensional Genitive and treats the two as a single phenomenon.

I believe that the hypothesis is essentially correct: NPs that appear in Irrealis Genitive do denote properties (rather than referring to or quantifying over individuals). It will be shown in what follows that this view of Irrealis Genitive is perfectly compatible with the analysis that I will propose; in fact, it can be stated that the two approaches complement each other. The main problem with the property analysis is that it turns out to be insufficient to account for the distribution of genitive objects. In the remainder of this section, I discuss this problem in some detail.

First of all, property-denoting NPs are found not only under negation or following intensional verbs. For instance, as argued convincingly by McNally (1998a), NPs that function as subjects of existential sentences (whether negated or not) are of the property type. Crucially, in Russian, such NPs are obligatorily nominative if the existential sentence is affirmative; namely, Irrealis Genitive is not licensed:

26. V komnate byli udobnyje kresla / *udobnyx kresel.
in room were [comfortable armchairs](nom pl)/(gen pl)
There were comfortable armchairs in the room.

Under the assumption that the postverbal NP in (26) is property-denoting, why cannot it appear in genitive Case?

It has been suggested above that Irrealis Genitive is only possible in Russian for NPs that lack existential commitment. However, existential commitment seems to be compatible with property-denoting NPs, as illustrated in (26). Then how can this semantic restriction on genitive Case-assignment be accounted for under the Property Type Hypothesis?⁹

Kagan (2005) attempts to solve this problem by further restricting the distribution of genitive objects. She proposes that genitive Case-marking is only licensed on NPs of the intensional property type <s,<e,t>>, but not on extensionally interpreted NPs of

the type $\langle e, t \rangle$. This way, genitive Case-assignment to NPs in affirmative existential sentences is ruled out: presumably, these NPs are interpreted extensionally. (26) is successfully accounted for; however, the analysis runs into a different problem. It builds on the assumption that negation licenses the intensional property interpretation of the object NP (and that is why the object may appear in genitive Case in negative clauses). However, this suggests that negation is an intensional operator, an assumption that is quite controversial.

Secondly, not all objects of intensional verbs may appear in Irrealis Genitive, as has been illustrated in (17) above. Sometimes, an object that takes narrow scope relative to an intensional verb is obligatorily accusative. Thus, genitive Case-assignment is licensed in (27a) but not (27b):

27 a. Dima ždjot rusalku / *rusalki.

Dima waits mermaid(acc sg)/(gen sg)

Dima is waiting for a mermaid.

b. Dima ždjot čuda.

Dima wait miracle(gen sg)

Dima is waiting for a miracle.

In order to account for this contrast under the Property Type Hypothesis, one would have to argue that the object NP is property-denoting in (27a) but not in (27b). However, it is at least not obvious how such a claim can be maintained. Indeed, it has been proposed in the literature that not all objects of intensional verbs are interpreted as properties (e.g. van Geenhoven and McNally (2005), Schwarz (to appear)). But under these approaches, the type of the NP either depends on its scopal properties (only narrow scope, intensionally interpreted NPs are property-denoting) or on the intensional verb involved (some verbs take property-denoting objects, the complement of others is of a different semantic type). However, the two sentences in (27) contain an object NP that takes narrow scope relative to exactly the same verb. It therefore seems unclear why *čuda* in (27a) and *rusalku* in (27b) should be treated as NPs of different semantic types. In Chapter 4, I will introduce an interpretational property that distinguishes between (27a) and (27b) and makes it possible to account for the contrast in Case. This distinction might function as a basis for arguing that the

semantic type of the two NPs is not identical; however, I believe that such a claim would still be too strong.

5. Conclusion

To sum up, in this chapter, I have discussed a number of previously proposed analyses of genitive Case-assignment to non-oblique arguments. We have seen syntactic, semantic and semantico-pragmatic approaches to the problem. Some of these approaches focus primarily on the syntactic configuration in which non-canonical genitive Case is assigned or checked, while others concentrate on the semantic and pragmatic contrast between genitive arguments and their nominative or accusative counterparts.

I have argued that none of these approaches is sufficient to account for the semantics of the genitive/accusative alternation. However, it should be emphasized that each of the approaches presented above makes a very important contribution to the investigation of non-canonical genitive Case. The analysis of Irrealis Genitive that will be proposed in this dissertation has been inspired by some of these approaches. For instance, I follow Borshev and Partee in arguing that the notion of existence plays an important role in Case-assignment. I will also make use of the 'Existence Is Relative' Principle they formulate in order to account for the exceptional instances of genitive Case-assignment to proper names, which will be discussed in Chapter 5. In addition, the claim that Irrealis Genitive can only be assigned in the absence of existential commitment, on which my proposal will be based, is strongly interrelated with Pereltsvaig's Referentiality Constraint. I will argue that genitive NPs lack commitment to existence both in the actual world and in alternative versions of reality introduced in the sentence; naturally, such NPs are predicted to be non-referential.

Appendix

A discussion of the configurational approach to GenNeg raises the question of whether this Case can only be assigned to base-generated objects. With transitive and passive verbs this is clearly always the case; the problem thus is limited to sentences that contain intransitive verbs that take a genitive argument. Are such verbs obligatorily unaccusative, i.e. can GenNeg be assigned only to an internal argument? This generalization is assumed to hold under the configurational approach. In

contrast, as stated in Section 1.3.1, Babby (2001) argues that unergative verbs can take a genitive argument as well, which means that GenNeg can be assigned to a base-generated subject. This section contains a relatively brief look into the problem. New data provided towards the end of the section suggest that the unaccusativity approach to GenNeg assignment might indeed be inadequate, as argued by Babby.

The unaccusativity analysis of the genitive/nominative alternation is quite appealing, since it allows a generalization that GenNeg can only be assigned to internal arguments, which are base-generated within the VP. Thus, a unifying syntactic account of all the instances of GenNeg-assignment becomes possible.

In addition, it appears that, indeed, the vast majority of intransitive verbs that license GenNeg-marking on their objects are unaccusative. For instance, GenNeg is often licensed by reflexives which are derived from a transitive counterpart by an addition of a reflexive suffix, a process whereby the verb loses its external thematic role. Such verbs are clearly unaccusative, as their only argument is an internal one. The genitive/nominative alternation with an unaccusative reflexive predicate is exemplified in (1):

- 1 a. Moroz ne čuvstvovalsja.
 frost(nom m sg) NEG felt(refl m sg)
 The frost was not felt.
- b. Moroza ne čuvstvovalos'.
 fost(gen m sg) NEG felt(refl neut sg)
 No frost was felt.

While the transitive verb *čuvstvovat'* (feel) takes two arguments, an experiencer and a stimulus, the only argument of its reflexive counterpart *čuvstvovat'sja* (be felt) is a stimulus. An external argument is missing. This verb can take a genitive complement under negation, as demonstrated in (1b).

GenNeg is licensed by numerous unaccusative reflexive verbs, some of which, taken from Padučeva (1997:107-108), are listed below:

vypuskat'sja (be issued), *vyrabatyvat'sja* (be worked out), *vyražat'sja* (be expressed), *vyjasnat'sja* (be found out), *dostigat'sja* (be reached, be obtained), *planirovat'sja* (be planned), *nakaplivat'sja* (accrue), *načinat'sja* (start, begin), *publikovat'sja* (be published), *stroit'sja* (be built), *delat'sja* (be done), *formirovat'sja* (be formed), etc.

(See Padučeva (1997) for further examples, in combination with genitive objects).

In contrast, “classical” reflexive verbs, whose reflexive suffix marks the fact that their two arguments are identical, do not license GenNeg in Russian (2). This is important, since, as argued convincingly by Reinhart and Sioni (2005), these verbs are unergative. With these verbs, the argument that is realized is the external one.

- 2 a. *Deti ne umyvalis'.*
 children(nom pl) NEG washed(refl pl)
 Children didn't wash up.
- b. **Detej ne umyvalos'.*
 children(gen pl) NEG washed(refl neut sg)
 Children didn't wash up.

In addition, intransitive verbs that license GenNeg tend to belong to verb classes whose members have been independently argued to exhibit unaccusative behavior cross-linguistically. For example, genitive arguments often appear with verbs of existence and appearance, which are classified as unaccusative in Levin and Rappaport-Hovav (1995). GenNeg licensing by such verbs is illustrated in (3):

- 3 a. *Edinorogov ne suščestvujet.*
 Unicorns(gen pl) NEG exist(neut sg)
 Unicorns don't exist.
- b. *Trudnostej ne vzniklo.*
 Difficulties(gen pl) NEG emerged(neut sg)
 Difficulties didn't emerge.
- c. *Novyx passažirov v kupe ne pojavilos'.*
 [new passengers](gen pl) in compartment NEG appeared(refl neut sg)
 New passengers did not appear in the compartment.

Levin and Rappaport-Hovav note that verbs belonging to this class take the unaccusative auxiliary in Italian, Basque and Dutch. In addition, they point out that in English, these verbs are licensed in the *there*-insertion construction of the form “*there* V NP PP”, which is also an unaccusativity diagnostics. (For further details, see Levin and Rappaport-Hovav (1995:148-154).) They further formulate the Existence Linking Rule, quoted below:

4. *Existence Linking Rule*

The argument of a verb whose existence is asserted or denied is its direct internal argument.

As demonstrated above, the GenNeg phenomenon is strongly associated with the absence of existential commitment and, in the context of intransitive verbs, with denial of existence. This pattern, together with the fact that numerous existence and appearance verbs can take genitive arguments under negation, supports the unaccusativity approach to GenNeg.

In addition, GenNeg is licensed by some verbs of inherently directed motion, which are also classified as unaccusative by Levin and Rappaport-Hovav. Verbs belonging to this class take a genitive argument in (5). ((5b) and (5c) have been found in the internet.)

5 a. *Otveta / pis'ma ne prišlo.*

answer(gen sg) letter(gen sg) NEG arrived(neut sg)

A / the answer / letter did not arrive.

b. *...vo vremja Vtoroj Mirovoj na etot xram ne upalo ni odnoj bomby*

in time second world on this temple NEG fell(neut sg) not [one bomb](gen)

During World War II a single bomb didn't fall on this temple.

c. *Iz besčislennyx trub ne podnimalos' ni odnoj strujki*

from countless pipes NEG ascended(refl neut sg) not [one whiff](gen)

dyma.

smoke(gen)

Not a single whiff was rising from the countless pipes.

In principle, verbs of inherently directed motion that take a genitive argument can be reanalyzed as verbs of appearance. GenNeg assignment is licensed only if the motion denoted by the verbs is directed towards some contextually salient location. In this case, stating that the motion did not take place essentially means that the entity did not appear in that location. Thus, for example, (5b) means that no bomb appeared at the location specified as the temple (and not that bombs appeared there but did not fall). Borshev and Partee's analysis of the phenomenon presented in Section 3 above predicts this weakening of verb meaning, whereby the semantics of the verb, for the purposes of the given sentence, becomes essentially equivalent to that of the verb *to be*.

The facts illustrated above show that GenNeg-assignment is indeed strongly associated with unaccusativity. Treating Genitive of Negation as a unaccusativity diagnostics is problematic for two reasons, however. Firstly, not all unaccusative verbs license genitive arguments. For instance, externally caused verbs of change of state, exemplified in (6), do not generally allow Genitive of Negation, despite the fact that, cross-linguistically, they are characterized by the unaccusative pattern of behavior:

- 6 a. *čášek ne razbilos'.
- cups(gen pl) NEG broke(refl neut sg)
- Cups weren't broken into pieces.
- b. *Vody ne kipelo.
- water(gen) NEG boiled(neut sg)
- Water didn't boil.
- c. *Bel'ja ne vysoxlo.
- laundry(gen) NEG went-dry(neut sg)
- The laundry didn't go dry.

Crucially, these verbs fail to license GenNeg independently of the semantic properties of their arguments. Thus, even if the NPs are interpreted as indefinite and non-specific, they still have to appear in the nominative Case.

Still, it should be noted that at least some of the verbs discussed above, e.g. *razbit'sja* (break), do license GenNeg if their argument contains the negative concord expression *ni odnogo* (not a single), as demonstrated by Borshev and Partee. For instance, (7) below seems to be grammatical:

7. Ne razbilos' ni odnoj čaški.
 NEG broke(refl neut sg) not [one cup](gen sg)
 Not a single cup was broken.

Moreover, many of the phenomena that do constitute unaccusativity diagnostics are subject to further restrictions. Therefore, the unacceptability of (6) on its own does not constitute convincing evidence against the unaccusativity approach to GenNeg. More importantly, however, genitive arguments seem to be sometimes licensed by unergative verbs. In Section 1.3.1 above, I have quoted two examples from Babby (2001) in which (presumably) unergative verbs take a genitive argument. I repeat these examples in (8) below for the sake of convenience. Some further examples of this type, found on the web, are provided in (9). For instance, (9) contains many verbs of light and sound emission, which are cross-linguistically classified as unergative.

- 8 a. [S tex por kak] na etom zavode sokratili zarplatu, tam ne rabotaet
 since on this factory lowered wages there NEG work(neut sg)
 ni odnogo inženera
 not [one engineer](gen)
 Since the wages were cut at the factory, there hasn't been a single engineer working there.

- b. V xorovode ne pljasalo ni odnoj devuški (odni parni).
 In round-dance NEG danced(neut sg) not [one girl](gen) [only guys](nom pl)
 There wasn't a single girl dancing in the round dance (only guys).
 (Babby 2001:50)

- 9 a. V domax ne svetilos' ni odnogo okna.
 in houses NEG gleamed(refl neut sg) not [one window](gen)
 Not a single window gleamed in the houses.

- b. V gorode ne progremelo ni odnogo vystrela.
 in city NEG thundered(neut sg) not [one shot](gen)
 Not a single shot thundered in the city.
- c. na...nebe ne mercialo ni zvjozdočki.
 on sky NEG glowed(neut sg) not star(gen sg)
 Not a single star was glowing in the sky.
- d. Ni edinoj zvjozdočki ne sverkalo na nebosklone.
 not [single star](gen) NEG sparkled(neut sg) on horizon
 Not a single star was sparkling on the horizon.
- e. V glazax ledi Ščerbatovoj ne blestelo ni slezinki.
 in eyes lady Sherbatova(gen) NEG glitter(neut sg) not tear(gen sg)
 Not a single tear glittered in lady Sherbatova's eyes.
- f. ...na poxoranax ne zvučalo rečej.
 on funeral NEG sounded(neut sg) speeches(gen pl)
 No speeches were given at the funeral.
- g. v etom konkurse ne učastvovalo ni odnogo človeka.
 in this contest NEG participated(neut sg) not [one man](gen)
 Nobody participated in this contest.
- h. ...v okeane počemu-to ne plavalo ni odnogo sudna...
 in ocean for-some-reason NEG swam(neut sg) not [one ship](gen)
 For some reason, not a single ship was navigating in the ocean.

It should be mentioned that all the verbs illustrated above were found in combination with genitive arguments in additional sentences as well. These facts suggest that unaccusativity is not likely to be the right criterion for distinguishing intransitive verbs that license GenNeg-marking on their arguments from the ones that allow only nominative subjects. On the other hand, it is possible that in Russian, the verbs found in (9) can be reanalyzed as unaccusative. A truly reliable test for unaccusativity in Russian that can be applied to these verbs is needed in order for a conclusive answer to be obtained.

Even if the unaccusativity hypothesis turns out to be incorrect, however, it is necessary to account for the fact that the vast majority of intransitive verbs that take genitive arguments are indeed unaccusative. One possible, and very likely, reason has

to do with the fact that, as argued by Borshev and Partee, sentences that exhibit the genitive/nominative alternation involve a denial of existence. Due to this fact, verbs of existence and appearance are especially likely to appear in NES's, and verbs belonging to this class are unaccusative (Levin and Rappaport-Hovav 1995).

An additional possible reason for the unaccusativity tendency is related to the assignment of thematic roles. As pointed out in Borshev and Partee (2002a), researchers who disagree with the unaccusativity approach propose instead that the licensing of GenNeg assignment depends on agentivity. NPs to which GenNeg is assigned are consistently non-agentive. Indeed, this holds for all the genitive NPs in (9). This approach accounts for the strong association between GenNeg and unaccusativity, since the argument of unaccusative verbs is not agentive. The same holds for the object of transitive and passive verbs. At the same time, unergative verbs can take both an agentive and a non-agentive argument, and, as a result, they sometimes do license GenNeg assignment (as illustrated in (9)).

Babby's examples in (8) may seem to constitute evidence against the agentivity approach in the same way as they pose evidence against the unaccusativity hypothesis. The verbs *rabotat'* (work) and *pljasat'* (dance) seem to assign the thematic role *agent* to their argument. Still, the latter can appear in genitive Case according to those speakers who accept (8).

I believe, however, that these sentences do not constitute true counterexamples, once their interpretation is carefully analyzed. Let us start with (8a). It should be noted that the verb *to work* in English, as well as its Russian counterpart *rabotat'*, has two somewhat different, although strongly related meanings. The verb can mean, roughly, *to be physically engaged in the process of working*. In this sense, it denotes a process and is indeed agentive. However, *to work* may also mean *to be employed in a particular place*. This meaning is unambiguously present in the sentence *Mary works in a library, but she doesn't do anything there*. Under this reading, *work* is stative, and its argument is clearly not an agent.

Crucially, it is precisely the second usage of *work* that we find in (8a) above with a genitive argument. This sentence means that no engineer is employed at the factory. It

cannot mean that engineers are actually employed, but, instead of being physically engaged in a work, they drink vodka. Thus, the genitive NP in (8a) is not an agent.

Let us now turn to (8b). It can be seen that this sentence cannot mean that girls were present in the round dance but were not dancing, which would have been a clearly agentive use. Moreover, the fact that the location of the event is defined as *xorovod* (round dance) absolutely eliminates the possibility of such a meaning, since being present in a round dance means to be dancing. What the sentence means essentially is that there were no girls there. And such an interpretation does not presuppose agentivity. (Again, we deal with the weakening of verb meaning on the line of Borshev and Partee. This weakening apparently also cancels the agentivity of the argument.) Therefore, I propose that (8b), similarly to (8a), does not constitute evidence against the agentivity account of GenNeg assignment to arguments of intransitive verbs.

At the same time, it should be noted that similarly to the unaccusativity hypothesis, this analysis fails to account for the unacceptability of the sentences in (6), which contain unaccusative non-agentive verbs and genitive arguments.

To sum up, a more detailed investigation of the issue is needed which is beyond our current purposes; however, the evidence provided in this section suggests that the unaccusativity approach to GenNeg may not be correct. The approach to Irrealis Genitive proposed in this dissertation does not depend on the adequacy of this analysis, since it focuses on the semantics and pragmatics of the alternations in Case, rather than on the syntactic configurations involved. The analysis does provide an explanation for the incompatibility of GenNeg assignment and agentivity, however. It will be proposed in Chapter 4 that Irrealis Genitive Case can only be assigned in the absence of existential commitment (although the latter notion will have to be appropriately modified). In turn, even in a negative sentence, an agent is typically presupposed to exist. In order for a person to do something *on purpose*, that person, obviously, has to exist. In order for a person *not to do something* on purpose, the person has to exist as well. Only an individual that exists can make a decision not to act¹⁰. Given that GenNeg as an instantiation of Irrealis Genitive is incompatible with existential commitment, it is predicted to be incompatible with agentive NPs. Thus,

the fact that genitive arguments are consistently non-agentive is predicted under the proposed analysis. It is also expected under the Perspectival Structure approach. An agent is definitely likely to function as Perspectival Center and, therefore, to be encoded by a nominative NP.

Chapter 3. Subjunctive Mood

The analysis of Irrealis Genitive that will be proposed in this study is based to a large extent on the approach to subjunctive mood developed in Farkas (2003). Therefore, before turning to the analysis of Irrealis Genitive, I will discuss semantic and pragmatic properties of the subjunctive and review Farkas' approach to this phenomenon. According to her account, subjunctive clauses are strongly associated with the absence of commitment to either truth or falsity of the proposition they contribute. Then, in the next chapter, I will turn to Irrealis Genitive and demonstrate that the restrictions imposed on its usage are essentially identical to the ones that delimit the usage of subjunctive mood, the only difference stemming from the fact that mood is sensitive to the interpretation of a clause and Case, of an NP.

1. Subjunctive Mood: An Introduction

Subjunctive mood is found in a variety of languages, including Romance, Germanic and Slavic languages. It has often been claimed to be associated with an irrealis interpretation (see Palmer (2001), Giorgi and Pianesi (1997), among others). While the notion of *irrealis* is quite vague, the term clearly relates to a state of affairs that differs from *reality*, i.e. it is associated with versions of reality that deviate from the actual state of affairs. As stated in Mithun (1999), “The realis portrays situations as actualized...knowable through direct perception. The irrealis portrays situations as purely within the realm of thought, knowable only through imagination.” (Mithun (1999:173), also quoted in Palmer (2001)). This essentially demonstrates that the term *irrealis* is strongly related to such notions as modality, intensionality and non-veridicality. We will see in what follows that the contrast between realis and irrealis is not sufficient to determine the mood of a clause. Still, subjunctive mood is indeed licensed in a variety of intensional and non-veridical environments, as demonstrated in (1) for Romanian, in (2) for French and in (3) for Spanish ((3b) and (3c) are taken from Gonzales-Fernandes et al. (1991:282)).

1 a. E posibil ca Ana să fie acasă.

Is possible that Ana SUBJ be home

It is possible that Ana is at home.

(Farkas 1985:81)

- b. Vreau ca Ana să vină cu noi.
 want(1st sg) that Ana SUBJ comes with us
 I want Ana to come with us. (Farkas 1985:80)
- c. În România nu există oameni care să creadă în el.
 in Romania NEG exist people who SUBJ believe in him
 In Romania there are no people who believe in him. (Farkas 1985:128)
- 2 a. J'exige qu'il soit puni.
 I demand that he be(subj3rd sg) punished
 I demand that he be punished. (Kendris 1996:xix)
- b. Soyez à l'heure!
 Be(subj2nd pl) at the-hour
 Be on time! (Kendris 1996:xix)
- c. Il est possible qu'il vienne.
 It is possible that he come(subj 3rd sg)
 It is possible that he will come. (Kendris 1996:xx)
- 3 a. Si tuviera dinero, iría al teatro.
 If have(subj1st sg) money go(potencial 1st sg) to-the theatre
 If I had money, I would go to the theatre.
- b. Hoy saldré por la tarde para que puedas quedarte
 today leave(fut 1st sg) in the afternoon for that can(subj2nd sg) stay(imp 2nd sg)
 solo...
 alone
 I will leave this afternoon so that you can stay alone.
- c. Quizás usted tenga razón.
 perhaps you have(subj 3rd sg) sense
 Perhaps you are write.

As exemplified above, the subjunctive is acceptable in sentences containing modal predicates (1a, 2c, 3c), following a propositional attitude verb (1b, 2a), in clauses embedded under negation (1c), in the antecedent counterfactual conditionals (3a), in purpose clauses (3b) and in imperative sentences (2b) (this list of environments is not exhaustive).

In contrast to Romance languages, Russian lacks a separate subjunctive morphology. However, it exhibits counterfactual clauses which contain a counterfactual particle *by* or a counterfactual complementizer *čtoby* in combination with either past tense or infinitival form of the verb. The two latter options are demonstrated in (4).

4 a. Lena kupila trenera čtoby ty zanimalas' sportom.

Lena bought trainer that-subj you engage(past) sports

Lena bought a trainer in order for you to do some sports.

b. Lena kupila trenera čtoby zanimat'sja sportom.

Lena bought trainer that-subj engage(Inf) sports

Lena bought a trainer in order to do some sports.

It should be noted that past tense morphology in counterfactual clauses does not correspond to semantic past tense. Thus, for example, in (4a), the event encoded by the embedded clause is supposed to take place after the buying event –which, in turn, follows the speech time. (A detailed discussion of the semantics of past tense morphology and its usage in counterfactual sentences can be found in Iatridou (2000).)

Although, as stated above, subjunctive morphology is absent in Russian, counterfactual clauses with past tense morphology are parallel to subjunctive clauses in Romance languages in terms of both their distribution and semantic contribution. In addition, in the linguistic literature related to this phenomenon, the construction is often referred to as involving subjunctive mood (e.g. Partee and Borshev (2007), Borshev et al. (2007)). Therefore, in what follows, I will refer to these clauses as exhibiting subjunctive mood, although this terminology is debatable.

The semantics of subjunctive mood and cross-linguistic variation in respect to this phenomenon has received much attention in the linguistic literature. For instance, Farkas (1985) and Giorgi and Pianesi (1997) propose modal approaches to the subjunctive. In contrast, Schlenker (2004) argues that the subjunctive lacks a unifying semantics and rather constitutes the “elsewhere” mood which is used whenever an alternative form (e.g. indicative or imperative) is for some reason inappropriate. In the next section I review the analysis of the subjunctive that has been proposed by Farkas

(2003). This approach is especially important for our current purposes since it places substantial weight on the notion of commitment to the truth of a proposition, a notion which, in turn, is strongly related to that of existential commitment.

2. Farkas (2003): The [+/-Decided] Feature

2.1. The Choice of Mood

Farkas (2003) discusses the mood of complement clauses. She demonstrates that in Romanian, some propositional attitude predicates take subjunctive complement clauses, whereas others require that their complement be indicative. Subjunctive mood is licensed by desideratives (e.g. *want* and *wish*) and directives (e.g. *command* and *ask-for*), as is exemplified in (1b) above and (5) below:

5. Maria i-a cerut lui Ion să-i scrie. (Farkas 2003:2)
Maria cl-has asked dat Ion subj-cl write(subj)
Maria asked Ion to write to her.

In turn, indicative clauses are taken by epistemic predicates, such as *believe* and *know* (6), predicates of assertion, such as *say*, and fiction predicates (e.g. *dream*, *imagine*).

6. Maria crede / știe că Ion i-a scris. (Farkas 2003:1)
Maria believes / knows that Ion cl-has(ind) written
Maria believes / knows that Ion wrote to her.

Farkas provides an analysis of subjunctive mood that is formulated within the framework of dynamic semantics. She proposes that mood distribution is sensitive to the Context Change Potential (CCP) of a clause, a notion that is employed in Heim (1992). For the sake of simplicity, let us define context as a set of possible worlds that are compatible with the beliefs shared by discourse participants, W_c (for details, see Section 4 in the Introduction). When a new utterance is made, it changes the previously established context in a certain way. In the simplest case of a main assertion, the speaker proposes to change the context so that it comes to contain the proposition she is making. The change is formalized in (7):

7. $W_{c'} = W_c \cap p$ (Farkas 2003:4)

This is an *assertive context change*. The speaker proposes to change context from c to c' , and the output context constitutes an intersection of the input context and φ (where p is the propositional content of φ , the set of worlds in which φ is true). Those worlds that are compatible with c but in which φ is false are thus excluded from the output context. (8) constitutes a definition of an assertive context change:

8. $c + \varphi$ is assertive iff $W_{c'} = W_c \cap p$, where c' is the output context. (Farkas 2003:5)

If the CCP of a clause is assertive, this means that its propositional content is assertively added to the context in the way represented in (8). This is the case with matrix assertions.

According to Farkas, complement clauses have their own CCP whose properties are determined by the matrix predicate. For instance, the verb *believe* introduces an embedded context that represents the epistemic state of the subject. In the possible worlds terminology, this state can be formalized as a set of all possible worlds that conform to the subject's vision of reality. Following Farkas, I will represent this set as $E^{i,w}$, where i is the individual referred to by the subject NP and w , the world in which the beliefs of i are asserted to hold (by default, w_0). A proposition contributed by the complement clause of *believe* is assertively added to this set of worlds; namely, the output embedded context comes to be restricted to only those worlds in which the embedded proposition is true. The sentence asserts that $E^{i,w}$ (the epistemic state of the subject) contains only those worlds in which the embedded proposition holds.

The choice of mood, Farkas argues, is affected by two semantic features of the CCP of the embedded clause: +/-Assert and +/-Decided. A clause is +Assert iff its CCP is assertive, namely, iff its propositional content is assertively added to the input context in the way represented in (8) above.

In turn, the conditions under which a clause is *decided* are provided in (9).

9. Let W_i be a set of worlds, and S a sentence with propositional content p ,

(i) S is positively decided in W_i iff $W_i \subset p$.

(ii) S is negatively decided in W_i iff $W_i \cap p = 0$.

(iii) S is decided in W_i iff either (i) or (ii); otherwise S is undecided in W_i .

Thus, essentially, S is decided iff it is in one way or other determined either that it is true or that it is false in the given set of possible worlds. S is undecided iff the output context does not determine its truth or falsity in the worlds in question. It follows that if the CCP of a sentence is +Assert, it is also obligatorily +Decided. (If a proposition denoted by the clause is asserted to be true in a certain world, then, trivially, it is decided in that world.) However, if it is –Assert, it can still be either +Decided (for instance, if its truth is not asserted but presupposed) or –Decided (if it is neither asserted nor presupposed). Predicates whose complements exhibit the different CCP properties will be exemplified immediately after the analysis proposed by Farkas (2003) is formulated.

Farkas further proposes that the following two constraints hold cross-linguistically:

10 a. *SUBJ / +Decided

b. *IND / –Assert

(10a) rules out subjunctive complement clauses whose CCP is +Decided. Thus, a clause is expected to appear in the subjunctive mood only if its truth or falsity is not decided (and, thus, neither entailed nor presupposed). (10b), in turn, rules out indicative complement clauses whose CCP is –Assert. Thus, unless any additional factors interfere, as will be mentioned after a number of examples are discussed, an indicative complement clause contributes a proposition that is asserted to be either true or false in the worlds belonging to the embedded context set.

2.2. Classes of Propositional Attitude Predicates

This analysis accounts for the mood distribution in clausal complements of various groups of verbs discussed by Farkas.

2.2.1. Epistemic Predicates

For instance, such epistemic predicates as *believe* and *know* take indicative complements in Romance languages, as well as in Russian, because the proposition contributed by the embedded clause is asserted to be true in the worldview of the subject, as already stated above. Thus, it is assertively added to the embedded context. For instance, (11) entails that in every possible world which conforms to Mary's worldview (namely, every world within E^{m,w_0}), it holds that a unicorn entered Mary's house. The fact that the embedded proposition is assertively added to this particular set of worlds is due to the semantic properties of the verb *believes*.

11. Mary believes that a unicorn entered her house.

Thus, such verbs as *believe* introduce an embedded context in which their complement is asserted to hold. The CCP of the complement clause is therefore +Assert. As a result, indicative mood is perfectly acceptable. In contrast, the subjunctive is ruled out by (10a) since, being +Assert, the CCP is also +Decided.

(The difference between *believe* and *know* is that the latter also triggers a presupposition that its complement is true and, thus, the embedded clause is also positively decided relative to the superordinate context.)

2.2.2. Fiction Predicates

Fiction predicates, such as *dream* and *imagine*, also take indicative complements. These verbs introduce fictional embedded contexts, and the embedded proposition is indeed asserted to be true in such a context. For instance, consider the sentence *John imagined that he was on the Moon*. Here, the embedded context does not represent John's, or anyone else's, beliefs about reality but rather, roughly speaking, constitutes a world (or a set of worlds) that conforms to what John imagines at the temporal interval encoded in the sentence. The sentence asserts that the proposition *John is on the Moon* is true in this world. More generally, complements of verbs belonging to this group constitute an assertion about the possible worlds that represent a certain fictional context. Therefore, the CCP of the complement is +Assert.

2.2.3. Desiderative Predicates

In contrast, desideratives, such as *want* and *wish*, and directives (*order*, *request*) license subjunctive mood. Farkas states that clausal complements of these predicates are not assertively added to an embedded context; they are not asserted to hold in any given possible world. Farkas assumes the approach to desideratives proposed by Heim (1992). Heim argues against Hintikka-style view according to which these verbs introduce an accessibility relation to the subject's want-worlds, i.e. worlds in which all the wishes of the subject are realized. (Had this been the case, we would have to conclude that the propositional complement of these verbs is indeed assertively added to the embedded context: it would be entailed that the embedded proposition is true within the want-worlds of the subject.) An important piece of evidence against this view comes from the fact that an individual may hold contradictory wishes. For instance, Heim points out that (12) may be true even if, in those worlds that conform to everything the speaker desires, she does not teach at all.

12. I want to teach Tuesdays and Thursdays next semester. (Heim 1992:195)

By analogy with an individual's epistemic state, the set of worlds compatible with everything the subject desires should constitute an intersection of all the propositions that represent the wishes of the subject. If an individual has contradictory wishes, which is definitely possible, as illustrated above, the set of her want-worlds follows to be empty. This is clearly an undesirable and counterintuitive result, since the individual clearly does have wishes.

For further evidence against representing the context embedded under desiderative predicates as a set of an individual's want-worlds, see Heim (1992). Crucially for our purposes, Heim rejects this view and proposes an alternative on the following line. Verbs like *want* introduce an accessibility relation to the epistemic state of the subject, similarly to *believe*. Thus, the embedded context set is identical for the two types of verbs. However, the complement of the desiderative, unlike the complement of *believe*, is not asserted to hold in these worlds. Thus, *John wants to find a unicorn* clearly does not assert that the proposition *John finds a unicorn* is true in every possible world that conforms to John's vision of reality. Rather, desiderative predicates trigger a world ranking: For every world w' that belongs to the embedded

context, the worlds maximally similar to w' in which the embedded proposition is true are ordered higher than those worlds maximally similar to w' in which it is false. This approach to the meaning of *want* is formally represented in (13). (The formulation is taken from Heim (1992:193), with a slight change in the formalism in accordance to the framework adopted in this chapter.)

13. 'a wants φ ' is true in w iff

for every $w' \in E^{a,w}$:

every φ -world maximally similar to w' is more desirable to a in w than any non- φ -world maximally similar to w' .

According to this view, the sentence *John wants to find a unicorn* roughly asserts that, as far as John is concerned, those worlds, maximally similar to reality, in which the proposition *John finds a unicorn* is true are ranked higher than the ones in which it is not. Essentially, this means that worlds in which the embedded proposition holds are more desirable in John's view than the ones in which it does not.

Crucially, as pointed out by Farkas (2003), this analysis predicts that the context change triggered by a complement of a desiderative predicate is not assertive but rather evaluative. The CCP is \neg Assert and, moreover, it is \neg Decided, as the complement clause is neither entailed nor presupposed to be true in the embedded context set. As a result, subjunctive mood is licensed, whereas the indicative is ruled out by (10b).

2.2.4. Directive Predicates

As pointed out by Farkas, directive predicates, similarly to desideratives, do not trigger an assertion that their complement holds in any given world. Rather, sentences with these verbs report the subject's attempt to shape the future. Farkas does not provide a detailed analysis of these predicates, nor is this a purpose of the present work. However, I believe that for our current purposes, we can assume that directives, not unlike desideratives, trigger a certain type of world ranking. As stated above, they report the subject's attempt to shape the future, and presumably, those possible worlds which are maximally close to the subject's vision of reality and in which the future is shaped in the way demanded by the subject are ranked higher in her view than the

worlds that are shaped differently. Thus, we deal with a ranking of the worlds that constitute a future development of reality, the ranking being anchored to the subject of the sentence. (It should be noted that the ranking is not of exactly the same nature as in the case of the verb *want*. See note 11 for details.) For instance, *John orders Mary to leave* entails that those possible worlds which are maximally similar to John's current vision of reality and in which Mary leaves are ranked higher according to John than the ones where she does not. Further investigation of the semantics of directives will not be undertaken below. Crucially, these predicates do not introduce any given set of worlds about which an assertion is made. Rather, similarly to desideratives, they introduce an accessibility relation to a set of epistemic alternatives, and trigger some kind of world ranking. We can therefore conclude that the CCP of complement clauses of directives is not assertive and, therefore, indicative mood is ruled out, and the subjunctive surfaces.

To sum up thus far, propositional attitude verbs can be divided into two classes. Verbs belonging to one class, e.g. *believe*, trigger an assertion that their complement is true in an embedded context set, i.e. in a certain set of possible worlds that is introduced in the sentence. The second class contains verbs whose complement clause is not asserted to be true in a given set of accessible worlds but rather is related to world ranking. Following the terminology in Farkas (2003), I will refer to the verbs belonging the first class as *strong intensional predicates* and to the ones belonging to the second class as *weak intensional predicates*¹¹. The latter but not the former license subjunctive mood.

2.2.5. Subjunctive Mood and the [+Decided] Feature

Farkas also discusses cases in which one of the rules in (10) has to be violated. This happens when a complement clause is –Assert and +Decided and, thus, if both constraints were followed, neither indicative nor subjunctive mood would be possible. This is the case of clausal complements of factive-emotive predicates, such as *glad*. Such clauses are not asserted to be true, but they are presupposed and, therefore, +Decided. In order to account for such instances, Farkas proposes an OT framework, according to which each language specifies a ranking of the rules in (10). If (10a) is ranked higher than (10b), then a complement of a factive-emotive predicate will appear in the indicative mood, so that (10b) will be violated. This is what happens in

Romanian. If, in contrast, (10b) is ranked higher, then a complement of such a predicate will be subjunctive, as is the case in French. It can thus be concluded that the constraints in (10) do not always hold. Rather, they are abided unless they come into a conflict with a different rule which is ranked higher in the given language. However, this is not going to be relevant for the purposes of this study, since in Russian, similarly to Romanian, (10a) is ranked higher than (10b). Thus, in both these languages, subjunctive mood is possible only in the absence of the +Decided feature, i.e. only in the absence of a commitment to truth (or falsity) of a clause.

2.3. Subjunctive Mood in Other Environments

Although Farkas discusses in detail only clausal complements of verbs, her analysis can be extended to mood choice in other environments as well. A development of such an analysis is beyond the purposes of this dissertation; as Farkas points out, such a detailed account would have to deal with other mood options than the indicative and the subjunctive (for instance, it will have to cover the infinitive and the imperative). However, I believe that the strong relation between subjunctive mood and the –Decided feature can be observed even at this stage. Below, I briefly discuss how this relation is exhibited in a number of environments.

2.3.1. Counterfactual Conditionals

For instance, the –Decided feature probably characterizes the antecedent of counterfactual conditionals, which appears in the subjunctive in a number of languages, including Spanish and Russian. The speaker is clearly not committed that the antecedent of such a conditional is true in any given possible world. She only provides certain information about those possible worlds in which the proposition holds, without being committed that it holds in any particular world in the context set. In this sense the antecedent of a counterfactual conditional is somewhat similar to a complement clause of a desiderative predicate. In fact, the analysis of desideratives developed by Heim is based on previous approaches to conditional sentences. And indeed, in both types of clauses, subjunctive mood is licensed in a number of languages.

However, counterfactual conditionals may pose a problem to the analysis since the antecedent is normally assumed to be false in the actual world. Thus, it seems to be

negatively decided and, therefore, +Decided. There are two ways to deal with this problem. Firstly, even if the clause is indeed +Decided, it is still –Assert, since it is not *asserted* to be false in the actual world. The former feature rules out the subjunctive, the latter, the indicative. If the restriction on the indicative (10b above) is ranked higher in the language than the one on the subjunctive (10a), the subjunctive mood will surface. Secondly, and, I believe, more relevantly in this case, it has been claimed that the antecedent of a counterfactual conditional is not decided to be false. Thus, consider the sentence in (14), Anderson’s example discussed in Schlenker (2004:6):

14. If the butler had done it, we would have found just the clues which we in fact found.

Here, the antecedent is certainly not assumed to be false; the sentence, in fact, suggests that it might be true. This demonstrates that the antecedent of a counterfactual conditional is not, in fact, decided to be false in the actual world and, thus, it can be maintained to be –Decided, which accounts for the use of subjunctive mood.

2.3.2. Imperative Sentences

In addition, subjunctive mood is used in imperative sentences in Romanian. Farkas points out that imperative sentences are similar in terms of the properties of their CCP to complements of directive predicates, which have been discussed above. In both cases the CCP is not assertive, as the relevant proposition is not asserted to be true in any given context set. Rather, we deal with an attempt to shape the future in a certain way. Thus, we deal with clauses that are –Decided. (It should be pointed out that the subjunctive does not surface in imperatives in many languages as a result of the existence of the special imperative mood, which is apparently preferred over the other options.)

2.3.3. Exclamative Sentences

Also, subjunctive is found in exclamative sentences of the type demonstrated in (15) for French and in (16) for Russian:

15. Que Jean soit malade de la tuberculose en 2003! (Schlenker 2004:9)
 That Jean be(subj) sick with the tuberculosis in 2003
 For Jean to be sick with tuberculosis in 2003!
16. Čtoby Dima zabolet tuberkuljozom v 2003!
 That-subj Dima get-sick(past) tuberculosis(instr) in 2003
 For Dima to get sick with tuberculosis in 2003!

The CCP of such clauses is clearly –Decided. They can be uttered as a reaction to a fact that is known by the speaker to hold in reality. However, alternatively, at least in Russian, such a sentence can be used to demonstrate the speaker’s disbelief in a certain claim and, thus, her lack of commitment. Thus, in terms of their semantics, such exclamative sentences are neither positively nor negatively decided, and this accounts for the use of the subjunctive mood.

2.3.4. Negation

Finally, and especially importantly for our purposes, subjunctive mood is sometimes licensed in embedded clauses in the presence of matrix negation. This pattern is illustrated in (17) for French and in (18) for Russian. The (a) sentences show that in the corresponding affirmative clauses, the subjunctive is not acceptable.

- 17 a. *Je pense que Jean écrive la lettre.
 I think that Jean write(subj 3rd sg) the letter
 I think that Jean will write the letter.
- b. Je ne pense pas que Jean écrive la lettre.
 I NEG think that Jean write(subj 3rd sg) the letter
 I don’t think that Jean will write the letter.
- 18 a. *Ja pomnila, čtoby my ob etom govorili.
 I remember(past) that-subj we on this speak(past)
 I remembered that we had talked about this.
- b. Ja ne pomnila, čtoby my ob etom govorili.
 I NEG remember(past) that-subj we about this speak(past)
 I didn’t remember our talking about this.

Consider the example in (17). The unacceptability of (17a) is not surprising, given that *think*, as discussed above, is a strong intensional verb. In an affirmative sentence, the CCP of its complement is +Assert, since the propositional content of the clause is assertively added to the embedded context. The sentence entails that the embedded proposition is true in the possible worlds that belong to the set $E^{Sp,w}$ (where *Sp* stands for the speaker). Matrix negation, however, changes the relevant interpretational components of the sentence in an important way. In (17b), it is no longer asserted that the proposition *Jean will write the letter* holds in every possible world that conforms to the speaker's beliefs. Rather, the state of affairs whereby the letter will not be written is now perfectly compatible with her vision of reality (although not strictly obligatory either¹²). Thus, the CCP of the embedded clause is –Decided, a factor that licenses subjunctive mood¹³.

To conclude, it is possible to extend the analysis proposed by Farkas to environments other than complement clauses. According to this analysis, subjunctive mood is normally incompatible with the +Decided feature. Thus, subjunctive clauses are characterized by the feature –Decided, unless this norm is overruled by a different restriction. In this case, the ranking of the rules on the lines of the OT framework will determine the mood of the clause.

2.4. A Summary

Below, I briefly summarize those parts of the above discussion that are going to be especially relevant for the analysis of Irrealis Genitive to be proposed in the next chapter. It will be argued that the assignment of this Case is subject to a restriction that is very close to the one imposed on subjunctive mood. For this reason, in what follows, I will adhere to terminology that can be applied to the semantics of NPs as well as of clauses. I will therefore focus on such notions as possible worlds and accessibility relations, rather than embedded context and CCP, since the former can be more easily used to capture the contribution of nominal complements. In other words, the analysis proposed below is not formulated within the framework of dynamic semantics.

As argued by Farkas (2003), unless additional restrictions intervene, subjunctive mood is licensed in the presence of the –Decided feature. I believe that, within a

framework that allows us to deal with NPs as well as clauses, we can interpret this restriction in the following way. The proposition contributed by a subjunctive clause is neither entailed nor presupposed to be true (or false) in either the actual world or any alternative set of worlds that is made accessible by an intensional operator the sentence contains (e.g. in a context embedded under a propositional attitude verb). Thus, the usage of subjunctive mood signals lack of commitment to a particular truth value of the embedded proposition. (I believe that in most cases, it is commitment to truth that is important, commitment to falsity becoming relevant mainly with such verbs as *deny* and *doubt*.) This association between subjunctive mood and lack of commitment, not only relative to w_0 but also regarding alternative accessible versions of reality, also follows from discussion in Schlenker (2004). Schlenker claims that subjunctive is the "elsewhere" mood, which is licensed whenever the alternative mood options are unavailable. However, he assumes, partly building on Farkas (2003), that the indicative mood contributes a commitment to a particular truth value of the proposition on somebody's part (possibly but not necessarily the speaker's). Therefore, in the context of the subjunctive/indicative opposition, the subjunctive naturally becomes strongly associated with the absence of such a commitment.

We have also seen that the set of operators that license subjunctive mood includes both negation and propositional attitude verbs. Further, propositional attitude verbs can be divided into two groups: strong and weak intensional predicates. Strong intensional predicates include, among other classes, epistemic verbs (e.g. *believe*) and fiction verbs (*imagine*); the embedded proposition is entailed to be true in a set of possible worlds that is introduced by these verbs. For this reason, their complement clause is obligatorily indicative. In turn, weak intensional predicates include desideratives and directives. The complement of these verbs is not asserted to hold in any given version of reality – neither in w_0 nor within the epistemic state of the subject, although at least some weak intensional verbs do introduce an accessibility relation to the set of worlds that represents this state. Instead, they involve world ranking and/or an attempt to shape the future. Crucially, commitment to the truth of the proposition embedded under these verbs is absent, and, therefore, the embedded clauses appear in subjunctive mood.

In the next chapter, it will be argued that Irrealis Genitive Case is subject to essentially the same restriction as subjunctive mood, although the former is sensitive to the properties of an NP and the latter, of a clause. Subjunctive mood signals the absence of commitment to the truth (as well as falsity) of the proposition denoted by a clause – in any given accessible world introduced in the sentence. Analogously, Irrealis Genitive is only licensed in the absence of commitment to existence – again, not only in w_0 but also relative to any alternative version(s) of reality that are introduced by an intensional operator, including an epistemic state of the subject. Thus, under this approach, we can conceive of Irrealis Genitive Case on NPs as a counterpart of subjunctive mood on clauses.

Chapter 4. Irrealis Genitive Case and Existential Commitment

1. Preview

Two points have been made in Chapter 1 regarding the relation between Irrealis Genitive Case and existential commitment (EC). On the one hand, the absence of the latter constitutes an important property that consistently characterizes NPs that appear in Irrealis Genitive. This Case is only licensed by operators that can cancel existential commitment. On the other hand, EC is insufficient to account for the genitive/accusative alternation under discussion. Not only is it *possible* for accusative NPs not to carry EC; sometimes an NP that lacks such a commitment *obligatorily* appears in accusative Case. In other words, absence of commitment to existence per se does not guarantee the availability of Irrealis Genitive. This is demonstrated by the unacceptability of such examples as (1):

- 1 a. Maša predstavljajet (sebe) burju / *buri.
Masha imagines herself storm(acc sg)/(gen sg)
Masha imagines / is imagining a storm.
- b. Dima ždjot rusalku / *rusalki.
Dima waits mermaid(acc sg)/(gen sg)
Dima is waiting for a mermaid.

The sentences in (1) contribute to a further puzzle regarding the licensing of Irrealis Genitive. In particular, some intensional verbs, such as *predstavljat'* (imagine), *never* take genitive objects, despite the fact that they do cancel EC. In contrast, other intensional predicates, such as *ždat'* (wait), do license the assignment of Irrealis Genitive (2), although the conditions under which this Case becomes acceptable remain at this point mysterious.

2. Dima ždjot čuda.
Dima wait miracle(gen sg)
Dima is waiting for a miracle.

What is the relevant contrast between (1b) and (2) that accounts for the difference in Case-assignment? What is the property that unifies (1b) and (1a) (and any other sentence that contains the verb *predstavljat'*), and distinguishes these examples from (2)? After all, in all these cases, the object NP is interpreted within the scope of an intensional predicate, receives an indefinite, non-specific interpretation and lacks EC.

Below, I will propose that the puzzles introduced above are accounted for once we assume that the assignment of Irrealis Genitive is, in fact, crucially dependent on the absence of EC. However, in order to capture the Case-assignment pattern in question, the notion of commitment has to be appropriately modified. In particular, I propose that Case-marking is sensitive to existence not only in the actual world (to which the notion of EC is typically restricted) but also in any accessible possible world that is made salient in the sentence (in a way to be specified below). In this sense, Irrealis Genitive Case is parallel to subjunctive mood in the clausal domain, given that the latter is sensitive to commitment to truth in such worlds. In order to capture this modified notion of EC, I will introduce a distinction between two types of commitment to existence: Absolute Existential Commitment (AEC) and Relative Existential Commitment (REC). The former constitutes commitment to existence in the actual world. The latter term is more inclusive since, in addition to EC relative to the actual world, it comprises EC relative to alternative versions of reality that stand to w_0 in an accessibility relation contributed by the operators the sentence contains. For instance, REC includes commitment to existence in the worlds that represent the beliefs of the subject in sentences that contain such verbs as *believe* or *want*.

It will be proposed in this chapter that Irrealis Genitive Case can be assigned only to those NPs that are not characterized by REC. This accounts both for the correlation between genitive Case-marking and the absence of EC observed above and for the fact that the notion of existential commitment in the traditional sense of the term (i.e. AEC) is insufficient to account for the genitive/accusative alternation. In addition, the proposed restriction on the usage of Irrealis Genitive accounts for the puzzles posed by the sentences in (1) and (2). The relevant contrast between such verbs as *imagine* and *wait* results from the fact that the former is a strong intensional predicate and the latter, a weak one. Subjunctive mood is only licensed by intensional verbs of the latter type; it will be argued below that the same holds for Irrealis Genitive. Strong

intensional verbs introduce an accessibility relation to a certain set of worlds (e.g. worlds that form a fictional context in the case of *imagine*), and their nominal complement always carries EC relative to these worlds. In contrast, weak intensional predicates, which typically introduce an accessibility relation to the worlds representing the epistemic state of the subject, need not trigger EC relative to these worlds. Thus, (1a) above entails the existence of a storm in the possible world(s) that conform to Masha's imagination. In contrast, the object NP in (2) lacks REC: the verb introduces the set E^{d,w_0} (the set of worlds that conform to Dima's vision of reality), but the (relevant) miracle is neither entailed nor presupposed to take place in these worlds. Dima is certainly not committed to the view that the miracle has already taken place or is taking place at the time of waiting, which, it will be argued, means that EC is not present.

The REC restriction also makes it possible to capture the contrast between such sentences as (2) and (1b), which contain weak intensional verbs. While in (2) REC is indeed absent, as pointed out above, the state of affairs in (1b) is different. In particular, (1b) does involve a certain type of EC, given that according to this sentence, John believes in the existence of mermaids – existence at the time at which the belief is being held. Otherwise, he would be certainly unlikely to be waiting for one. In other words, the object NP in (1b) carries EC relative to the set E^{d,w_0} , which is introduced by the intensional verb. As a result, the assignment of Irrealis Genitive is ruled out. I will demonstrate that sentences that contain weak intensional verbs and nominal complements should be divided into two groups according to their interpretational properties. One group, exemplified by (1b), contains NP complements that carry EC relative to the actual world and/or to the worldview of the subject and, therefore, normally appear in accusative Case. Complements in the other group lack not only AEC but also REC and, therefore, appear in Irrealis Genitive (2).

It will thus be demonstrated below that the sensitivity of Irrealis Genitive to REC accounts for the distribution of this Case on complements of intensional verbs. In the next chapter, it will be shown that this restriction also accounts for the distribution of Irrealis Genitive under negation, the semantic properties of genitive objects, and a number of properties that this Case appears to share with subjunctive mood.

2. Irrealis Genitive Case and REC

In this section, I formulate a restriction on the assignment of Irrealis Genitive that is based on the notion of existential commitment. In order to do so, it is necessary first to discuss the different possible types of EC.

2.1. Absolute and Relative Existential Commitment

As demonstrated in the previous chapter, a sentence may involve assertions made not only about the actual world but also about alternative versions of reality introduced by a modal or intensional operator. This is what happens with propositions embedded under strong intensional predicates, which are asserted to hold in possible worlds that represent the embedded context set. Analogously, an NP may carry commitment to existence in the actual world or, in the presence of an appropriate operator, in alternative possible worlds.

By default, in the absence of an intensional or non-veridical operator, an NP carries commitment to existence in the actual world. For instance, (3a) entails and (3b) presupposes (3'), i.e. the existence of at least one green dog in w_0 . (In fact, (3b) also presupposes that the dog is unique, but I will not discuss this issue any further.)

- (3) a. Mary patted a green dog.
 b. Mary patted the green dog.
(3') $\exists x [\text{dog}(x) \wedge \text{green}(x)]$

I will refer to existential commitment of this type *Absolute Existential Commitment* (AEC). An NP carries AEC in the presence of an entailment and/or presupposition that it quantifies over a non-empty set in w_0 (or that it has a referent in w_0 , in the case of definite NPs). A formal definition of AEC is provided in (4) below¹⁴. I assume that a property contributed by an NP corresponds, in extensional terms, to the intersection of the sets denoted by the head noun (or the head noun together with its complement(s)) and by the modifiers, in case these are present. For instance, the property contributed by the NP *the black dog* is the property *black dog*, i.e. the intersection of the set of dogs and the set of black objects. Under the intensional interpretation, the property contributed by the NP *the black dog* is the function from possible worlds to sets of all black dogs that exist in these worlds. (Again, the value of

this property in any given world will be the intersection of the set of dogs and the set of black objects that exist in that world.) In case of proper names, I assume that we can also talk about a property they contribute, i.e. a property of being a particular individual. For instance, the proper name *John* contributes the property of being John.

4. Let S be a sentence with propositional content p. Let NP be a noun phrase that contributes the property P. Let w_0 be the actual world. Let \rightsquigarrow encode entailment and/or presupposition relation. Then an occurrence of an NP in S carries Absolute Existential Commitment iff

$$p \rightsquigarrow \exists x P(x, w_0)$$

Crucially, in the presence of a non-veridical or intensional operator, AEC can be cancelled. However, in most cases, it will be substituted by a commitment that the NP in question has a referent in some alternative possible world which is introduced in the sentence. For instance, consider (5), which contains a strong intensional verb *think*, which takes a clausal complement.

5. Mary thinks that a unicorn entered her house.

The sentence as a whole makes an assertion about the actual world: it is in the actual world that Mary is entailed to have a certain belief. (Within the context set framework, its function is defined somewhat differently: we would say that (5) as a whole restricts the matrix context set: it causes the output context set to contain only those worlds in which Mary holds the specified belief.) In addition, however, the sentence makes an assertion about a set of alternative versions of reality, in particular, the worlds that represent Mary's beliefs. (5) entails that in every possible world which conforms to Mary's worldview, it holds that a unicorn entered Mary's house. Within the possible worlds notation, this entailment can be represented as in (5')¹⁵:

$$5'. \forall w [w \in E^{m, w_0} \rightarrow \exists x [\text{unicorn}(x, w) \wedge \text{enter}(x, \text{Mary's-house}, w)]]$$

This semantics has important consequences for the interpretation of the indefinite NP. It can be seen that (5) does not entail the existence of a unicorn in w_0 . This results

from the fact that the embedded subject is interpreted within the scope of an intensional predicate. However, the sentence does entail that there exists at least one unicorn in all those worlds that are compatible with Mary's beliefs. Thus, (5') clearly entails (5''):

5''. $\forall w[w \in E^{m,w_0} \rightarrow \exists x [\text{unicorn}(x,w)]]$

The same verb that cancels existential commitment in w_0 introduces an alternative set of worlds relative to which EC is present.

An analogous example is provided in (6), which contains a possibility operator, as demonstrated in the logical form in (6'). Under its most natural reading, the sentence involves epistemic possibility and, out of context, is most likely to mean that there is at least one possible world compatible with what we know about reality in which the proposition *A unicorn has entered the house* is true.

6. A unicorn may have entered the house.

6'. $\diamond \exists x [\text{unicorn}(x) \wedge \text{entered}(x, \text{the-house})]$

Let us turn to the interpretation of the indefinite NP. Under the salient reading of the sentence, the NP is interpreted within the scope of the modal *may*. As a result, the sentence does not entail the existence of a unicorn in the actual world. However, the sentence involves quantification over a set of possible worlds, in this case, the set of epistemically accessible worlds. It entails that in at least one of these worlds, it is true that a unicorn entered the house. This, in turn, entails that in at least one of these worlds, a unicorn does exist. Thus, while EC relative to the actual world is absent, we do find commitment to existence in (an)other accessible possible world(s).

I will refer to existential commitment of this latter type as *Relative Existential Commitment* (REC). This is a commitment to existence in w_0 or in any alternative possible world that stands to it in an accessibility relation introduced in the sentence. (An accessibility relation may be introduced by a modal or intensional operator, e.g. a propositional attitude verb (*think, want*) or a modal verb (*should, may*).) In the

definition (7) below all such worlds are subsumed under the set W^S . Essentially, REC is commitment to existence in those possible worlds about which an assertion is being made in the sentence, or relative to which the sentence contains presuppositions. Presumably, at least by default, such an assertion is necessarily made about w_0 , since the maximal proposition contributed by the whole sentence is asserted to be true in the actual world. (For the sake of simplicity, I exclude from the discussion sentences that are interpreted as assertions not about reality but rather about an alternative reference world.) In addition, a sentence may involve entailments or presuppositions regarding other versions of reality – ones that are introduced by intensional operators, as discussed with respect to (5) and (6) above.

7. Let S be a sentence with propositional content p . Let NP be a noun phrase that contributes the property P . Let \sim encode entailment and/or presupposition relation. Then an occurrence of an NP in S carries Relative Existential Commitment iff

$$\exists w [w \in W^S \wedge p \sim \exists x P(x,w)]$$

The formula in (7) predicts that an NP that carries AEC obligatorily carries REC as well. The actual world is always by default included in the set W^S , and therefore, once commitment to existence in the actual world is present, it follows automatically that there is existential commitment relative to at least one world in W^S .

As illustrated in (5) and (6) above, in numerous cases, an NP that lacks Absolute Existential Commitment is still characterized by the relative one. However, within the scope of certain operators, even REC may be absent. Below, I will argue that Irrealis Genitive Case can be assigned only to those NPs that lack Relative Existential Commitment.

2.2. Proposal

It has been demonstrated in Chapter 1 that NPs that appear in Irrealis Genitive consistently lack AEC, but sometimes, even in the absence of such a commitment, this Case is unavailable. This, I propose, results from the fact that Irrealis Genitive can be assigned only in the absence of REC (which, of course, means AEC too must

be absent). An NP that lacks absolute commitment to existence but carries a relative one will not appear in the genitive Case.

First of all, it should be pointed out that both negation and the intensional verbs that license Irrealis Genitive can cancel REC of the direct object. Thus, consider the sentences in (8):

- 8 a. Mary is waiting for a miracle.
- b. Mary didn't find a solution to the problem.

(8a) does not entail the existence of the relevant miracle in the actual world, nor does it entail that the miracle has taken place within Mary's worldview, accessibility relation to which is presumably introduced by the verb *wait* (on the contrary, the fact that Mary is waiting for the miracle strongly suggests that she believes it has not yet taken place). Similarly, REC does not characterize the indefinite NP in (8b). Negation cancels AEC of the NP that is interpreted within its scope: the sentence does not entail that in the actual world, there exists a solution to the problem in question. In addition, the negative operator does not introduce an accessibility relation to any alternative possible worlds in which such a solution is entailed (or presupposed) to exist.

It can thus be observed that, unlike most intensional and non-veridical operators, negation and certain intensional verbs can cancel REC. This, I believe, explains the fact that Irrealis Genitive is licensed specifically by these operators. I propose that the assignment of Irrealis Genitive Case is subject to the restriction formulated in (9) below (essentially, a restriction that the NP to which it is assigned must lack REC).

9. An NP that appears in the direct object position¹⁶ in a sentence S may be assigned Irrealis Genitive Case iff

$$\neg \exists w [w \in W^S \wedge p \sim \exists x P(x,w)]$$

(where S, W^S , p and P are as in (7) above)

This restriction accounts for both the distribution and the semantic properties of genitive objects, as will be demonstrated in Section 3 of this chapter and in Chapter 5.

According to (9), the assignment of Irrealis Genitive is ruled out in the presence of existential entailment and/or existential presupposition. It should be pointed out, however, that, as we will see in Section 3.2, Case-assignment is also sensitive to a somewhat weaker version of REC, which is based on knowledge of the world, rather than being entailed or presupposed. We will see that Irrealis Genitive strongly tends not to be assigned in the presence of this type of REC, but certain exceptions are possible.

2.3. REC and the Property Type Hypothesis

We can now see that the proposed analysis is compatible with the Property Type Hypothesis, discussed in Chapter 2. According to this hypothesis, Irrealis Genitive is assigned only to property-denoting NPs (Partee and Borshev 2004, Kagan 2005). It should be noted that NPs that lack REC are indeed most likely to denote properties. An NP that encodes an individual in a given world, whether the actual one or not, bears commitment to existence *in this world*. However, property-denoting NPs neither refer to nor quantify over individuals; their semantics may be truly independent of existence in any version of reality. A property can be analyzed as a function from possible worlds to sets of individuals. Crucially, the value of such a function in any given world may be an empty set; this option is not eliminated. Thus, NPs that receive such an interpretation are expected not to carry REC, by virtue of their semantics.

2.4. Commitment and Time

Before we continue the discussion of Irrealis Genitive, one important point regarding the notion of commitment as it will be used below should be clarified. For the purposes of this study, I will analyze EC as commitment to existence at a restricted temporal interval. If, at a temporal interval *t*, an individual *A* is committed to the existence of an entity *X*, this means that, within those possible worlds that conform to *A*'s beliefs, *X* exists at *t* (below, I will refer to *t* as *attitude time*). Suppose, on the other hand, that *A* does not believe that *X* exists but thinks that *X* might come into existence at some point in the future. This state of affairs is not sufficient to assert that existential commitment is present. I believe that this restriction captures our intuitions regarding what it means for a person to be committed to the existence of an entity. In addition, as will be demonstrated below, Case-assignment appears to be sensitive to

EC relative to the time at which the commitment is held, and not regarding future possibilities accepted by the attitude holder¹⁷.

In this respect, I am diverging from Heim and Farkas' treatment of subjunctive mood and complement clauses of intensional predicates. In Heim' system, an important role is devoted to the attitude holder's belief that the proposition contributed by the embedded clause will come to be true in the future. Thus, consider (10) below.

10. Dima xočet, čtoby Lena ujexala.
Dima wants that-subj Lena leave(past)
Dima wants Lena to leave.

According to Heim, the properties of the verb *want* (and presumably *xotet'* in Russian) are such that there must be at least one world within the epistemic state of the subject in which the embedded proposition is true. Thus, according to (10), there is at least one world within Dima's epistemic state in which the proposition *Lena leaves* is true. Crucially, this proposition is most likely to become true in the future, i.e. at a temporal interval that follows speech time (which is also attitude time). In this sense, in Heim's system, commitment is not temporarily restricted in the same way as within the framework I am proposing for Irrealis Genitive.

There is an additional difference between my analysis of EC and Farkas' treatment of commitment to truth, which is interrelated with the distinction that has been discussed above. According to the analysis developed in this chapter, REC is absent only as long as there is no possible world in W^S in which the NP has a referent. In contrast, within the system developed by Farkas, a clause lacks commitment to truth (in the sense of not being positively decided) as long as the proposition is not true in *all* the worlds in the embedded context set. It can still be true in some of these worlds. Moreover, with some verbs, it even has to be, as discussed with respect to (10) above. It thus seems that commitment to truth means truth in all the worlds introduced by the intensional operator, whereas commitment to existence is satisfied by existence in at least one of these worlds. Consequently, lack of REC is a stronger requirement than lack of commitment to truth in the presence of subjunctive mood.

This does not mean, however, that the parallel between Irrealis Genitive and subjunctive mood is lost. Rather, the contrast in question results from the temporal restriction that I am imposing on REC (which is not imposed by Farkas on commitment to truth in the context of mood choice). It is relative to the attitude time that EC must be absent in *each* of the worlds in the embedded context. To illustrate, consider (11):

11. Dima ždjot čuda.

Dima wait miracle(gen sg)

Dima is waiting for a miracle.

Here, Irrealis Genitive is licensed because there is no possible world within Dima's epistemic state in which a relevant miracle is entailed to be taking place at (or to have taken place by) the speech time. The NP does not refer to (or quantify over) already existing object(s) in any given world in W^S .

It should be noted, however, that if REC was not temporally restricted, if it was allowed to include commitment to future existence, then the constraint on genitive Case-assignment would have to be weaker than the one represented in (9). It would be much closer to the constraint to which subjunctive mood is sensitive. Irrealis Genitive would be compatible with existential entailment relative to (the future development) of some worlds introduced by the intensional verb but, crucially, not relative to all of them. Thus, (11) does entail that there is a possible world within Dima's epistemic state in which the relevant miracle comes into existence in the future. At the same time, it is not entailed to come into existence in *all* these worlds. In this, temporally unrestricted, sense, EC-related properties of the object NP in (11) are very similar to commitment to truth facts exhibited by the complement clause in (10). The analogy between Irrealis Genitive and subjunctive mood is thus sustained.

Still, as already stated above, for the purposes of this study, it is essential to concentrate on the notion of EC as commitment to existence at the attitude time, i.e. EC cannot be future oriented. It is this, temporally restricted, version of EC that makes it possible to account for the alternation in Case. The intuitive idea is that genitive NPs (which must lack REC) do not pick up an individual that already exists

either in the actual world or in an alternative salient version of reality. Rather, an assertion is made about potential instantiations of the property contributed by the NP. Analogously, a subjunctive clause does not denote an event that actually took place (or is taking place) in w_0 or a world that represents an alternative view of reality. Rather, a sentence that contains such a clause involves a statement about any instantiation of a certain *event property*, or about a whole set of worlds in which the event is instantiated.

3. Intensional Predicates

Below, I demonstrate how the restriction on the assignment of Irrealis Genitive formulated in Section 2 accounts for the choice of Case on objects of intensional verbs. This issue has been briefly addressed in Section 1; below, the facts are discussed in more detail.

3.1. Case-Assignment and the Strong/Weak Distinction

3.1.1. Irrealis Genitive Is Licensed by Weak Intensional Verbs

As demonstrated above, genitive objects are not allowed by all intensional verbs. Thus, for example, the verb *ždat'* (wait) can take a genitive object, but the verb *predstavljat'* (imagine) cannot. Table 2 below contains a (definitely not exhaustive) list of Russian intensional verbs that take nominal complements. The verbs listed in the left column license Irrealis Genitive; the ones that appear in the right column, do not.

Table 2

Intensional Verbs that License Genitive Case-Assignment	Intensional Verbs that do not License Genitive Case-Assignment
<i>xotet'</i> (want), <i>želat'</i> (wish), <i>žaždat'</i> (thirst for) ¹⁸ , <i>trebovat'</i> (demand), <i>prosit'</i> (ask for), <i>ždat'</i> (wait), <i>oždat'</i> (wait, expect), <i>iskat'</i> (look for, seek), <i>izbegat'</i> (avoid), <i>zasluživat'</i> (deserve), <i>stoit'</i> (cost, be worth), <i>bojat'sja</i> (be afraid of)	<i>predstavljat'</i> (imagine), <i>voobražat'</i> (imagine), <i>izobražat'</i> (picture), <i>risovat'</i> (paint), <i>napominat'</i> (remind, resemble), <i>planirovat'</i> (plan), <i>predskazyvat'</i> (foretell), <i>predvidet'</i> (foresee), <i>obeščat'</i> (promise), <i>pridumyvav'</i> (invent, contrive)

Crucially, it turns out that all the verbs that appear in the left column license subjunctive mood, as illustrated in (12). In contrast, the clauses embedded under the verbs found in the right column are obligatorily indicative (13-14).

- 12 a. Ja xoču / trebuju / prošu, čtoby on prišol.
 I want / demand / ask that-subj he come(past)
 I want / demand / ask for him to come.
- b. Takaja krasavitza stoit, čtoby jejo ozolotili.
 such beauty costs that-subj her make-golden(past)
 Such a beauty deserves to be loaded with money.
 (from “Don Cesar de Basan”)
- c. Ona... ždiot, čtoby ja pervyj načal govorit’.
 She waits that-subj I first start(past) talk(Inf)
 She is waiting for me to be the first one to start speaking. (Internet)
- d. Stranno oždat’, čtoby u sovsem molodogo čeloveka byl...
 strange expect(Inf) that-subj at completely young man be(past)
 konservativnyj vkus
 conservative taste
 It is strange to expect a very young man to have a conservative taste. (Internet)
- e. ...ona izbegaet togo, čtoby jej nanesli ranu.
 She avoids that(gen) that-subj her inflict(past) wound
 She avoids a wound being inflicted to her. (Internet)
- f. Lena iščet čeloveka, kotoryj by jej pomog.
 Lena seeks man(acc) that subj her help(past)
 Lena seeks a man that would help her.
- 13 a. Ona predstavila / predvidela / predskazala / obeščala, čto eto slučitsja.
 She imagined / foresaw / foretold / promised that this happen(fut)
 She imagined / foresaw / foretold / promised that this will happen.
- b. * Ona predstavila / predvidela/ predskazala / obeščala čtoby eto slučilos’.
 She imagined / foresaw / foretold / promised that-subj this happen(past)
14. Lena risujet čeloveka, kotoryj sidit na kryše / *sidel by na kryše.
 Lena draws man(acc) that sits on roof / sit(past) subj on roof
 Lena is drawing a man that is sitting on a roof.

This similarity in distribution between subjunctive clauses and genitive NPs is too considerable to be accidental. Crucially, the facts summarized in Table 2 show that Irrealis Genitive Case, similarly to subjunctive mood, is licensed by weak intensional verbs but not by strong ones.

The fact that the verbs found in the left column constitute weak intensional predicates is supported by the fact that, as demonstrated above, they license subjunctive mood. In turn, the verbs in the right column do not allow the subjunctive, which suggests that they should be classified as strong intensional predicates. The same conclusions can be achieved if the semantics of the individual verbs present in the two columns is considered.

Descriptively, it can be noted that the left column of Table 2 consists largely of desiderative predicates (e.g. *xotet'* (want), *želat'* (wish), *žadždat'* (thirst for)) and directive verbs (e.g. *trebovat'* (demand), *prosit'* (ask for)). Some verbs do not seem to belong to either of these groups; still, it can be seen that in terms of their semantic properties, they pattern together with weak intensional predicates. For instance, the verb *zasluživat'* (deserve) does not introduce into the picture any particular set of possible worlds in which its complement holds. Thus, the sentence *John deserves receiving a medal* does not contribute a commitment that John receives a medal in any given version of reality. Rather, similarly to desideratives, the verb *deserve* appears to trigger some kind of world ranking, the anchor in this case being the speaker. According to the speaker, those worlds in which John receives a medal are ranked higher than the ones in which this does not happen. (Possibly not in terms of the speaker's desires but rather in terms of her view of justice.) Finally, it should be noted that the Romance equivalents of many of the verbs found in the left column are classified by Farkas as weak intensional predicates.

In contrast, all the verbs that appear in the right column contribute a commitment that their complement holds in some version of reality. For instance, *predstavljat'* (imagine), *risovat'* (paint), *izobražat'* (picture) constitute fiction predicates, which are classified by Farkas as strong intensional verbs. *Predvidet'* (foresee) contributes an assertion that its complement is true in the set of worlds that represents the vision of the future on the part of the subject. (I assume that here, we focus on the future, rather

than on the present, by virtue of lexical semantic properties of the verb. Essentially, we can say that it introduces a fictional context, not unlike *imagine*, but in this case, this embedded context represents the way in which the subject sees the future *now* (i.e. at the time of foreseeing), as if this was a performance the subject is watching or a state of affairs she is imagining.) *Obeščat'* (promise) clearly involves a commitment, even though not precisely of the same type as with the other strong intensional predicates discussed above. Still, there is a commitment that the complement of the verb is true in a certain set of worlds (say, the worlds that conform to the subject's obligations).

We have established above that Irrealis Genitive Case is licensed only by weak intensional predicates. This fact demands an explanation, to which I turn in the next section.

3.1.2. The Strong/Weak Distinction and REC

The sensitivity of Case-assignment to the strong/weak distinction is expected under the proposed approach to Irrealis Genitive. Verbs that contribute a commitment to the truth of their clausal complement in a certain set of worlds also trigger a commitment to the existence of their nominal complement in these worlds. Consider again the verb *imagine*. A clausal complement of this verb is asserted to hold in the worlds representing the subject's current imagination. If the verb takes an NP complement, it still introduces the same set of worlds, by virtue of its semantics. What the resulting sentence asserts is precisely the *existence* of the complement in this set of worlds. For instance, *John imagines a storm* entails that there is a storm in the possible world(s) that represent John's current imagination state. Thus, strong intensional verbs always introduce an accessibility relation to a certain set of worlds which constitutes an alternative to w_0 . If the verbs take a clausal complement, they contribute a commitment that the embedded proposition is true in these alternative worlds. For a nominal complement, they trigger a commitment to existence in these same worlds. Thus, strong intensional verbs do not really cancel existential commitment. They merely cause it to be shifted from the actual world to a set of alternative versions of reality. This means that REC is still present, and Irrealis Genitive is correctly predicted to be ruled out.

The case is different with weak intensional verbs. These predicates, similarly to strong ones, cancel commitment to existence in the actual world and introduce an accessibility relation to a set of alternative versions of reality, but EC relative to these versions of reality need not be present. As discussed in Chapter 3, typically, weak intensional verbs make accessible the set of worlds that conform to the worldview of the subject. Just as their clausal complements are not entailed to be true in this set of worlds, so their nominal complements need not carry existential entailment relative to it.

For instance, consider the following sentence:

15. Dima xočet / želajet, čtoby čto-nibud' izmenilos'

Dima wants / wishes that-subj something change(past)

Dima wants / wishes for something to change.

This sentence does not entail that the proposition *Something changes* is true within the set of worlds that conform to Dima's beliefs about reality. It is for this reason that the embedded clause appears in subjunctive mood.

The case is essentially the same in (16), which exhibits Irrealis Genitive.

16. Dima xočet / ždjot / žaždet peremen.

Dima wants / waits-for / thirsts-for changes(gen pl)

Whichever of the three verbs is chosen, the sentence does not entail that the relevant changes actually take place in any given accessible version of reality (i.e. the actual world or worlds that conform to Dima's beliefs about reality). That is why Irrealis Genitive is acceptable.

Such a correspondence between commitment to truth and commitment to existence has been noted in the literature. Kiparsky and Kiparsky (1970) demonstrate that verbs that trigger a commitment to the truth of their clausal complement also trigger EC of their NP complement. They make this observation in the context of the factive/non-factive distinction, rather than the strong/weak opposition.

To sum up, weak intensional verbs but not strong ones can cancel REC of their NP complement. Therefore, only the former license the assignment of Irrealis Genitive Case. Analogously, only weak intensional verbs do not trigger a commitment to the truth of the proposition embedded under them in any given set of accessible worlds. Therefore, verbs belonging to this class allow subjunctive mood. The facts described in this section serve two important purposes. First, they provide further motivation for the division of intensional predicates into two groups, strong and weak ones, a division that has been previously proposed for reasons independent from Case-marking. Second, they further support the claim that the assignment of Irrealis Genitive is sensitive to the notion of commitment, since it is this notion that systematically distinguishes strong intensional verbs from weak ones.

3.1.3. Exceptions

Finally, it should be pointed out that several intensional verbs are exceptional in that they license subjunctive mood but not Irrealis Genitive. I have found three verbs that follow this pattern: *razrešat'* (allow), *zaprěšćat'* (prohibit) and *predpoćitat'* (prefer). Crucially, these predicates do not falsify the generalization that Irrealis Genitive is only acceptable in those environments in which subjunctive mood is available. Thus, we can still maintain that the non-canonical genitive Case is possible in weak intensional environments but not in strong ones. Still, the verbs listed above do present a problem. The fact that they license subjunctive mood shows that they are weak intensional predicates. As a result, it becomes unclear why they do not license genitive complements. In order to answer this question, a thorough investigation of the lexical and truth-conditional semantics of these verbs and sentences containing them is needed. It is possible that the nominal complement of these verbs either denotes a kind (as in *I prefer coffee to tea*) or receives a definite and specific reading (*I prefer this book*). Both types of interpretations are incompatible with the assignment of Irrealis Genitive. I leave a more detailed investigation of the issue to future research.

3.2. Irrealis Genitive with Weak Intensional Verbs

While complement clauses of weak intensional verbs rather consistently appear in subjunctive mood¹⁹, their objects are not always allowed to be assigned genitive Case, as has been shown at the beginning of this chapter. This fact is predictable whenever

the object in question takes wide scope relative to the intensional predicate. I assume that the semantics of such an NP is not affected by the properties of the verb²⁰, and the former carries AEC (unless it takes narrow scope relative to an additional non-veridical operator). Crucially, however, NPs that are interpreted within the scope of intensional predicates are sometimes obligatorily assigned accusative as well. This observation is illustrated in (17):

- 17 a. Dima *ždjot rusalku / *rusalki*.
Dima waits mermaid(acc sg)/(gen sg)
Dima is waiting for a mermaid.
- b. Dima *iščet živuju vodu / *živoj vody*.
Dima seeks [alive water](acc)/(gen)
Dima is seeking life-giving water.

Under the salient reading of these sentences, the object NPs receive a narrow scope interpretation, while both *ždāt'* (wait for) and *iskat'* (seek) belong to the group of weak intensional verbs that license both Irrealis Genitive and subjunctive mood²¹. Still, in these particular examples, the Case of the object is obligatorily accusative. This suggests that more has to be said about Case-assignment to narrow scope objects of weak intensional verbs.

It should be pointed out that, as far as Case-assignment to such NPs is concerned, the data are very complex due to the process of language change involved, which has been discussed in more detail in the introduction. This process is accompanied by a considerable variation in native speakers' judgments. Furthermore, Case-assignment properties of different verbs seem to be developing in somewhat different ways. For instance, the verbs *ždāt'* (wait) and *trebovat'* (demand) license genitive objects somewhat more easily than *iskat'* (seek) and *xotet'* (want). The investigation of lexical differences between the individual verbs that are responsible for these distinctions is beyond the scope of this study. I leave it for future research. Below, I discuss a more general semantic distinction which strongly tends to affect the choice of Case on objects of weak intensional verbs. I demonstrate that sentences which contain weak intensional verbs with NP complements should be divided into two types according to their semantics. One type is characterized by REC of the

complement NP; as a result, the latter appears in the accusative Case. In the sentences of the second type, REC is consistently absent, and the assignment of Irrealis Genitive surfaces. In Section 3.2.6, I address the issue of variation in judgments and propose an explanation for the fact that, despite its strong tendency to determine the choice of Case, this distinction allows a certain degree of flexibility in Case-assignment.

3.2.1. Two Types of Sentences with Intensional Verbs

It has been argued in the literature that one cannot assign a uniform interpretation to all the sentences in which a (weak) intensional verb takes a nominal complement (or at least what superficially seems to be a nominal complement). It has been proposed that sentences of this kind should be further divided into different types according to their semantics (see Schwarz (to appear) and references therein). Below, I introduce one such distinction which, to the best of my knowledge, has not been previously discussed in the literature.

When a person waits for, asks for, demands, wants, etc. some entity, essentially, she wants for a certain change to take place in the world. Two types of changes can be desired. One possibility is that the person wants for an entity that she believes to exist to come to occupy the same location as herself.

This kind of desire is involved, for instance, in (18):

- 18 a. John is waiting for Mary.
b. The hunter is waiting for a deer.

In (18a), John is waiting for an already existing individual, Mary, to arrive at the location occupied by him. In this sentence, the complement NP is a proper name; thus, it is a rigid designator and is not expected to take narrow scope relative to the propositional attitude verb. In contrast, the object in (18b) certainly has a narrow scope, non-specific reading, according to which the hunter is waiting for *any* deer. Still, importantly, the hunter is waiting for an entity which he believes to exist and wants for it to arrive at the location he is occupying. In order for the hunter to be waiting for a deer, he must believe in the existence of deer, or at least, believe that deer *possibly* exist. A person who is absolutely certain that there is no deer in the

world will not be waiting for one. In other words, we have to conclude from (18b) that there is at least one possible world that conforms to the hunter's beliefs in which the set of deer is non-empty. (Moreover, there is likely to be more than one such world: a hunter will presumably wait for a deer only if he is either certain that deer exist or at least considers this probable.) This conclusion is formally represented in (18b'). (*h* in E^{h,w_0} stands for the hunter; here and below, I avoid a formal representation of semantico-pragmatic properties of definite subject NPs for the sake of simplicity.)

18 b'. $\exists w[w \in E^{h,w_0} \wedge \exists x [\text{dear}(x,w)]]$

For the sake of convenience, in what follows, I will refer to this kind of sentences as exhibiting *Location-Oriented Attitude*. Importantly for our purposes, object NPs in sentences of this type normally carry existential commitment. If these NPs take wide scope relative to the intensional verbs, they encode individuals in the actual world and, thus are characterized by AEC. However, even if they receive a narrow scope interpretation, as is exemplified in (18b), REC is present. In particular, a narrow scope object NP carries commitment to existence in at least one world that is compatible with the beliefs of the attitude holder. Thus, object NPs in Location-Oriented Attitude sentences are always characterized by some version of existential commitment.

Alternatively, there exist sentences with intensional verbs that exhibit a very different kind of interpretation, as is exemplified in (19) below.

- 19 a. John is waiting for a miracle.
 b. Mary demands silence.
 c. I'll be waiting for your new stories.

According to these sentences, the attitude holder waits, wants, demands, etc. for an entity which, most probably, does not yet exist to come into existence. In other words, we deal with a desire for the actual world to change in such a way as to include a new entity. For instance, (19a) does not mean that John is waiting for a miracle to undergo a change of location, moving to the place he currently occupies. Rather, he is waiting for a miracle to take place, namely, *to be instantiated* in the actual world. The case is

similar in (19b). (19c), in turn, is ambiguous. It can mean that the addressee has already written some new stories, and the speaker is waiting to receive a copy of them. In that case, the copy of already existing stories is supposed to move from one location to another. However, the sentence has a different reading, according to which the speaker is waiting for new stories to be written. In that case, (19c) exemplifies the second type of sentences with intensional verbs: the subject wants for new objects to come into existence. I will refer to this type of sentences as *Instantiation-Oriented Attitude*.

Crucially, in the latter type of sentences, even REC is absent. Neither the speaker nor the attitude holder is required to believe that the object NP has a referent. Moreover, the attitude holder is most likely to believe in non-existence of the referent since one does not typically desire for an already existing entity to come into existence. Thus, object NPs in these sentences are characterized by the absence of existential commitment, either absolute or relative. Essentially, the attitude holder in these sentences wishes *for a property to be instantiated*, and the interpretation of the NP does not get restricted to entities in any particular world. Thus, sentences of this type, including the examples in (19), satisfy the condition on the assignment of Irrealis Genitive, formulated in (9).

I believe that the Location-Oriented / Instantiation-Oriented opposition constitutes an important semantic contrast between two types of sentences with weak intensional verbs. Wishing for an entity to change its location (or possession) differs in significant ways from wishing for the world to change by coming to contain new individuals. Crucially, Russian facts demonstrate that natural language is indeed sensitive to this contrast. In particular, it appears that, with few exceptions (some of which will be considered below), the complement NP in Location-Oriented Attitude sentences appears in the accusative Case (20), whereas the object in Instantiation-Oriented Attitude sentences is assigned Irrealis Genitive (21). This pattern is precisely what we expect, given that, as demonstrated above, Location-Oriented objects normally carry at least the relative version of existential commitment, whereas their Instantiation-Oriented counterparts, on the contrary, consistently lack such a commitment. Thus, it is NPs of the latter type that are predicted to be compatible with Irrealis Genitive.

- 20 a. Dima ždjot Lenu / *Leny.
 Dima waits Lena(acc)/(gen)
 Dima is waiting for Lena.
- b. Rebjonok prosit knižki / *knižek.
 child asks books(acc pl)/(gen pl)
 The / a child asks for books.
- c. Maša xočet otkrytki / *otkrytok.
 Masha wants postcards(acc pl)/(gen pl)
 Masha wants (some / the) postcards.
- d. Kollektzioner iščet / prosit starinnye monety / *starinnyx monet.
 collector seeks / asks [ancient coins](acc pl)/(gen pl)
 The / a collector seeks / asks for ancient coins.
- 21 a. Dima ždjot čuda / *čudo.
 Dima waits miracle(gen sg)/(acc sg)
 Dima is waiting for a miracle.
- b. Petja iščet prikliučenij / ??priključenija
 Petja seeks adventures(gen pl)/(acc pl)
 Petja is seeking adventures.
- c. Devočka trebujet vnimanija / *vnimanije.
 girl demands attention(gen)/(acc)
 The girl needs / demands attention.

It is now possible to account for the Case-marking pattern exhibited in (17), repeated below for the sake of convenience.

- 17 a. Dima ždjot rusalku / *rusalki.
 Dima waits mermaid(acc sg)/(gen sg)
 Dima is waiting for a mermaid.
- b. Dima iščet živuju vodu / *živoj vody.
 Dima seeks [alive water](acc)/(gen)
 Dima is seeking life-giving water.

These sentences belong to Location-Oriented Attitude type. In these examples, the subject is not willing for some new objects to come into existence; rather, he wants

for entities that he believes to exist to occupy the same location as himself. For instance, (17a) does not mean that Dima wants for some non-existing mermaid to come into existence. Intuitively, such a reading is absent. Rather, *he believes that mermaids exist*, or at least that it is possible that they exist, and is trying to find one of the existing ones. This, in turn, means that, while the set of mermaids is likely to be empty in w_0 (or in all the possible worlds compatible with the speaker's worldview), the case is different as far as Dima's beliefs are concerned. It is likely that mermaids are present in all the worlds that conform to his beliefs. But even if Dima is not absolutely certain about their existence, he must at least believe that it is possible that they exist. Thus, there must be at least one world that conforms to his view of reality in which the set of mermaids is not empty. And it is precisely one of these "existing" mermaids that Dima is willing to find. Thus, the interpretation of the object NP is restricted to a particular set of worlds, and it does carry REC, as is shown in (17a'). Therefore, it cannot appear in Irrealis Genitive. The same holds for (17b).

17 a'. $\exists w[w \in E^{d,w_0} \wedge \exists x [\text{mermaid}(x,w)]]$

To sum up thus far, object NPs in Location-Oriented Attitude sentences denote individuals to whose existence either the speaker or the subject, or both, are committed. The NP is thus characterized by REC and cannot appear in Irrealis Genitive. In contrast, Instantiation-Oriented Attitude sentences encode a desire for a new entity to come into existence, or for a property to be instantiated. Here, the complement NP denotes a property and lacks REC. As a result, genitive Case-assignment is licensed²².

3.2.2. Instantiation-Oriented Attitude and Sentences with Complement Clauses

It has been suggested above that Irrealis Genitive and subjunctive mood are very close in terms of their interpretational properties – to a large degree, the difference between the two features has to do with the fact that they apply to constituents of different syntactic categories. The discussion in the previous section shows an important analogy between Instantiation-Oriented Attitude sentences, in which Irrealis Genitive is assigned, and sentences in which weak intensional verbs take clausal complements, which exhibit subjunctive mood. Sentences of the latter type involve an embedded

proposition and entail that the subject wishes for this proposition to be true (roughly, prefers those worlds in which it is true to the ones in which it is false). In turn, Instantiation-Oriented Attitude sentences entail that the subject wishes for a certain property to be instantiated, which essentially corresponds to a wish for an individual characterized by this property to exist. It is typically possible to paraphrase these sentences with an embedded existential proposition, reporting the wish of the subject for this proposition to be true. Thus, *Dima is waiting for a miracle* means roughly that Dima wants there to be a miracle, and *John wants peace* means that those worlds maximally close to w_0 in which *there is peace* are preferred by John to those worlds in which there is no peace. This shows that Instantiation-Oriented Attitude sentences are very close in terms of their interpretation to sentences that contain an embedded proposition. Therefore, non-surprisingly, it is precisely in these sentences that the nominal counterpart of subjunctive mood (i.e. Irrealis Genitive) is found.

3.2.3. Abstract Objects and the Genitive/Accusative Alternation

The proposed analysis also accounts for the fact that abstract NPs strongly tend to appear in genitive Case. As briefly mentioned above, referents of abstract nouns, such as *freedom*, *reason*, *love*, etc., or entities these nouns quantify over are not normally associated with a particular location in the world. For the same reason, abstract entities are not generally expected to move from one physical location to another. Thus, abstract NPs are unlikely to appear in sentences that exhibit Location-Oriented Attitude, in which accusative Case is assigned. If a person wants, asks for, waits for, etc. an abstract entity, this does not generally mean that she wants for this entity to undergo a change of location. Rather, the person wishes for the entity to come into existence. Thus, the sentence *Mary demands silence* does not mean that Mary wants silence to move from one (currently quiet) location to another. Rather, she wants the property *silence* to be instantiated in a certain place at a certain time. A similar type of interpretation is obtained in the case of such sentences as *Jane thirsts for love* and *I wish you happiness*. Thus, the speaker of the second sentence clearly does not wish for somebody else's already existing happiness to move towards the addressee. In all these cases, neither AEC nor REC is present, and Instantiation-Oriented Attitude is involved, which typically corresponds to genitive Case-assignment. The state of affairs is similar once we consider abstract NPs that denote events, such as *this meeting*, *a miracle* or *John's arrival*. If a person wants / is waiting for an event, she is

waiting for this event to take place (thus, to be instantiated) and not to undergo a change of location. For instance, *John is waiting for a miracle* means that John is waiting for a new miracle event to take place in the actual world. In other words, he wants the property *miracle* to be instantiated. Thus, event-denoting NPs that function as complements of intensional verbs such as *wait*, *want*, *demand*, etc. consistently lack REC and are consistently interpreted as properties. As a result, such NPs are almost always assigned Irrealis Genitive. Thus, the fact that abstract NPs tend to appear in genitive Case is predictable within the framework of the proposed analysis.

This point also sheds light on the fact that while nominal complements of weak intensional verbs may be accusative as well as genitive, their clausal complements are typically subjunctive. Clauses do not denote concrete objects but rather events or states, and in this sense they are similar semantically to abstract, event-denoting NPs. To wait for an event means to wait for it to take place, to be instantiated, and not to move from one location to another. Therefore, complement clauses, as well as event-denoting NPs, are consistently interpreted in a way that is compatible with subjunctive mood and Irrealis Genitive.

The analysis also predicts, however, that abstract complements of intensional verbs might, in principle, be assigned accusative Case if they are for some reason or other interpreted as entities that exist in the actual world. This is demonstrated in (22) below.

22 a. On zasluživaet zvanie futbolista goda. (Internet)

he deserves title(acc) football-player(gen) year(gen)

He is worthy of the title The Football Player of the Year.

b. Ukraina zasluživaet odobrenie... agenstva. (Internet)

Ukraine deserves approval(acc) agency(gen)

Ukraine is worthy of the approval of the agency.

(22a) and (22b) both contain the verb *zasluživat'* (to deserve) and in both these sentences, the accusative NPs can be substituted by their genitive counterparts. In fact, I believe that for many speakers such a substitution would be preferable. Still, in the attested examples, accusative is assigned. Crucially, it follows from these

sentences that the subject does actually have what he deserves (the title or the approval). In other words, the accusative NPs carry existential commitment, as they denote abstract entities that the subjects have already received. According to (22a), the subject of the sentence has indeed received the title of The Football Player of the Year. Similarly, according to (22b), the agency does approve of Ukraine. Naturally, it follows that the accusative NPs do have referents in the actual world. Therefore, accusative Case-marking is licensed. Crucially, if the NPs appeared in the genitive, the same implication would not arise. It would no longer follow that the subject of (22a) is the football player of the year or that Ukraine really has the approval of the agency. Each of these sentences would merely mean that the subject is worthy of an instantiation of the property denoted by the complement NP, independently from whether such an instantiation has actually been received. The difference in meaning that results from the two Case-assignment options, as well as the acceptability of the sentences in (22), is predicted within the framework of the proposed analysis²³.

In the remainder of this section, I discuss the proposed view of the alternation in Case in the context of a number of minimal genitive/accusative contrasts and certain potential counterexamples.

3.2.4. Explaining Minimal Contrasts

The account proposed in this section explains the Case-marking facts in the sentences considered above, as well as the minimal and near-minimal contrasts discussed below.

For instance, (23) demonstrates how the alternation in Case may affect the interpretation of a sentence.

23 a. načal'nik trebujet pribyli.

boss demands profit(gen)

The boss demands profit.

b. načal'nik trebujet pribyl'.

boss demands profit(acc)

The boss demands the profit.

(23a) means that the boss demands that there be profit; namely, he demands for the employees to work in such a way as to get a profit. (23b), in contrast, means that the boss wants to physically receive the money that has already been gained. Thus, in the second sentence, the complement NP corresponds to an object that exists either in the actual world or in the worlds that represent the epistemic state of the boss. What the boss wants is for this object to move to his location, or to come to be under his possession. This interpretation leads to accusative Case-assignment. In contrast, the complement NP in (23a) does not refer to an object in any version of the actual world (nor any other salient world). Rather, the boss wishes for a new entity to come into existence. The NP denotes a property which the attitude holder wishes to be realized. As a result, it appears in Irrealis Genitive. Due to the difference in Case-assignment, (23') follows from (23b), but not (23a).

23'. $\exists w[w \in E^{b,w_0} \wedge \exists x [(profit(x,w))]]$

Consider also the contrast in (24):

24 a. Dima ždjot gorjačej vody.

Dima waits [hot water](gen)

Dima is waiting for hot water.

b. Dima ždjot gorjačuju vodu.

Dima waits [hot water](acc)

(It should be pointed out that (24a) is not considered acceptable by all the speakers of Russian, although most of my informants do accept this sentence. Obviously, for those speakers whose dialect allows only accusative Case-assignment in (24), the semantic contrast between the two sentences discussed below does not exist, and (24b) is used for both interpretations.)

(24a) can be uttered in a context when Dima, having found out that there is no hot water, has turned on a boiler and is now waiting for water to be heated. In this case, (relevant) hot water does not exist in the actual world at the time of speech. Crucially, Dima does not believe it to exist; thus, the NP does not encode an object in those

possible worlds that represent his epistemic state. Rather, Dima is waiting for hot water to come into existence in the actual world; thus, he is waiting for a property to be instantiated.

It should be noted that for those of my informants who accept (24a), (24b) often seems awkward when uttered out of context. They find it acceptable only when the following kind of context is provided. Suppose that Dima is staying in a place with no centralized water supply. He knows that a maidservant, or some other person, is at this moment bringing him a vessel with hot water. In this case, (24b) becomes acceptable. Note that according to this scenario, the complement NP refers to an entity in the actual world, and the sentence exhibits Location-Oriented Attitude.

Note that (24) exemplifies the assignment of Irrealis Genitive when the subject wants not for a new entity to be created but rather for an already existing entity to come to have a new property. In both such cases, we deal with a desire for a property to be instantiated. (25) is similar in this respect.

- 25 a. Dima iščet ubežišče v etom dome.
Dima seeks shelter(acc sg) in this house
Dima is seeking a shelter in this house.
- b. Dima iščet ubežišča v etom dome.
Dima seeks shelter(gen sg) in this house
Dima is seeking shelter in this house.

According to (25a), Dima believes (or at least hopes) that there is a refuge (or a bomb-shelter) in the house in question and is trying to find it. If the complement NP takes wide scope, it quantifies over objects in w_0 ; if not, it is interpreted as quantifying over a non-empty set of objects in either all or some possible worlds that represent Dima's beliefs. In any event, the NP carries REC. (25b) has a different interpretation. This sentence means that Dima wants the house to become a shelter for him. He is not trying to find any specific place which is currently used as a shelter. Rather, he wants the house to come to have the property of being a shelter. Thus, he wants the property *shelter* to be instantiated (even though he does not want for a new object to be created.) He wants for a new entity to be added to the set of objects that

have the property of being a shelter. This interpretation corresponds to genitive Case-assignment, since REC is absent as long as the property *shelter* is considered. Note that the scope of the complement NP is not sufficient to account for the contrast in (25). In (25b), the NP is obligatorily interpreted within the scope of the verb *iščet* (seeks), but its accusative counterpart in (25a) can take either wide or narrow scope relative to the intensional operator.

The contrast between (26) and (27) below demonstrates how context may influence the interpretation of an NP and, as a result, its Case properties.

26. Aleks zasluživajet tvojej ljubvi / ???tvoju ljubov’.

Alex deserves [your love](gen)/(acc)

Alex deserves your love.

(26) does not entail that the addressee actually loves Alex. Assuming that the NP *tvoju ljubov’* (your love) is used here as a relational noun (a love of x towards y), whose second argument (Alex) is provided by the sentence, the NP does not carry EC. It is not interpreted as an abstract entity that exists in the actual world or any other given accessible world. The NP can therefore be argued to denote a property, the sentence asserting that Alex is worthy of an instantiation of that property. REC is absent. As a result, it seems that the NP must appear in Irrealis Genitive. However, the context provided by the first clause in (27) appears to make accusative Case-marking possible:

27. Ty liubiš Aleksa, i on zasluživajet tvoju ljubov’.

you love Alex and he deserves [your love](acc)

You love Alex, and he deserves your love.

The first clause essentially asserts that the NP *tvoju ljubov’* (your love) has a referent in the actual world. As a result, it becomes much easier than out of context to interpret this NP as referring to an (abstract) object in the actual world, and not as denoting a property. In turn, the fact that this interpretation becomes available leads to the acceptability of accusative Case-marking. The conjunction of the two clauses in (27) entails (27’), assuming that (27) constitutes a statement about the actual world.

27'. $\exists x$ [the-addressee's-love (x,w₀)]

Finally, (28) demonstrates how Case-assignment may be influenced by the choice of the verb.

28 a. Lena trebujet real'nyx rezultatov / ??real'nye rezultaty.

Lena demands [real results](gen pl)/(acc pl)

Lena demands real results.

b. Lena iščet real'nye rezultaty / *real'nyx rezultatov.

Lena seeks [real results](acc pl)/(gen pl)

Lena is seeking real results.

The facts obtained in (28) may seem quite surprising, given that both *trebovat'* (demand) and *iskat'* (seek) are intensional verbs that license genitive objects in Russian. Moreover, the object NP is the same in the two sentences (except for the Case-marking) and is thus associated with the same features – for instance, the NP is in both cases count plural, and the head noun is abstract. Still, the complement is obligatorily accusative in (28b) and is at least highly preferred in the genitive in (28a). However, once the interpretation of the two sentences and the resulting semantics of the complement NP is considered more closely, the observed pattern becomes predictable on the basis of the discussion above.

Consider (28a). This sentence involves Instantiation-Oriented Attitude. It cannot mean that there exist some real results that Lena demands to move in her direction. Rather, it means that Lena wants there to be real results; namely, she demands that the property *real results* be instantiated. As demonstrated above, this pattern is normally associated with genitive Case-assignment.

Let us now turn to (28b). The change of verb appears to be very important, as it leads to a shift from Instantiation-Oriented to Location-Oriented Attitude. In contrast to (28a), the second sentence cannot mean that Lena wants new results to be obtained. In this sense, (28b) also differs from its English translation, which might result from subtle differences in the lexical meanings of *seek* and *iskat'*. Descriptively, (28b) does

not have the same kind of interpretation as *Lena is seeking love* or *Lena is seeking adventures*, even though it contains the same verb. The only meaning this sentence can have is that Lena is trying to find (in the sense of coming to perceive) real results already obtained through some performance. If such results have already been obtained, she may get to perceive them; if they have not, she is seeking in vain. This is the case because she does not wish for a new entity to be created but is rather trying to find an abstract entity *already existing in at least one world that is compatible with her beliefs*. In this sense (28b) patterns with such sentences as *Lena is seeking a unicorn* or *Lena is looking for a newspaper*, as well as with the examples in (22) above, in which abstract NPs also appeared in accusative Case. Just as in these examples, the complement NP denotes an object, rather than a property, carries REC, and is therefore assigned accusative.

It should also be noted that in (28b), Lena does not wish to find herself literally *in the same location* with the results – a pattern that is normally associated with Location-Oriented Attitude. This results from the fact that the complement NP is abstract and, as such, is not associated with a particular location in the world (see a discussion of abstract nouns above). However, as stated above, Lena wants to *perceive* the results. Thus, her field of perception can in some sense be considered a location in which she wants them to appear.

The discussion of (28) sheds light on the fact that the verb *iskat'* (seek) tends to take accusative objects in Modern Russian. This verb, as well as its English counterpart, can be analyzed as having two related senses. Under one, the more basic, sense, it denotes a relation between an individual and an object which the individual believes to exist (or at least to possibly exist) and is trying to find. This sense of the verb is found in sentences like *Lena is looking for a newspaper / a unicorn* and is associated with REC and, therefore, obligatory accusative Case-marking. In its second sense, the verb means roughly *try to bring about, behave as to bring about, or even crave for*. This meaning is present in such phrases as *seek love* and *seek adventures*. In this sense, the verb denotes a relation between an individual and a property which that individual wants to be instantiated (or at least behaves in such a way as to cause it to be instantiated). Indeed, when the verb is used under this meaning, it obligatorily

takes a genitive object. Since the first sense of *seek* discussed above seems to be prevalent, its Russian counterpart appears to tend to take accusative complements.

3.2.5. Potential Counterexamples: Unexpected Genitive Case-Marking

In this section, I discuss certain cases in which Irrealis Genitive is assigned to NPs that seem to appear in Location-Oriented Attitude sentences and to denote objects, rather than properties. In most of these cases, a careful consideration of the example reveals that the object does not, in fact, carry REC, and the assignment of Irrealis Genitive is to be expected.

3.2.5.1. Coercion

Firstly, in some cases, the meaning of NPs that superficially seem to refer to existing entities is coerced to events that are strongly associated with these entities. Thus, consider the example in (29):

29. Ja ždu fil'ma “Tri mušketjora”.

I wait movie(gen sg) three musketeers

I am waiting for the movie “Three Musketeers”.

Numerous speakers accept the genitive Case in (29) not only under the reading according to which the speaker is waiting for a new movie to be created but also if the sentence means that the speaker is waiting for an old movie to be shown. In the latter case, the NP complement seems to refer to an entity that already exists in the actual world and, thus, is expected to carry REC (and AEC). Note, however, that under the relevant reading, what the speaker is waiting for is not really an object but rather an event of the movie being shown. This, in turn, means that the sentence exhibits Instantiation-Oriented Attitude, and the complement NP corresponds to an event which has not yet taken place and which the speaker wants to be instantiated. Such an interpretation is predicted to be compatible with genitive Case-assignment.

(30) constitutes an additional example of Irrealis Genitive assigned to an NP which seems to denote an object:

30. Ja ždu biletov.

I wait tickets(gen pl)

I am waiting for (the) tickets.

This sentence seems to mean that the speaker is waiting for a set of tickets she has ordered to move to her location (and to come to be under her possession). Basically, she is waiting for somebody to bring her the tickets. Thus, (30) exemplifies Location-Oriented Attitude, and the complement NP is expected to refer to an existing object. It should be pointed out that accusative Case-marking is possible in this sentence. Still, for many speakers, genitive is acceptable as well. Interestingly, the same speakers do not accept (31):

31. *Ja ždu knig / starinnyx monet / marok.

I wait books(gen pl) / [ancient coins](gen pl) / stamps(gen pl)

I am waiting for books / ancient coins / stamps.

The question emerges as to what makes (30) more acceptable than (31). How do tickets differ in a relevant way from books and stamps? One possibility may be related to the fact that a person waiting for a ticket is waiting not for an object per se (namely, a small piece of paper with some words printed on it), but rather for the right of entrance which this object gives. This right, in turn, is an abstract entity that does not currently exist and will come into existence only when the person gets that small piece of paper. In this case, *a ticket* is treated not as an object but rather as a certain property strongly associated with this object, just as *a movie* “*Three Musketeers*” in (29) is interpreted not merely as a movie but as an event of the run of the movie. In other words, in (30), as well as in (29), we deal with a conventional coercion between an object and its typical (if not the only possible) use.

The fact that Irrealis Genitive is sometimes assigned to NPs that are interpreted not as objects but rather as certain features or events strongly associated with these objects is demonstrated in (32) below:

32 a. Ivan zasluživaet gil’otiny.

Ivan deserves guillotine(gen sg)

b. Ja xoču prazdnika.

I want holiday(gen sg)

c. Igor' xočet / žaždet krovi.

Igor wants / thirsts-for blood(gen).

According to (32a), Ivan deserves being executed by means of a guillotine. Thus, the complement NP is interpreted not as an object it normally denotes but rather as an execution, an event in which this object is designed to serve as an instrument. Crucially, in this sentence, the NP is obligatorily genitive. If it is assigned accusative Case, the sentence gets a funny reading according to which Ivan collects different means of execution and deserves receiving a guillotine which can be added to his collection. Thus, accusative Case-marking forces an object interpretation of the NP.

(32b) is not normally interpreted as an assertion that the speaker wants a holiday like New Year, John's birthday, etc. to begin. Rather, the sentence means that the speaker longs for the *atmosphere* of a holiday, i.e. guests, flowers, cakes, presents, etc. Thus, the complement NP is not interpreted as a day (or a set of days) that is included in the set of holidays, but rather as a set of features strongly associated with such days. Once again, such coercion is accompanied by genitive Case-marking.

Finally, (32c) means roughly that Ivan wants to kill somebody. Thus, it is not literally blood that he thirsts for. Strangling would satisfy him perfectly well. Here, *blood* is used as an entity that often accompanies murder. However, what the subject wants is not an entity that falls under the denotation of the noun but rather an event strongly associated with such an entity. Genitive Case-assignment is obligatory in order for this reading to be obtained.

It should be noted that, at a superficial level, (32a) and (32c) seem to involve Location-Oriented Attitude. The subjects do not want for a new guillotine or blood to be created. Still, a closer examination of the sentences reveals a special reading of the complements, which appear to be interpreted as events. As a result, these examples do appear to exhibit Instantiation-Oriented Attitude, with the object NPs lacking existential commitment of any type.

3.2.5.2. Waiting for a Letter

Such examples as (33) below exhibit an additional instantiation of genitive Case-assignment in what looks like a Location-Oriented Attitude sentence.

33. Ja ždu pis'ma.

I wait letter(gen sg)

I am waiting for a letter.

After all, a person who is waiting for a letter is waiting for it to move from one location to another.

Two points can be made in this respect. Firstly, at least in a classical case, a person who is waiting for a letter need not know for sure that the letter has actually been written and/or sent. Moreover, a person may be waiting for a letter even if she is sure that the letter has not yet been written. In this case, she is wishing for the letter first to come into existence and then to undergo movement to her location. Thus, existential commitment is absent, a factor that reconciles the semantics of (33) with genitive Case-assignment.

Secondly, it should be pointed out that the VP *ždat' pis'ma* (to wait for a letter_{GEN}) is often found in Russian classic literature, which has been written in an earlier period when Irrealis Genitive was used more frequently than in Modern Russian. It is therefore possible that at least for some speakers, this phrase has become a kind of frozen expression, in which the object appears in the genitive Case. For instance, one of my informants to whom (33) has been shown said that it is definitely acceptable and explicitly referred to classical literature. This factor could constitute one of the reasons for the contrast between (33) and (34):

34. Ja ždu posylku / *posylki.

I wait parcel(acc sg)/(gen sg)

I am waiting for a parcel.

The phrase *wait for a parcel* is not frequently encountered in the literature of eighteenth and nineteenth century. In addition, a person who is waiting for a parcel is

likely to believe that one has already been prepared and/or sent. These facts together explain why Irrealis Genitive is unacceptable in (34), in contrast to (33).

3.2.5.3. Waiting for Transport

It does not seem obvious how to treat within the framework of the proposed analysis a group of sentences that contain the verb *ždat'* (to wait) and a complement NP corresponding to a transportation vehicle.

- 35 a. Dima *ždjot* avtobusa / tramvaja / poezda.
Dima waits bus(gen) / tramway(gen) / train(gen)
Dima is waiting for a bus / a tramway / a train.
- b. Dima *ždjot* avtobus / tramvaj / poezd.
Dima waits bus(acc) / tramway(acc) / train(acc)

(35) demonstrates that both genitive and accusative Case-assignment is acceptable. Some speakers consider (35a) preferable; others prefer (35b). However, the acceptability of the first sentence seems to be problematic, since the complement NP is expected to denote an object in the actual world. Thus, Dima does not want a new bus to be created; rather, he is waiting for an already existing vehicle to reach his station. Then why is Irrealis Genitive acceptable? One possibility is that what Dima is actually waiting for is not the object *bus* per se, but rather the means to get somewhere. Thus, if, for example, a bus arrives at the station and stays there due to a certain malfunction, intuitively, Dima's wish will not be satisfied. In this sense, (35) is relatively similar to (30). The complement NP corresponds not merely to an object but largely to the function that objects of this kind normally fulfill. Alternatively, we could take these examples as showing that REC that accompanies objects of weak intensional verbs does not always rule out genitive Case-assignment (even though it strongly tends to). This issue will be further investigated in the next section.

Finally, it should be noted that the choice of Case in the sentences discussed in this section is partly a matter of idiosyncrasy. Thus, while (35a) is acceptable, the genitive variant of (36) is not:

36. Dima ždjot maršrutku / *maršrutki.

Dima waits minibus-taxi(acc)/(gen)

Dima is waiting for a minibus taxi.

Moreover, as already mentioned above, the choice of Case largely depends on the speaker. Interestingly, the same speaker may prefer different Case-assignment patterns for nouns denoting different vehicles. Thus, one of my informants accepts genitive Case-marking on the NP *avtobus* (bus) but not *tramvaj* (tramway). Such facts pose a problem for any theory of Case-assignment to objects of intensional verbs. The sentences *I am waiting for a bus* and *I am waiting for a tram* are unlikely to differ either semantically or syntactically in any way that is relevant for the choice of Case. The inconsistency is probably due to the process of language change whereby the accusative is taking over, which has already been mentioned above.

3.2.6. Knowledge of the World: A Weaker Version of REC

We can see that Location-Oriented / Instantiation-Oriented distinction strongly tends to affect Case-assignment and makes it possible to account for a wide range of facts. It should be noted, however, that certain true exceptions can be found, with some of the speakers accepting genitive Case-assignment in certain Location-Oriented sentences with narrow scope objects that carry REC. It is possible that such exceptions are constituted by sentences that contain the verb *ždat'* (wait) and a genitive object that denotes a transportation vehicle, which were discussed in the previous section. Further, some of my informants consider (37) below acceptable in a context whereby customers are standing in a flower shop and waiting for new flowers to be brought by a supplier. Here, REC seems to be present, since the customers are waiting for already existing flowers to undergo a change of location. Still, at least for some speakers, a genitive object is acceptable.

37. Pokupateli ždut cvetov.

customers wait flowers_{GEN}

Customers are waiting for flowers.

There are two possible reasons for the acceptability of such sentences. The first reason is etymological: Irrealis Genitive used to be obligatorily assigned to all objects of

weak intensional verbs, and such Case patterns as (35a) and (37) may constitute reflexes of the older rule. On the basis of linguistic literature, it seems to follow that even several decades ago, Irrealis Genitive used to function as the default Case under negation and with weak intensional verbs, even though at that stage, its assignment was no longer obligatory (e.g. Neidle 1988 and references therein). If this is correct, occasional uses of the genitive in what has become the territory of accusative Case in recent Russian are to be expected. Second, it seems probable that sentences under discussion exhibit a somewhat weaker version of REC than the one represented in (7). Although REC is clearly present, this is not an existential entailment; rather, it is based on our knowledge of the world and on the context in which the sentence is uttered. Roughly, the sentence *Mary is waiting for flowers* entails the following:

38. For every possible world w' within Mary's epistemic state, every world that is maximally similar to w' in which the proposition $\exists x [\text{flowers}(x) \wedge \text{AT}(\text{Mary}, x)]$ is true is ranked higher than any world maximally similar to w' in which this proposition is false.

(The precise nature of ranking involved, the ordering source, will depend on the analysis one assigns to the verb *wait*.)

Crucially, it is not entailed that there exist flowers in any world within Mary's epistemic state. Our commitment to the fact that Mary believes in the existence of flowers, though quite strong, stems from our knowledge of the world, rather than from the semantics of the sentence. It is our knowledge of the world that tells us that if a customer is waiting for flowers, she must believe that the relevant flowers already exist, as she would not be waiting in a store for new flowers to be grown. In contrast, when a gardener is waiting for flowers, he is more likely to wait for new flowers to come into existence, namely, for a plant to blossom. (In fact, naturally occurring examples of the phrase *ždat' cvetov* (wait for flowers) with a genitive object consistently involve the latter kind of meaning: a person is waiting for a plant to blossom.) Analogously, knowledge of the world leads us to assume that if John is waiting for a train, he must be committed that the train already exists, whereas if, for example, he is waiting for a letter, such a commitment is not obligatory. Thus, REC that is found in Location-Oriented sentences with narrow scope objects is, at least in some cases, not entailed, but is rather a product of our knowledge of the world. We

can see that this, weaker version of REC does affect Case-assignment; however, it allows some flexibility: genitive Case is occasionally found in such sentences as (37), since they do not entail (nor presuppose) REC. We can conclude that whenever REC is entailed, Intensional Genitive is unacceptable. But when we get this weaker version of EC, Intensional Genitive is relatively unlikely to be assigned, but exceptions can be found and variation in judgments is possible.

4. Syntactic Constraints

Before concluding this chapter, it is important to point out that, in addition to the absence of REC requirement, Irrealis Genitive is sensitive to certain syntactic constraints. This fact is to be expected: even though the choice of Case is dependent on semantics, Case-assignment, or Case-checking, is a process that takes place in syntax.

The sensitivity of genitive Case-assignment to the syntactic configuration in which the NP appears is discussed extensively under configurational and empty quantifier approaches to the phenomenon, which have been introduced in Chapter 2. For instance, Irrealis Genitive cannot be assigned to NPs that receive Inherent Case from their governor (e.g. to complements of verbs that assign Inherent Dative or Inherent Instrumental Case, such as *pomoč* (help) or *prenebregat'* (neglect)). Presumably, the assignment of Inherent Case, which is closely related to thematic role assignment, is obligatory, which makes Irrealis Genitive unavailable, independently from the EC status of the NP. In addition, it is possible that the assignment of Irrealis Genitive is only possible to NPs that are base-generated in the direct object position, as is assumed under the configurational approaches (see Chapter 2 for discussion).

It should also be pointed out that the assignment of Irrealis Genitive is subject to certain locality constraints. The operator that licenses this Case must stand in a sufficiently local relation to the NP. Thus, the relation between a genitive NP and a weak intensional verb is local, given that the NP functions as the complement of this verb. The relation between the negative operator and a genitive object is local as well, given that, syntactically, negation phrase is merged immediately above the VP (according to Bailyn (1997), it should even be treated as a kind of extended VP).

The sensitivity of Irrealis Genitive to locality constraints becomes evident once we consider the availability of this Case in embedded clauses, with negation or an intensional verb appearing in the matrix clause. It has been noted in the literature that Genitive of Negation is sometimes available in embedded clauses, but only as long as these clauses are infinitival and lack an overt complementizer. (Even in such clauses, the assignment of GenNeg is further restricted. For instance, (39b) below, a slightly adapted version of an example taken from Franks (1995), is acceptable, while (39c) is not.) Once the negative operator is separated from the NP by a CP projection, genitive Case-assignment becomes impossible. The availability of GenNeg in embedded clauses, as well as some of the restrictions imposed on its assignment, is discussed by Neidle (1988), Franks (1995) and Miyoshi (2002), among others.

39 a. Lena ne čitaet knig.

Lena NEG reads books(gen pl)

Lena doesn't read books.

b. Lena ne obeščala Nataše čitat' knig.

Lena NEG promised Natasha(dat) read(inf) books(gen pl)

Lena didn't promise Natasha to read books.

c. *Lena ne xotela čitat' knig.

Lena NEG wanted read(inf) books(gen pl)

Lena didn't want to read books²⁴.

d. *Lena ne xotela, čtoby ty čital knig.

Lena NEG wanted that-subj you read(past) books(gen pl)

Lena didn't want you to read books.

Turning to sentences with intensional verbs, Irrealis Genitive can be assigned to the nominal complement of such a verb but not to an object NP that is embedded within its clausal complement, as in (40b). (As pointed out in note 19, the verb *ždat'* (wait) can take an indicative complement clause in Russian, although it can license subjunctive mood as well.)

40 a. On ždal čuda.

He waited miracle(gen sg)

He was waiting for a miracle.

b. On ždal, čto ty sotvoriš čudo / *čuda.

He waited that you create(fut) miracle(acc sg) / (gen sg)

He expected you to work a wonder.

I believe that the presence of such syntactic constraints also accounts for the fact that Irrealis Genitive is never licensed in a number of intensional environments in which REC does seem to be canceled. For instance, this Case is unavailable in the antecedent of counterfactual conditionals, even though these clauses do appear in subjunctive mood in Russian, and an NP that is embedded in such a clause need not carry REC. Consider the example in (41):

41. Esli by Dima sotvoril čudo / *čuda, Masha byla by rada.
if subj Dima created(past) miracle(acc sg)/(gen sg) Masha was(past) subj glad
If Dima worked a wonder, Masha would be glad.

The NP *čudo* (miracle) seems to carry neither AEC nor REC; still, genitive Case-assignment is impossible. I believe that this results from the fact that the operator that cancels REC does not stand in a local relation to the NP. It is not VP-internal and not even IP-internal. Presumably for this reason, it cannot affect the Case of the NP.

In fact, it is not impossible that the unavailability of genitive Case-assignment in such sentences as (41) does have a semantic explanation. The proposition encoded by the antecedent of the conditional is not entailed to be true in any given world (which is why subjunctive mood is licensed). As a result, the clause is not interpreted as a truth value but rather, most probably, as a proposition (or a propositional concept), i.e. as a set of worlds in which the proposition *Dima works a wonder* holds. This set of worlds is not introduced into the meaning of the sentence by any intensional operator, but it is introduced via the interpretation of the clause itself. Crucially, in these worlds, there does exist at least one wonder created by Dima. In other words, the object NP does carry EC relative to these worlds. We can therefore say that REC is present, and that genitive Case-assignment is ruled out for this reason. It is also possible that an analogous semantic explanation would hold for (40b).

I will not resolve in this study the question of whether such sentences as (41) are ruled out for semantic or syntactic reasons. In any event, the licensing of Irrealis Genitive is subject to certain locality constraints. I assume that these constraints are due to the fact that Case-assignment, or Case-checking, is a process that can only take place within a local domain. Therefore, the assignment of Irrealis Genitive is only possible as long as the operator that licenses this Case appears within such a domain. A more detailed investigation of the syntactic restrictions imposed on Irrealis Genitive will not be undertaken here.

5. Conclusion

To sum up, in this chapter, I have proposed that the assignment of Irrealis Genitive is only possible to those NPs that lack REC, commitment to existence in any salient possible world introduced in the given sentence. Under this approach, Irrealis Genitive is essentially analyzed as a nominal counterpart of subjunctive mood. This analogy, if on the right track, makes a contribution to our understanding of those parallels that hold between noun phrases and clauses, both in terms of their syntactic structure and semantic meaning. The existence of such parallels has received much attention in the linguistic literature and is demonstrated in Abney (1987), Bittner (1993), Szabolcsi (1994), among others²⁵.

I have argued that the proposed analysis accounts for the complicated pattern of Case-assignment to objects of strong and weak intensional verbs. In the next chapter, I discuss further predictions of this analysis and demonstrate how it accounts for additional semantic and distributional properties of genitive NPs.

Chapter 5. Predictions of the Analysis

The analysis of Irrealis Genitive proposed above accounts for a wide range of properties that characterize genitive objects. In the previous chapter, the main focus was on the distribution of Irrealis Genitive in sentences that contain intensional verbs. Below, I proceed by considering a number of additional properties. I will demonstrate how the sensitivity of Case-assignment to REC accounts for the distribution of genitive complements under negation as well as for a number of semantic facts. I hope to demonstrate that the proposed analysis explains a wide range of data. At the end of this chapter, I address the issue of genitive Case-assignment to proper names, a phenomenon that can be observed in a highly restricted set of environments.

1. EC and Genitive Case-Assignment in Negative Contexts

Under negation, Irrealis Genitive seems, at least superficially, to be more easily available than following intensional verbs. In many cases, for a given object NP, both genitive and accusative Case-assignment is possible. If the NP appears in genitive Case, it will receive a narrow scope, non-specific, indefinite interpretation and will lack EC²⁶. Since most genitive NPs are characterized by this whole cluster of properties, it becomes difficult to determine which of the properties in question is the one that actually affects Case-assignment. In certain environments, however, it becomes clear that the crucial property on which the choice of Case depends is precisely the absence of (R)EC. Below, I discuss a number of contexts in which this dependence can be observed. I begin by considering Case-assignment to objects of different types of verbs. We will see that certain verbs affect the EC property of their complement and, as a result, its Case-marking. Then, in Section 1.2, I discuss the assignment of Irrealis Genitive in the presence of the negative concord item *ni-*.

1.1. Different Types of Verbs

It is quite obvious that under negation, Case-assignment is strongly dependent on the properties of the NP (e.g. its number, definiteness, etc.). However, Case also appears to be sensitive to the semantics of the verb. Thus, even a non-specific, indefinite, narrow scope NP will be obligatorily accusative with some verbs and will easily appear in Genitive of Negation with others. It is, of course, beyond the purposes of the present work to provide a detailed investigation of the whole range of different verbal

classes and the ways in which they affect Case-assignment. The discussion below will be limited to a number of contrasts. Crucially for our purposes, it will be shown that those verbs that affect, by some mechanism or other, the existence meaning component of their object, also determine the choice of Case.

1.1.1. Creation Verbs

First, let us consider the contrast in (1):

1 a. ???Ja ne čitala knigi.

I NEG read book(gen sg)

I wasn't reading a book / I did not read a book.

b. ?Ja ne pisala pis'ma.

I NEG wrote letter(gen sg)

I wasn't writing a letter / I didn't write a letter.

Acceptability judgments of both sentences above vary across speakers. Most speakers, however, consider (1a) unacceptable. In turn, (1b) is often judged as either perfectly or at least marginally acceptable and tends to be considered better than (1a). (The fact that both examples in (1) may be considered unacceptable apparently results from the tendency for count singular NPs to appear in the accusative Case. This tendency will be discussed separately in Chapter 6, Section 5.) Note that in both sentences it is possible to interpret the object NP as non-specific and taking narrow scope. Still, (1b) is more acceptable than (1a), and the question emerges as to what causes this contrast.

I believe that the relevant difference relates to the fact that *pisat'* (write) is a verb of creation, whereas *čitat'* (read) is not. Zucchi (1999) claims that the objects of creation verbs are intensional. They need not have a referent in the actual world. The existence of an object of a creation verb depends on whether or not the event of creation successfully takes place. Thus, the existence of a letter depends on whether I write it or not, whereas the existence of a book does not depend on my reading it. If a creation event is not asserted to have taken place, one cannot be committed that the object of the creation verb has a referent (or quantifies over a non-empty set). As a result, negating an event of writing a letter, as in (1b) above, strongly suggests that the letter did not come into existence – at least not in the process of the event described in

the sentence. Negating an event of reading a book, in contrast, is not associated with a similar conclusion. Thus, in (1b), the possibility that the object NP does not have a referent is much more prominent than in (1a). Apparently, this interpretational property makes the assignment of Irrealis Genitive much more easily acceptable in (1a). More generally, objects of creation predicates are especially likely to lack REC under negation, which is why they are also especially likely to appear in Irrealis Genitive. (See also Pereltsvaig (1999) for a discussion of Case-assignment to objects of verbs of creation.)

1.1.2. Verbs that Trigger Existential Presupposition

1.1.2.1. Existential Presupposition and Case

As opposed to verbs of creation, whose complement typically lacks REC in negative contexts, there are verbs that, in contrast, presuppose the existence of their complement. In English, these verbs include, for example, *lose (a game)* and *reread*.

2 a. Bill reread a book.

b. Bill didn't reread a book.

Both sentences in (2) presuppose that Bill had read the book for the first time, and, thus, they also presuppose that there exists a book that had been read. In other words, both sentences, including the negated one, involve a presupposition that the object NP has a referent.

As will be demonstrated below, verbs of this kind are less likely than others to take genitive objects in Russian, even though their objects certainly can get narrow scope, indefinite and non-specific readings. This result is predicted by the restriction on genitive Case-assignment formulated in the previous chapter.

To illustrate, consider the sentences in (3):

3 a. On ne polučil otveta.

He NEG received answer(gen sg)

He didn't receive an answer.

- b. *On ne perečital otveta.
 He NEG reread answer(gen sg)
 He didn't reread a/the answer.

The verb *polučit'* (receive) does not contribute a presupposition that its object has a referent. Thus, it is possible that an answer was not received because no answer had ever been written. In contrast, *perečitat'* (reread) does contribute an existential presupposition, as already discussed above with respect to its English counterpart. (3b) presupposes that the subject did read the answer for the first time, and it can therefore be concluded that the answer exists. Thus, the complement NP carries REC, due to the properties of the verb. For this reason, genitive Case-marking is unacceptable in (3b), in contrast to (3a).

An additional example of essentially the same phenomenon is provided in (4).

- 4 a. Ja ne vižu pjaten.
 I NEG see stains(gen pl)
 I don't see (any) stains.
- b. Ja ne sažaju pjaten.
 I NEG plant stains(gen pl)
 I don't stain clothes.
- c. ???Obyčno ja ne otstiryvaju pjaten.
 Generally I NEG wash-out stains(gen pl)
 Generally, I don't (succeed to) take stains out.

Genitive Case-assignment is acceptable in (4a) and (4b), but not in (4c). Note that the first two sentences do not involve existential commitment. *Videt'* (see) does not presuppose the existence of its complement. *Sažat'* (plant) does not trigger presupposition of existence either. (4b) does not presuppose that there are any relevant stains. Moreover, it strongly suggests the non-existence of stains, since *sažat'*, at least in its metaphoric use exhibited in (4b), essentially functions as a verb of creation. As a result, negating the creation event strongly suggests that the object did not come into existence. (See the discussion of (1b) above.)

The verb *otstiryvat'* (wash-out), in contrast, presupposes the existence of its complement. (4c) may mean either that the speaker does not generally succeed to take stains out or that she generally prefers not to take stains out (but rather to buy new clothes). Under both these readings, (4c) is a statement about situations in which stains are present. The existence of stains is presupposed, and the speaker asserts that she does not take out *existing* stains. For this reason, Irrealis Genitive is unacceptable.

It should be noted, however, that sentences like (4c) are not absolutely unacceptable. It has been suggested to me by one speaker that (4c) may, in fact, be uttered with the genitive object, in which case it has to be interpreted as: *Taking out stains is not a kind of activity that I engage in*. Note that under this reading, existence of stains is not presupposed. Thus, it cannot be stated that verbs that normally presuppose existence of their objects absolutely never license Irrealis Genitive. Since we do not deal with grammaticality but rather with the kind of acceptability that is strongly dependent on the semantics and pragmatics of the sentence, it is important to consider carefully the individual sentence involved and to check which reading of this sentence the given informant has in mind. This is especially important with generic sentences, such as (4c). Generic sentences involve quantification over situations, and the question is what kind of situations is being quantified over. In the case of (4c) these are most likely to be situations in which stains are present. Under this reading, existential presupposition contributed by the verb is present, and it manifests itself as REC, namely, commitment to existence in those situations that the generic operator quantifies over. At the same time, the sentence may receive a different interpretation, whereby the situations quantified over are not restricted to stains situations (but rather, for instance, include all the situations in which the speaker is engaged in some activity). In this case, negation together with genericity basically succeed to cancel existential presupposition: existence of stains is no longer presupposed. If the speaker has this kind of reading in mind, (4c) will be judged as acceptable.

1.1.2.2. Existential Presupposition and Dialectal Variation

It was suggested above that in sentences that involve existential presupposition contributed to the NP by the verb, variation in speakers' judgments regarding the possibility of genitive Case-marking is particularly likely. This generalization is further supported by Case-assignment in negative sentences with perfective verbs, as

will be discussed in the next chapter. I have proposed that this variation results from the fact that different speakers may accommodate different contexts, and as a result, not everybody interprets the sentence as involving existential presupposition. It is possible, however, that an additional source of variation in native speakers' judgments is present. Although at this stage the discussion is only speculative, it seems that there exists a dialect that allows genitive Case-assignment to NPs that carry existential presupposition. Speakers of this dialect sometimes accept Irrealis Genitive not only in such sentences as (4c) above but also on definite NPs, including proper names (crucially, they accept genitive proper names in a wide range of sentences, not only in the highly exceptional environments to be discussed in Section 4.) At the same time, the speakers do not accept genitive Case-assignment to NPs whose existence is entailed (e.g. complements of strong intensional verbs or wide scope NPs). It might therefore be the case that there exists a dialect in which Irrealis Genitive is licensed in the absence of (relative) existential *entailment*, rather than existential commitment as defined in this work. The adequate condition under which this Case can be assigned to an NP in this dialect would be formulated as follows (p corresponds to the propositional content of the sentence in which the NP appears, and P, to the property contributed by the NP):

$$\neg \exists w [w \in W^S \wedge p \rightarrow \exists x P(x,w)]$$

In order to obtain more conclusive results regarding the existence of a dialect that is restricted precisely by this rule, a more extensive investigation is needed. In the course of such an investigation, a large number of informants would report their judgments regarding genitive Case-assignment to NPs characterized by different types of EC (existential entailment and existential presupposition, relative to w_0 as well as other accessible worlds). It should also be remembered that distinguishing separate dialects according to the availability of Irrealis Genitive is an idealization; in reality, we deal with a continuum. At this point, I can only add that the dialect in which genitive case is only prevented by existential entailment does not seem to be prevalent in modern *spoken* Russian. In spoken language, NPs that carry existential presupposition do not typically appear in Irrealis Genitive. Genitive Case-assignment to such NPs often carries a literary flavor.

The issue raised in this section is also related to the discussion in Section 3.2.6 of the previous chapter. It was suggested at that point that if REC follows from knowledge of the world, rather than by entailment, the assignment of Irrealis Genitive is unlikely, but variation in judgments becomes possible. We can conclude that, more generally, Irrealis Genitive is obligatorily ruled out when REC is entailed. If REC is introduced by a different mechanism, this Case tends to be ruled out as well, but a certain degree of flexibility is present.

1.2. Negative Concord Items

The sensitivity of the choice of Case under negation to REC also becomes evident once so-called *ni*-phrases are considered. The properties of these phrases are discussed by Pereltsvaig (1999), Harves (2002a) and Borschev and Partee (2002), among others. *Ni*-phrases are negative concord items, also referred to as strong negative polarity items, since they are only licensed in the presence of overt sentential negation. These phrases contain the negative morpheme *ni*, as exemplified in such items as *nikto* (nobody) and *nigde* (nowhere). They also include NPs immediately preceded by the particle *ni*. These phrases often, although not always, start with a weakly interpreted quantifier *odin* (one), and the interpretation of the whole phrase (including the particle) is approximately: *no X*. Such phrases are exemplified in (5).

- 5 a. Serby ne načinali ni odnu vojnu (Internet)
 Serbs NEG started not [one war](acc)
 Serbs did not start a single war.
- b. Serby ne načinali ni odnoj vojny
 Serbs NEG started not [one war](gen)
 Serbs did not start a single war.

Borschev and Partee (2002), among others, claim that *ni*-phrases have to appear within the scope of negation. Such a restriction could be explained by the need of negative concord items to check their features against the Neg head in syntax.

The fact that *ni*-phrases exhibited in (5) cannot take wide scope is further supported by the interpretation of these sentences. Neither (5a) nor (5b) may mean that there is a (particular) war that was not started by Serbs. Rather, both sentences mean roughly

that Serbs started no war. Thus, the object NP in both sentences takes narrow scope relative to negation and gets a non-specific, indefinite interpretation, as it is not identifiable to the speaker and not familiar from the context. Still, the NPs do differ in terms of REC.

It follows from (5a) that Serbs participated in a number of wars, but none of these wars started on their behalf. (5b) could be uttered in the same context as well, but, in contrast to (5a), it is also compatible with a model in which Serbs did not participate in any wars at all, and thus, naturally, did not start any. In other words, the object in (5a) carries EC, whereas in (5b), this property is absent.

While (5) above illustrates the existential commitment contrast under the genitive/accusative alternation, Borshev and Partee (2002b) demonstrate the same kind of semantic contrast between genitive and nominative arguments. For instance, they discuss the following pair of sentences:

- 6 a. Nikto na koncerte ne byl.
 Nobody(nom) at concert NEG was(m sg)
 Nobody was at the concert.
- b. Nikogo na koncerte ne bylo.
 Nobody(gen) at concert NEG was(neut sg)
 Nobody was at the concert.

Borshev and Partee note that the two sentences in (6) do not have the same meaning. (6a) requires the existence of a contextually presupposed set of individuals and asserts that none of these individuals was at the concert. (6b), in contrast, is compatible with the same interpretation, but it can also merely mean that the auditorium was empty. Namely, commitment to the existence of any relevant individuals is not triggered. Again, it can be seen that Irrealis Genitive is characterized by the absence of REC, and this property distinguishes a genitive argument from its nominative counterpart.

2. Semantic Properties of Genitive Objects

As argued above, existential commitment (or, more precisely, REC) constitutes the semantic property which determines Case-assignment to objects. However, as noted

in the literature and pointed out in Chapter 1, the choice of Case seems to be also sensitive to a number of additional properties, such as specificity, definiteness and scope. Below, I propose that the sensitivity to all these features is a by-product of the rule stating that genitive objects must lack REC.

Firstly, it has been noted that Irrealis Genitive is only assigned to those NPs that receive a narrow scope reading. This is not surprising under the proposed approach, given that negation and intensional predicates can only cancel existential commitment of those NPs that are interpreted within their scope. An NP that takes wide scope will be interpreted as quantifying over entities in the actual world (or referring to ones, depending on its semantic type), and will carry AEC (and, therefore, also REC).

Secondly, the fact that genitive NPs lack (absolute) existential commitment is, of course, accounted for straightforwardly. As pointed out in the previous chapter, the absence of REC entails the absence of AEC. Therefore, the REC restriction on genitive Case-assignment predicts the absence of existential commitment in the traditional sense of the term.

Thirdly, it has been noted that genitive NPs tend to be indefinite. I believe that there is no inherent incompatibility between Irrealis Genitive and definiteness per se. Rather, definite NPs normally carry existential presupposition (e.g. Frege (1892), Strawson (1950)). Since NPs that appear in Irrealis Genitive have to *lack* existential commitment, accusative Case-assignment results. However, under negation, a definite NP can sometimes lose the presupposition of existence, and in that case, it can be assigned Irrealis Genitive. Thus, consider (7).

7. Petja ne pomnit etot razgovor / etogo razgovora.
Petja NEG remember [this talk](acc sg) / (gen sg)
Petja doesn't remember this talk.

The NP *this talk* can appear in the genitive Case, as long as the sentence does not carry a commitment that the talk in question actually took place. Thus, according to the genitive variant of (7) it is certainly possible that the talk did not take place and

that is why Petja cannot remember it. This demonstrates that a definite NP can be assigned Irrealis Genitive, but only as long as it lacks an existential presupposition.

Also, genitive NPs receive non-specific readings. This is to be expected, given that specific NPs generally encode individuals in the actual world. Typically, they take wide scope and carry AEC. A possible exception is constituted by such NPs as *a unicorn* in (8):

8. Mary thinks that a unicorn entered her house.

8'. $\forall w [w \in E^{m,w_0} \rightarrow \exists x [\text{unicorn}(x,w)]]$

Under some (though not all) approaches to specificity, this NP is analyzed as specific as long as Mary is assumed to have a particular unicorn in mind whom she believes to have eaten the petunias. Even if such an approach to specificity is adopted, we still maintain that a specific NP obligatorily carries REC. Thus, although the embedded subject in (8) is not likely to bear AEC, it certainly does carry REC, since the sentence entails that the unicorn exists in those possible worlds that conform to Mary's view of reality. Thus, specific NPs obligatorily carry commitment to existence – most typically, AEC, and in some cases, possibly, only the relative one (if they encode a particular entity within the worldview of an individual other than the speaker). In any event, they are predicted to be incompatible with Irrealis Genitive Case, and the prediction is borne out.

It has also been pointed out in the previous chapter that Irrealis Genitive is especially likely to be assigned to plural NPs, and that it is more likely to be assigned to objects of imperfective verbs than of perfective ones, at least under negation. The relation between Case-assignment and aspect and number will be discussed in detail in Chapter 6.

3. Subjunctive Mood and Irrealis Genitive: Shared Properties

Since the REC approach to Irrealis Genitive treats this Case as a nominal analog of subjunctive mood, it is supported by the fact that these phenomena share numerous properties. It has been demonstrated in the previous chapter that the two phenomena

are licensed by essentially the same intensional verbs, a significant parallel in their distribution. Below, two additional shared properties are discussed. In section 3.1 it is demonstrated that genitive NPs and NPs modified by subjunctive relative clauses are characterized by the same semantic features. Section 3.2 shows that Irrealis Genitive Case and subjunctive mood contribute the same interpretational nuances to event-denoting constituents under negation.

3.1. Genitive Case-Marking and Subjunctive Relative Clauses: Semantic Properties

In this section, I compare the semantics of genitive complements and NPs that are modified by subjunctive relative clauses. I will limit the discussion of mood to relative clauses since this will make it possible to investigate the contribution of the subjunctive within the nominal domain. Below, it will be demonstrated that genitive Case-marking and modification by subjunctive relatives affect the interpretation of an NP in the same way: both cause it to be interpreted as non-specific, to take narrow scope and to lack existential commitment.

3.1.1. Scope and Specificity

NPs that appear in Irrealis Genitive normally receive a non-specific, narrow scope reading. It has been argued in the previous section that this results from the fact that genitive NPs are required to lack REC. In contrast, for accusative NPs, different scope and specificity options are available. It appears that the mood of a relative clause affects scope and specificity of an NP in essentially the same way. Thus, NPs modified by subjunctive relative clauses consistently get narrow scope, non-specific interpretation. In turn, NPs that contain indicative relatives are often ambiguous between specific and non-specific, wide and narrow scope readings. Farkas (1985) points out that this pattern holds in Romanian. The examples in (9) demonstrate the same for Russian:

- 9 a. Ja xoču pogovorit' s čelovekom, kotoryj xorošo znaet anglijskij.
I want talk(inf) with man that well knows English
I want to talk to a man that knows English well.

- b. Ja xoču pogovorit' s človekom, kotoryj xorošo znal by anglijskij.
 I want talk(inf) with man that well know(past) subj English
 I want to talk to a man that knows English well.

The NP modified by an indicative relative clause in (9a) is ambiguous between two readings. Thus, (9a) can mean that there is a particular man that the speaker has in mind that she wants to talk to, in which case the relative clause is used in order to help identify the man. In this case, the NP that contains the relative clause is specific and takes wide scope relative to the intensional verb *xoču* (want). Alternatively, the sentence may assert that the speaker wants to talk to any man that has the property of knowing English well. This interpretation corresponds to the narrow scope, non-specific reading.

In contrast, (9b) is compatible only with the second, non-specific, interpretation. Thus, while an NP modified by an indicative clause can, similarly to an accusative object, be either specific or non-specific and take either wide or narrow scope, subjunctive relatives, just like genitive NPs, typically force a narrow scope, non-specific interpretation.

It has also been shown above that, though in principle compatible with different scope options, in some sentences, accusative NPs force the wide scope interpretation, or at least exhibit a strong preference to wide scope readings. This fact leads to a further similarity between the genitive/accusative alternation on the one hand and the subjunctive/indicative opposition, on the other. Just like accusative NPs, phrases that contain indicative relative clauses are in some cases almost obligatorily interpreted as taking widest scope, as is exemplified in (10):

- 10 a. Ja ne videla devočku, kotoraja ponravilas' Dime.
 I NEG saw girl(acc) that pleased Dima
 I haven't seen a girl whom Dima liked.

- b. Ivan xočet poznamomit'sja s devočkoj, kotoraja učitsja na našem
 Ivan wants get-acquainted(inf) with girl that studies on our
 otdelenii.
 department
 Ivan wants to meet a girl that studies in our department.

In both (10a) and (10b), the wide scope reading of the post-verbal NP is not merely salient; it is very difficult to get a different interpretation for these sentences. In order to do so, it is highly preferable to substitute the indicative relative clause by its subjunctive counterpart. Thus, (10a) asserts that there is a particular girl that Dima liked and that the speaker has not seen, and according to (10b), there exists a particular girl from the speaker's department that Ivan is willing to meet.

This does not mean, however, that an indicative relative clause always forces a wide scope reading due to its inherent interpretational properties. Narrow scope, non-specific NPs modified by such clauses can be easily found. The sentences below, for example, contain narrow scope, non-specific NPs with a relative clause identical to the one that appears in (10b). (The negative polarity item *kakoj-nibud'*, glossed as *some*, and the adjective *ljuboj* (any) make a wide scope and specific reading unavailable.)

- 11 a. Ivan xočet poznamomit'sja s kakoj-nibud' devočkoj, kotoraja učitsja na
 Ivan wants get-acquainted(inf) with some girl that studies on
 našem otdelenii.
 our department
 Ivan wants to meet some girl that studies in our department.
- b. Ivan gotov poznamomit'sja s ljuboj devočkoj, kotoraja učitsja
 Ivan ready get-acquainted(inf) with any girl that studies
 na našem otdelenii.
 on our department
 Ivan is ready to meet any girl that studies in our department.

In addition, it should be noted that there are environments in which subjunctive mood is not licensed, and then, a relative clause has to be indicative independently from the

scope that the NP in question takes and from whether its referent is identified by the speaker or not.

I suggest that the state of affairs is similar with accusative objects. Accusative Case-assignment per se does not force wide scope, nor does it contribute specificity. Even in those environments in which genitive objects are acceptable, accusative ones may take narrow scope, and, certainly, in those numerous contexts in which Irrealis Genitive is not licensed, both wide and narrow scope objects appear in accusative Case. Rather, accusative Case becomes associated with wide scope and specificity under negation by virtue of being contrasted with the genitive, which is normally incompatible with these properties.

To sum up thus far, the contrasts in mood and in Case under discussion appear to be sensitive to the scope and specificity of an NP in a similar way. Both genitive Case-assignment and subjunctive mood normally result in a narrow scope and non-specific reading. In contrast, accusative objects and NPs modified by indicative relatives can take either wide or narrow scope. In addition, in some cases, the latter two types of NPs are strongly associated with a wide scope reading, which probably results from their being contrasted with the genitive and subjunctive counterparts for which this reading is unavailable.

3.1.2. Existential Commitment

An additional property shared by genitive objects and NPs modified by subjunctive relative clauses is lack of existential commitment. The fact that Irrealis Genitive is only assigned in the absence of REC has been discussed extensively above. The same appears to hold for NPs that contain subjunctive relatives. Sentences in which such NPs are licensed neither entail nor presuppose that the intersection of the set denoted by the head noun and the set contributed by the relative clause is not empty in any salient world.

Let us begin with the actual world and AEC. Consider the sentences in (12). In (12a), subjunctive mood is licensed by the negative operator and in (12b), by a weak intensional verb.

- 12 a. Dima (nikogda) ne videl medvedja, kotoryj by vesil
 Dima never NEG saw bear(gen=acc²⁷) that subj weigh(past)
 300 kilogrammov
 300 kg
 I have never seen a bear that would weigh 300 kg.
- b. Lena xočet najti človeka, ktoromu ona byla by nužna.
 Lena wants find(inf) man(acc) that she be(past) subj needed
 Lena wants to find a man that would need her.

(12a) may and is even likely to be uttered by a speaker who is skeptical about the existence of bears that weigh so much. Thus, the intersection of the set of bears that exist in the actual world and the set of entities that weigh 300 kilos may well be empty. Similarly, (12b) can be true and felicitous in a world in which nobody needs Lena. Thus, AEC is absent.

Moreover, the same sentences demonstrate that REC does not characterize phrases that contain subjunctive relatives either. The fact that REC is not present in (12a) is, of course, not very informative, given that in this sentence, no possible worlds seem to be invoked except for w_0 . The absence of AEC therefore means also the absence of REC. (12b) is more significant in this respect. It can be seen that in this sentence, the NP headed by the noun *človeka* (man) lacks existential commitment not only relative to the actual world but also relative to Lena's vision of reality. (12b) essentially means that Lena is willing to find a man that would come to need her (after they meet), and not that she believes that such a man already exists and is just trying to physically locate him. Thus, Lena is clearly not entailed to believe that the set denoted by the NP is not empty at the time of speech. (On the contrary, she is likely to believe that it is empty and to hope that it will stop being empty in the future.)

The fact that it is precisely subjunctive mood, and not merely the presence of an intensional verb, that causes the NP to lack existential commitment of any type can be shown by a comparison of (12a) and (13):

13. Lena xočet najti človeka, ktoromu ona nužna.

Lena wants find(inf) man(acc) that she needed

Lena wants to find a man that needs her.

The only difference between (12b) and (13) is that in the latter, the relative clause is indicative. This contrast affects the interpretation of the sentence in a way that is significant for our purposes. According to (13), either the speaker or Lena must believe that a man that needs Lena exists. The belief can be attributed to the speaker, in which case the sentence asserts that there exists a man who needs Lena and whom the latter wants to find. (Lena may not care as to whether the man needs her or not; the relative clause may merely constitute a tool used by the speaker in order to identify the referent). In this case, AEC is present. Alternatively, the sentence may mean that Lena believes in the existence of a man that needs her and wants to find this man (she may either be able to identify him or not). Under this reading, the speaker need not be committed that the man in question exists; namely, AEC may be absent, but REC is certainly present: in those possible worlds that conform to Lena's vision of reality, the set denoted by the NP is not empty.

Due to the fact that NPs modified by subjunctive relatives, similarly to genitive objects, lack REC, they exhibit a similar behavior pattern in the presence of verbs that presuppose the existence of their complement. As demonstrated in Section 1.1.2, Irrealis Genitive is not normally licensed in clauses that contain such verbs. (15) below illustrates that the same is true for subjunctive relative clauses:

14 a. Ja xoču videt' pjatna, kotorye portjat plat'je.

I want see(inf) stains that spoil dress

I want to see (the) stains that spoil the dress.

b. Ja xoču videt' pjatna, kotorye portili by plat'je.

I want see(inf) stains that spoil(past) subj dress

I want to see stains that would spoil the dress.

15 a. Ja xoču otstirat' pjatna, kotorye portjat plat'je.

I want wash-out(inf) stains that spoil dress

I want to take out (the) stains that spoil the dress.

b. ??? Ja xoču otstirat' pjatna, kotorye portili by plat'je.

I want wash-out(inf) stains that spoil(past) subj dress

? I want to take out stains that would spoil the dress.

Since the verb *videt'* does not trigger commitment to the existence of its complement, the latter can be modified by either an indicative or a subjunctive relative (just as it can appear in either accusative or genitive Case under negation). According to (14a), there exist bad stains on the dress and the speaker wishes to see them. (14b) with the subjunctive clause does not trigger such a commitment. This sentence is most likely to be uttered by a person who wants the addressee to create stains that would fit the description. For this reason, (14b) may seem pragmatically odd, but it becomes perfectly acceptable once the right context is found. For example, the sentence could be uttered by a stage manager who states what kind of a dress is needed for a performance. In contrast, the object of *otstirat'* (wash out) cannot be modified by a subjunctive relative clause for the same reason as it cannot appear in Genitive of Negation, as discussed in the previous chapter. The verb triggers a presupposition that its complement exists. Thus, (15) is associated with the commitment that there exist stains to be taken out, which makes subjunctive mood within the relative clause inappropriate.

The association of subjunctive relative clauses with lack of REC is, in fact, predicted on the basis of the approach to subjunctive mood developed by Farkas (2003). According to this approach, subjunctive mood is normally found in the presence of the -Decided feature, i.e. in the absence of a commitment to the truth or falsity of a clause in any given set of worlds. However, a relative clause does not denote a truth value to begin with. For instance, the clause *that weighs 300 kilo* cannot have a truth value. It cannot be true or false. Rather, it denotes a property of weighing 300 kilo. Its extension in w_0 corresponds to a set of individuals that satisfy the proposition *x weighs 300 kilo*; in other words, the set of all the individuals that weigh at least 300 kilo in the actual world. The intension of the clause is, accordingly, a function from possible worlds to sets of individuals that weigh 300 kilos in those worlds. Thus, a relative clause denotes a property, similarly to common nouns, adjectives, and genitive objects as argued in Kagan (2005) and proposed and discussed in recent work

by Partee and Borshev (e.g. Partee and Borshev (2004),(2007)) and in Chapter 4 above.

Given that a relative clause denotes a property, the non-commitment to truth associated with subjunctive mood is likely, in the case of relative clauses, to shift to a non-commitment to existence. To illustrate, a subjunctive version of the clause *Ivan weighs 80 kilo* (16a) signals lack of commitment that the proposition *Ivan weighs 80 kilo* is true in any given world introduced in the sentence. Correspondingly, the subjunctive version of the relative clause *that weighs 80 kilo* (16b) signals lack of commitment that the proposition *x weighs 80 kilo* is made true by any individual in any given salient world. This amounts to non-commitment that the property encoded by the clause is instantiated in any such world. This, in turn, leads to the fact that an NP that contains this relative clause lacks existential commitment as well. Thus, the NP in (16c) involves an intersection of the set denoted by the head noun (the set of men) and the set contributed by the relative clause. In case the latter set is empty, the intersection will be empty as well. And since subjunctive mood triggers a non-commitment that the set contributed by the relative clause is not empty, it automatically triggers non-commitment to existence of the NP as a whole.

- 16 a. Ivan vesil by 80 kilogram
 Ivan weigh(past) subj 80 kilo
 Ivan would weigh 80 kilo
- b. kotoryj vesil by 80 kilogram...
 that weigh(past) subj 80 kilo
 that would weigh 80 kilo
- c. čelovek, kotoryj vesil by 80 kilogram...
 man that weigh(past) subj 80 kilo
 a man that would weigh 80 kilo

Thus, subjunctive relative clauses are associated with the absence of REC similarly to Irrealis Genitive NPs. The fact that the former trigger a narrow scope and non-specific reading of the NP in which they appear follows from the absence of REC. Such a close parallel between subjunctive relatives and genitive arguments further supports the analysis of the latter proposed in the previous chapter.

3.2. Event-Denoting Constituents

The above discussion was limited to relative clauses; however, a semantic parallel between subjunctive mood and genitive Case can also be seen if subjunctive complement clauses are considered. In the previous chapter, such a parallel has been briefly discussed regarding the semantics of complements of weak intensional verbs (Section 3.2.2 of Chapter 4). Below, I demonstrate that the state of affairs is similar under negation, when neither subjunctive mood nor Irrealis Genitive is obligatory in the complement position. It will be shown that the choice of subjunctive mood for a complement clause makes the same interpretational contribution as the choice of genitive Case for an event-denoting NP complement. Non-surprisingly, both subjunctive clauses and genitive NPs are associated with the lack of commitment that the event in question actually took place. In order for such a commitment to be present, their indicative or accusative counterparts have to be used.

For instance, consider the minimal pairs in (17) and (18):

- 17 a. Ivan ne čuvstvoval, što bylo xolodno
Ivan NEG felt that be(past) cold
Ivan didn't feel that it was cold.
- b. Ivan ne čuvstvoval, čtoby bylo xolodno
Ivan NEG felt that-subj be(past) cold
- 18 a. Ivan ne čuvstvoval xolod.
Ivan NEG felt cold(acc)
Ivan didn't feel the cold.
- b. Ivan ne čuvstvoval xoloda.
Ivan NEG felt cold(gen)

(17) exhibits the indicative/subjunctive contrast. (17a), in which the complement clause is indicative, suggests that it was, in fact, cold, but Ivan did not feel that (for instance, because he was well dressed). In turn, (17b) with a subjunctive complement clause makes salient the possibility that it was not, in fact, cold, and that is why Ivan did not feel cold. (It should be pointed out that (17b) is somewhat colloquial. Still, in spoken language, such constructions, in which a mental verb is followed by a subjunctive complement under negation, are used quite often.)

Interestingly, the same semantic contrast is present in (18), in which the accusative/genitive alternation is exhibited. Thus, (18a), in which the NP *cold* appears in the accusative Case, means that it was cold, but Ivan failed to feel that. In contrast, according to (18b), which contains a genitive complement, it is possible and even likely that it was not cold and therefore, naturally, Ivan did not feel cold.

Here, both the embedded clauses and the complement NPs encode a certain state, while subjunctive mood and genitive Case-marking signal that this state may not have held in reality. In (17b), subjunctive mood contributes lack of commitment that the embedded proposition (*It was cold*) is true. In (18b), genitive Case-assignment signals lack of existential commitment of the NP *cold*. Since the clause and the NP correspond to the same state, the result in the two cases is the same: the hearer concludes that, possibly, it was not, in fact, cold.

The same kind of similarity between the two alternations is exhibited in (19) and (20):

19 a. Ja ne pomnila, što my ob etom razgovarivali.

I NEG remembered that we about this talk(past)

I didn't remember that we had talked about this.

b. Ja ne pomnila, čtoby my ob etom razgovarivali.

I NEG remembered that-subj we about this talk(past)

20 a. Ja ne pomnila etot razgovor.

I NEG remembered [this talk](acc sg)

I didn't remember this talk.

b. Ja ne pomnila etogo razgovora.

I NEG remembered [this talk](gen sg)

The speaker of (19a), which contains an indicative complement clause, is much more likely to be committed that the talk in question had taken place than the speaker of (19b). For this reason, subjunctive mood is especially likely to be used if the main verb in (19) is substituted by its present tense form (*pomnju*). A speaker who does not remember that a particular talk has taken place is likely not to be committed that it has.

Similarly, (20a) suggests that the speaker failed to remember a talk that had taken place, while according to (20b), it is possible that there was no such talk (although this is definitely not entailed).

It can be seen that both subjunctive mood and genitive Case-marking signal lack of commitment that the event they encode has taken place. In fact, under negation, such a commitment is not always obligatory even with indicative and accusative complements. However, firstly, complements of the latter type do tend to carry such a commitment; thus, the hearer of (19a) and (20a) is likely to conclude that the talk had taken place, just as the hearer of (17a) and (18a) will assume that it was cold. Secondly, subjunctive mood and genitive Case-marking can be, and often are, used as rhetorical devices by a speaker who wants to make salient the possibility that the event, indeed, was not instantiated. Thus, although the (19b) and (20b) do not *entail* that the talk did not take place, they strongly suggest the likelihood of this state of affairs.

3.3. Genitive and Subjunctive: A Summary

To sum up this section, we have seen that Irrealis Genitive Case and subjunctive mood share a number of properties. Irrealis Genitive can be assigned only in those types of environments in which the subjunctive is allowed; moreover, the sets of intensional verbs that license the two phenomena are almost identical. Both phenomena are sensitive to the weak/strong distinction and are only available in the presence of a weak intensional predicate (unless additional competing restrictions intervene in the case of the subjunctive; however, this does not seem to happen in Russian and Romanian). In addition, genitive NPs that encode an event (or a state) make salient the possibility that the event in question did not take place. Subjunctive complement clauses make the same contribution. Finally, genitive NPs are characterized by similar semantic properties to NPs that contain subjunctive relative clauses. Phrases of both types take narrow scope, receive a non-specific interpretation and lack existential commitment, relative as well as absolute.

4. Proper Names

The last question that I would like to address below is genitive Case-assignment to specific NPs, including proper names, which, though highly restricted, has been attested in the literature.

4.1. Genitive Proper Names: The Data

Typically, proper names cannot appear in Irrealis Genitive Case, as illustrated in (21) for Intensional Genitive, Genitive of Negation with transitive verbs and Genitive of Negation with intransitive verbs.

21 a. Ivan ždjot *Anny.

Ivan waits Anna(gen)

Ivan is waiting for Anna.

b. Ja ne priglasila *Leny.

I NEG invited Lena(gen)

I didn't invite Lena.

c. *Leny ne našlos'.

Lena(gen) NEG found(refl neut sg)

Lena wasn't found.

However, there do exist environments in which proper names can appear in Genitive of Negation, with the assignment of this Case being perceived as perfectly acceptable.

Firstly, this exceptional Case-assignment is licensed in existential sentences (in the traditional, restricted sense of the term²⁸). This is demonstrated in (22):

22. Elly net doma.

Ella(gen) NEG-BE at-home

Ella is not at home.

(22) is a perfectly grammatical sentence of Russian; its acceptability is not subject to variation in native speakers' judgments.

The other environment in which GenNeg can be assigned to proper names is created by perception predicates. For example, consider (23), taken from Padučeva (1997:106), which contains a predicate derived from the verb *videt'* (see) with the morphology of an adjectival passive, and a genitive argument.

23. Mašy ne vidno.

Masha(gen) NEG seen(neut sg)

?Masha can't be seen / ?One doesn't see Masha.

Similarly to (22), (23) is acceptable and does not seem to trigger variation in speakers' judgments.

Proper names receive genitive Case-marking especially easily if the perception predicate involved is intransitive. However, genitive proper names are sometimes attested in the object position of transitive verbs as well, although it should be noted that genitive Case-marking of this type is more controversial and not typical for spoken language. An example, found in the Russian translation of a novel, is provided below:

24. Ja nikogda... ne videl Morgauzy.

I never not saw Morgausa(gen)

I had never met Morgausa.

(M. Stewart, *The Wicked Day*)

Genitive Case-assignment to proper names, even though highly restricted, poses a considerable problem to most approaches to GenNeg, given that, as mentioned above, this Case is typically unavailable with wide scope and specific NPs, and at least tends not to be assigned to definite phrases. In turn, proper names are characterized by all these properties. And given that proper names obligatorily carry existential commitment, typically the absolute one, the fact that they can sometimes appear in Irrealis Genitive certainly poses a problem for the analysis developed in Chapter 4. The Perspectival Center approach proposed by Borshev and Partee (2002a) (see Section 3 of Chapter 2 for details) does in principle allow genitive Case-assignment to proper names, since it is possible to deny that the referent of the latter is instantiated in a certain location. However, it remains unclear why genitive proper names are

possible in such sentences as (22)-(23) above but not in (21c) (and not with most predicates that license GenNeg).

Despite the fact that proper names are supposed to carry AEC, I argue below that the data are, in fact, consistent with the account of Irrealis Genitive argued for in the previous chapter. I will propose, in the spirit of 'Existence is Relative' Principle introduced by Borshev and Partee, that the notion of existential commitment gets reinterpreted in the environments under discussion. The domain of existence relative to which existential commitment is checked is shifted from the actual world as a whole to a particular spatiotemporal location, either explicitly or implicitly introduced in the sentence. This is revealed by the fact that the genitive/nominative alternation, as well as the subjunctive/indicative contrast within relative clauses, come to be sensitive not to existence of a referent per se, but rather specifically to its existence in a certain location. Given that the notion of existence is this way narrowed or reinterpreted, we naturally expect for the restriction on Irrealis Genitive to be reinterpreted accordingly. In particular, its assignment comes to be sensitive to existential commitment not relative to possible worlds but rather relative to salient spatiotemporal locations. This means that in these environments, an NP can appear in the genitive as long as it lacks commitment to existence in the salient location. Since a proper name is not required to carry such a commitment, genitive Case-assignment to proper names becomes acceptable.

It should be emphasized that the discussion below is mostly tentative and intuitive. In order for more conclusive and formal results to be obtained, a deep semantic investigation of perception verbs and existential sentences, as well as the ways in which these constituents restrict domain of existence, is required. In what follows, I only propose a direction for explaining the exceptional Case-assignment pattern to proper names in these environments.

4.2. Reanalyzing the Domain of Existence

4.2.1. Existential Commitment Relative to a Spatiotemporal Location

The acceptability of genitive Case-marking to proper names can be derived, to a large extent, from 'Existence is Relative' Principle proposed by Borshev and Partee, applied on a somewhat different level than discussed in their work. B&P develop this

principle in order to capture the fact that sentences exhibiting the genitive/nominative alternation deny existence not (or not necessarily) in the world as a whole, but rather in specific locations. Despite this fact, existential commitment to which the choice of Case is sensitive in such sentences is still commitment to existence in the actual world. To illustrate, consider the contrast in (25):

25 a. Otvet ne prišol.
 Answer(nom m sg) NEG arrived(m sg)

 The answer did not arrive.

b. Otveta ne prišlo.
 Answer(gen m sg) NEG arrived(neut sg)

 No answer arrived.

(Babby 1978:13)

Both (25a) and (25b) negate the appearance of the answer in a particular location, which is implicit in the sentences but is expected to be identifiable from the context. Denial of existence is thus relative to a particular spatiotemporal location, as predicted by 'Existence Is Relative' Principle. Still, the nominative NP in (25a) and its genitive counterpart in (25b) differ in terms of existential commitment – this time, commitment relative to the actual world. According to (25b), it is possible that the answer in question has not come into existence at all. According to the salient reading of (25a), the answer does exist (but was not sent or perhaps was lost on its way). In other words, (25a) denies the existence of the answer in the implicit location but presupposes its existence in the actual world. In contrast, (25b) denies the existence of the answer in the implicit location *and* lacks commitment that it exists in the world at all. It thus follows that existential commitment to which Case-assignment is sensitive is not subject to 'Existence Is Relative' Principle.

This state of affairs holds in a wide range of environments. However, it appears that there exists a very limited set of environments in which 'Existence Is Relative' Principle does affect the existential commitment component of sentence meaning and, therefore, the choice of Case. Non-surprisingly, these environments include existential sentences and sentences with perception predicates.

In both these constructions, a very prominent role is reserved to a location. In existential sentences, this is the location argument that constitutes an inherent and necessary part of the construction. In the case of perception predicates, a prominent role is assigned to the field of perception of the experiencer. Due to the prominence of the location role, domain of existence that is relevant for the interpretation of these sentences is shifted from the actual world as a whole to the spatiotemporal location. Existential commitment is accordingly checked relative to this location. If the property contributed by the content of an NP is instantiated in the location, the NP is interpreted as carrying existential commitment. If the property is not instantiated in that location, the NP is treated as lacking such a commitment (independently from whether the property is instantiated in some other locations in the actual world or not). Thus, in sentences with perception predicates, it becomes crucial not whether the stimulus exists in the world as a whole, but rather whether it is present within one's field of perception. Analogously, in existential sentences, it is important whether the theme is instantiated in the place denoted by the location argument, and much less crucial, whether it is instantiated elsewhere in the world.

Thus, in these two environments, the notions *domain of existence* and *existential commitment* get reinterpreted and, consequently, are based on existence in the prominent location. Naturally, once existential commitment gets reanalyzed in this way, the restriction on Irrealis Genitive, which is heavily dependent on the latter notion, should be appropriately reanalyzed as well. Typically, a genitive NP is required to lack commitment to existence relative to a certain set of worlds (including w_0). With perception predicates and in existential sentences, domain of existence is reduced from worlds to given spatiotemporal locations. Consequently, in these environments, genitive NPs are required to lack commitment to existence in any salient spatiotemporal location (including the field of perception of the experiencer or the place denoted by a locative PP in an existential sentence)²⁹.

Below, I provide examples proving that the state of affairs described above indeed holds in the environments under discussion. Existential commitment is interpreted relative to a location, and the choice of Case, as well as the choice of mood in relative clauses, is dependent on existence in this location, and not in the actual world as a whole. In Section 4.2.4, I address the consequences that this interpretational

peculiarity bears for Case-assignment to proper names. Specifically, I will account for the fact that in the two environments discussed, proper names can appear in Irrealis Genitive.

4.2.2. Case and Mood under Reduced Domain of Existence

4.2.2.1. Case

Let us begin with the minimal pair in (26).

26 a. Maša ne zametila cvety.

Masha NEG noticed flowers(acc pl)

Masha didn't notice the flowers.

b. Maša ne zametila cvetov.

Masha NEG noticed flowers(gen pl)

Masha didn't notice flowers.

(26a) means that there were flowers *in the same location in which Masha was present*, but she did not notice them. In turn, (26b) suggests that Masha did not see any flowers because there were no flowers in that location. (It should be noted that this is an implicature, rather than an entailment. (26b) does not involve a commitment that flowers were NOT there, but it makes this possibility a salient one.) Thus, the choice of Case depends on the commitment to the existence of flowers *within Masha's field of perception*. This means that (26) differs from (25) in a significant way. In (25), Case-assignment is sensitive to existential commitment relative to w_0 . In (26), the choice of Case is determined primarily by existential commitment relative to the field of perception of the subject.

More generally, with certain perception predicates, such as *videt'* (see), *slyšat'* (hear) and *zamečat'* (notice), the Case of the theme argument depends not on existential commitment in general but rather on the commitment that an entity is instantiated within the field of perception of the experiencer. This sensitivity is pointed out by Padučeva (1992,1997), who states that in certain cases, GenNeg is associated with X not being present within the field of perception of an experiencer.

The fact that the same holds in sentences that contain a proper name argument is shown in (27). ((27a) and (27c) below are taken from Padučeva (1997:106); (27c) repeats the example in (23).)

- 27 a. Maša ne vidna.
 Masha(nom) NEG seen(fem sg)
 ?Masha can't be seen / ?One doesn't see Masha.
- b. Mašu ne vidno.
 Masha(acc) NEG seen(neut sg)
- c. Mašy ne vidno.
 Masha(gen) NEG seen(neut sg)

(27a) is a passive construction. *Masha*, which is the internal argument of the predicate, has been moved to the subject position; it appears in the nominative Case and triggers agreement on the predicate. Interestingly, (27b) is acceptable as well. In this sentence, the NP appears in the accusative Case, and the predicate is neutral singular. Finally, in (27c), the NP appears in the genitive Case. The predicate is neutral singular.

The contrast between (27a) and (27b), the nominative and the accusative variant, is irrelevant for our current purposes. With respect to the interpretational properties discussed in this section, the two sentences behave in the same way. Therefore, I am going to focus on the difference between (27a) and (27b) on the one hand and (27c), on the other. According to both (27a) and (27b), *Masha* is in the same location as the speaker but cannot be seen, for instance, because she is hiding behind a tree or because someone tall and fat is standing in front of her. Thus, such a sentence could be uttered by a photographer, who suggests that *Masha* has to move in order to be seen on the picture. In contrast, (27c) strongly suggests that *Masha* is absent, and cannot be seen for that reason. The existence of such a contrast between (27a) and (27c) is mentioned by Padučeva (1997).

Thus, the choice of Case is not affected by existence in the actual world, but rather by existence in a certain spatiotemporal location. Nominative and accusative Case-marking is strongly associated with commitment that the referent of the object is

instantiated within the field of perception of the experiencer. In turn, genitive Case signals lack of such a commitment. For the latter reason, (28) below is likely to be uttered to point out that Masha has not been present at the locations visited by the speaker for a long time:

28. čto-to Maši davno ne vidno
 something Masha(gen) for-a-long-time NEG seen(neut sg)
 Somehow Masha hasn't been seen for a long time.

The pattern is similar with genitive Case-assignment to proper names that function as complements of transitive perception verbs, although, as stated above, genitive Case-marking of this kind is rarely found in modern spoken language. Two attested examples are provided below:

- 29 a. Ja ne videl tam Erielly.
 I NEG saw there Eriella(gen)
 I didn't see Eriella there. (K. Kurtz, *The Chronicles of the Deryni*)
- b. ...plemjannicy vikonta grafini de Bazan ja tože ne vižu.
 niece(gen) viscount(gen) countess(gen) de Basan I also NEG see
 ...I don't see the niece of the viscount, Countess de Basan, either.
 (the movie "Don Cesar de Basan")

Crucially, in each of these sentences, it is important for the speaker to emphasize that the referent of the proper name was not present within his field of perception, rather than that he just failed to notice her for some reason. (29a) is uttered in the context of a group of people trying to locate Eriella, and the speaker suggests that she should be searched somewhere else, not in the place where he has been before. The speaker of (29b), who is talking to the queen, is trying to insinuate that Countess de Basan is not present at the party, but rather has gone elsewhere together with the king. The case is similar in (24) above, the Russian equivalent of *I had never seen Morgausa* which also exhibits genitive Case-marking. In this sentence, King Arthur is saying that he had never met Morgausa (before a certain event took place), not merely that he had never noticed her. Thus, the choice of genitive Case-marking is associated with the fact that Morgausa had never appeared within the field of perception of the speaker.

4.2.2.2. Mood

It has been demonstrated above that, with perception predicates, the choice of Case is sensitive to existence in a certain salient location, rather than in a world. It is important that the same holds for the choice of mood within a relative clause.

- 30 a. Dima ne videl devoček, kotorye stojali u okna.
Dima NEG saw girls(gen=acc pl) that stand(past) at window
Dima didn't see (the) girls that were standing near the window.
- b. Dima ne videl devoček, kotorye stojali by u okna.
Dima NEG saw girls(gen=acc pl) that stand(past) subj at window
Dima didn't see (any) girls standing near the window.

According to (30a), the speaker is committed to the truth of the proposition that some girls were standing near the window and Dima did not notice them. Namely, the object NP carries existential commitment not only relative to the actual world but also relative to the particular situation described by the speaker, i.e. Dima's field of perception at the temporal interval invoked in the sentence. In contrast, according to (30b), it is possible, and even likely, that no girls were standing near the window. Again, it is suggested that such girls were absent within the field of perception of the subject (and not that no girls ever stood near that window).

Thus, while typically, modification by an indicative relative clause is associated with commitment to existence in the actual world, here, a much stronger conclusion is obtained. A commitment is contributed that the set quantified over by the NP is not empty in the spatiotemporal location described by the speaker. In turn, modification by a subjunctive relative normally contributes lack of existential commitment. Moreover, it *makes salient* the possibility that the relevant set is indeed empty in the actual world. As mentioned in Section 3, the subjunctive can be used as a rhetorical device to contribute this non-existence meaning component. (30b), however, certainly does not suggest that, in the actual world, there exist no girls who have ever stood by a window. What it does suggest is that no such girls were present within Dima's field of perception. This point further supports the conclusion that existential commitment has been reinterpreted in this environment as commitment to existence in a location.

4.2.3. Case-Assignment in Existential Sentences

Up to this point, I have focused on sentences with perception predicates, rather than on the existential construction. The reason is that in negated existential sentences, only genitive Case-assignment is possible, and therefore, it is impossible to compare strict minimal pairs that differ only in terms of Case-marking. However, this fact on its own may be informative. Let us assume that in existential sentences, just as in sentences with perception predicates, the notion of existential commitment that affects the grammar is shifted to existence in a spatiotemporal location. The relevant location, in this case, will be provided by the location argument, which constitutes an inherent and necessary part of the construction. Under this configuration, we predict that genitive Case-assignment would signal lack of commitment that the property contributed by the theme NP is instantiated in this location. Nominative Case-marking would, on the contrary, contribute a commitment that this property is instantiated. However, given that negative existential sentences, due to their semantics, deny the existence of the theme in the location, the latter type of commitment is impossible. As a result, only GenNeg is predicted to be available.

4.2.4. Irrealis Genitive and Proper Names

4.2.4.1. Why is Genitive Case-Marking Available?

As proposed in Section 4.2.1 and as demonstrated by minimal pairs considered above, in existential sentences and sentences with perception predicates, Case-assignment comes to be sensitive to existence in a spatiotemporal location, rather than in the actual world as a whole. Specifically genitive Case-marking is possible in the absence of commitment that an NP has a referent (or quantifies over a non-empty set) in a salient location (e.g. the experiencer's field of perception), rather than in a salient possible world.

This reanalysis of the restriction on genitive Case-assignment has important consequences for the compatibility of Irrealis Genitive with specific NPs, including proper names. Proper names carry commitment to existence in the actual world and, therefore, normally, they cannot appear in the genitive Case. However, a referent of a proper name is not required to be present in any specific spatiotemporal location. Thus, commitment to existence in a given location, including one's field of perception, need not characterize NPs of this type. As a result, a proper name that

functions as an argument of a perception predicate need not carry existential commitment in the relevant, shifted, sense. This, in turn, makes it possible for such a proper name to be assigned Irrealis Genitive.

B&P point out that 'Existence is Relative' Principle makes it possible for a proper name to be found in a negated existential sentence. One would expect that the existence of a referent of a proper name cannot be denied. However, these sentences deny existence in a particular location, and the referent of a proper name certainly need not be present in any given location. The same principle applied to the (grammatically relevant) notion of existential commitment accounts for the fact that a proper name can appear in GenNeg. For instance, following perception predicates, this Case signals lack of commitment that the referent is present within one's field of perception, and indeed, a proper name need not carry such a commitment. Thus, for instance, (23), repeated below, is acceptable because it contains a perception predicate. As a result, genitive Case-assignment is licensed in the absence of a commitment that Masha is present within the field of perception of the speaker at the time of speech. Since nothing in the semantics of the NP *Masha* rules out this option, Irrealis Genitive is acceptable.

23. Mašy ne vidno.

Masha(gen) NEG seen(neut sg)

?Masha can't be seen / ?One doesn't see Masha.

It has also been suggested above that genitive NPs are required to lack existential commitment because they denote properties, functions from possible worlds to sets of individuals. The shift in the domain of existence imposed by perception predicates would mean that their property-denoting arguments should be reanalyzed accordingly. The notion of a property would be analyzed as a function from spatiotemporal locations in different possible worlds to sets of individuals that are present in these locations. An instantiation of such a property would constitute an individual present in a certain spatiotemporal location. Consequently, a property-denoting proper name would encode a function whose value in any given location is either a singleton set (containing the specific individual to whom the NP typically refers) or an empty set, if the individual is not present at that location. The latter option shows that, under this

interpretation, a proper name need not carry existential commitment. Thus, genitive Case-assignment is predicted to be possible.

4.2.4.2. Existential Commitment Minimized

Finally, it should be pointed out that with genitive proper names, even commitment to existence in the actual world as a whole is minimized. Thus, GenNeg assignment to proper names, once acceptable, may weaken the presupposition of existence in w_0 , to the extent to which this is possible. The phenomenon is illustrated in (31b) below.

31 a. Dima ne v bol'nice.

 Dima(nom) NEG in hospital

 Dima is not in the hospital.

b. Dimy net v bol'nice.

 Dima(gen) NEG-BE in hospital

 Dima is not in the hospital.

(31a) is not an existential sentence; in the terminology of B&P (e.g. 1998, 2002a) and Babby (1978), it is a negated declarative sentence (NDS). The proper name in this sentence functions as the nominative subject. In contrast, (31b) is an existential sentence; the proper name, consequently, appears in the genitive Case.

The interpretations of the two sentences are, although similar, not identical. Pragmatically, according to the analysis of the genitive/nominative alternation proposed by B&P (e.g. 2002a), the sentences differ in terms of Perspectival Center.

In turn, semantically, the two utterances seem at first glance to make exactly the same contribution. In both cases, it is asserted that the referent of the NP *Dima* does not occupy the location referred to by the NP *bol'nice* (hospital) at the time of speech. The sentences seem to have the same truth conditions and are expected to have the same truth value in any model. However, a very subtle difference in the state of affairs described by the two sentences can be found. Consider the following scenario. There has been a traffic accident. The relatives of Dima believe that he may have been hurt. One of them phones to a hospital and is told that Dima is not there. He can then utter either (31a) or (31b), thereby informing the others. If the relative chooses (31a), he is actually committed to the fact that although Dima is not in the hospital, he does

exist in some other location in the world (and thus that he is alive). In contrast, the speaker of (31b) avoids such a commitment. Here, the relative only claims that it is not the case that Dima is in the hospital. It does not follow that Dima is in any other place; the fact that Dima is actually alive does not follow.

Thus, while the nominative proper name in (31a) is associated with (absolute) existential commitment (relative to the actual world), for its genitive counterpart in (31b), such a commitment appears to be weakened, even though not completely absent. The speaker of (31b) still has to be committed that the referent of *Dima* existed in the actual world in the (recent) past. However, he need not be committed that such a referent exists at the time of speech. Thus, in (31), genitive Case-marking is associated not only with the non-existence of the referent in the specified location (namely, the hospital). It also cancels existential commitment in a more classical sense (existence in w_0) – to the extent to which this is possible with a proper name.

A similar contrast is observed for Finnish in Kiparsky (2001a). In Finnish, it is the nominative/partitive alternation that should be considered, partitive being the Case that shares numerous properties with the non-canonical genitive in Russian. (The sentences in (32) are provided in Kiparsky (2001a).)

- 32 a. Anna ei enää tullut.
 Anna(nom) NEG(3^{sg}) any more come(perf participle)
 Anna did not come any more. [She stayed away.]
- b. Ei tullut enää Annaa.
 NEG(3rd) come(perf participle) anymore Anna(part)
 Anna did not come any more. [Perhaps she died.]

According to (32b), in which the proper name appears in the partitive Case, it is possible that Anna did not come because she was dead. Just as in the Russian example in (31b), the partitive proper name is associated with a reduced existential commitment.

The fact that genitive proper names are associated with a reduced existential commitment in Russian is especially explicitly illustrated in (33):

33. Dimy bol'she net.
Dima(gen) more NEG-BE
Dima doesn't exist anymore.

This is a perfectly acceptable sentence, which essentially means that Dima has died. In (33), Dima's existence in the actual world as a whole, rather than in a particular location, seems to be denied. Still, it has to be emphasized that the presupposition of existence is not completely lost (given that the NP is a proper name), since the speaker still has to be committed that the individual called *Dima* existed in the world before the time of speech.

Of course, it is a complicated and to a large extent metaphysical question whether a dead individual should be considered to exist in the actual world or not. But in any event, a certain contrast can be observed between the interpretation of nominative and genitive proper names, and this contrast is related to existential commitment. It can be seen that the assignment of Irrealis Genitive Case reduces the existential presupposition of proper names to the extent to which this goal can be achieved. This fact further supports the view that the semantics of this Case is strongly related to the absence of existential commitment.

4.3. Conclusion

To sum up, proper names can appear in GenNeg only in those environments in which the notion of existential commitment is appropriately modified. In these environments, Case-assignment, as well as the choice of mood, is dependent not on existence in the world but rather on presence in a given location. Since referents of specific NPs, including proper names, are allowed not to be present in particular locations, they may lack commitment to existence relative to a domain of this type. For this reason, they can appear in Irrealis Genitive.

Of course, a question remains as to for what reason and by which formal mechanism this shift in existence domain takes place precisely in the environments discussed above (and not, for instance, with numerous other intransitive verbs that license GenNeg). A much more detailed investigation of the various environments in which the genitive/nominative alternation is found is needed in order for a detailed and

conclusive answer to be obtained. Such an investigation, however, is beyond the scope of this work.

Chapter 6. Irrealis Genitive Case, Aspect and Number

In this chapter, I discuss the ways in which the genitive/accusative alternation interacts with verbal aspect and the number of the NP.

1. Aspect and Number Affect Case-Assignment

1.1 Introducing the Problem

It has been noted by Timberlake (1986), among others, that Genitive of Negation is more likely to be assigned to objects of imperfective verbs than to objects of perfective ones. This tendency is reflected in (1) below.

- 1 a. Dima ne čital stat'i / statej.
Dima NEG read(imp) articles(acc pl)/(gen pl)
Dima didn't read articles.
- b. Dima ne pročital stat'i / *statej.
Dima NEG read(perf) articles(acc pl)/(gen pl)
Dima didn't read (the) articles.

In (1a), the verb is imperfective, and GenNeg can be assigned. In contrast, in (1b), the verb is perfective and genitive Case-assignment is unavailable.

However, just like with many other semantic properties discussed with respect to GenNeg, such as specificity, definiteness and number, there is no one-to-one relation between aspect and the acceptability of the genitive. We deal merely with a tendency. Thus, even though the genitive variant of (1b) is bad, (2) below is perfectly acceptable.

2. Lena ne našla dokumentov.
Lena NEG found(perf) documents(gen pl)
Lena didn't find (any) documents.

GenNeg is successfully assigned in (2), even though this sentence contains a perfective verb.

The number of the object NP appears to affect Case-assignment in a similar way. As also noted by Timberlake, GenNeg is more likely to be assigned to plural NPs than to their singular counterparts. This is illustrated in (3), taken from Timberlake (1986:342):

- 3 a. Ja ne našol cvetov.
I NEG found(perf) flowers(gen pl)
I didn't find (any) flowers.
- b. ???Ja ne našol cvetka.
I NEG found(perf) flower(gen sg)
I didn't find a/any flower.

The same tendency holds for Intensional Genitive: singular objects are less likely to appear in the genitive Case than their plural counterparts:

- 4 a. Ja budu ždat' cvetov.
I will wait flowers(gen pl)
I will be waiting for flowers.
- b. ???Ja budu ždat' cvetka.
I will wait flower(gen sg)
I will be waiting for a flower.

((4a) is accepted by my informants, under the reading according to which the speaker is waiting for a plant to blossom – namely, for new flowers to come into existence.)

Again, despite the presence of this tendency, it can be overruled. Singular NPs do appear in Irrealis Genitive, even though somewhat more rarely than their plural counterparts. For instance, (5) below is a perfectly acceptable sentence:

5. Ja ne uvidel v komnate kovra.
I NEG saw(perf) in room carpet(gen sg)
I didn't see a carpet in the room.

1.2 Preview

In this chapter, I will propose an account of the two Case-assignment tendencies illustrated above. The explanation will be based on the approach to Irrealis Genitive argued for in Chapter 4. My goal is to answer the following questions. Why is Irrealis Genitive more likely to be assigned to plural NPs and to objects of imperfective predicates? Why is its assignment to singular NPs and objects of perfective predicates impossible in some sentences and perfectly acceptable in others? It will be proposed that the similarity between the two tendencies (i.e. between the ways in which the choice of Case is affected by aspect and by number) is not accidental. Rather, it results from more basic parallels that can be observed between aspect and number in Russian.

I begin by presenting the approach to the semantics of aspect and number that will be assumed in what follows. I adopt the analysis of number according to which singular NPs contain only atomic individuals within their denotation, whereas the denotation of plural NPs includes both pluralities and single (atomic) individuals. I then argue that the perfective/imperfective distinction within the verbal domain should be provided an analogous analysis. According to this view, perfective predicates denote atomic (i.e. single completed) events, whereas the denotation of imperfective predicates includes atomic as well as non-atomic events, both singular eventualities and their pluralities. Thus, the perfective/imperfective opposition will be treated as essentially identical to the singular/plural contrast, the differences between the two stemming from the fact that aspect is applied to the verbal domain and number, to the nominal domain³⁰. It will be demonstrated that this semantic analysis of Russian aspect, together with a number of independently motivated pragmatic principles, accounts for the choice of aspect in various contexts and environments.

I then turn to a discussion of negative sentences. (It is mainly under negation that Irrealis Genitive is preferred with imperfective verbs; therefore, the discussion will concentrate on Genitive of Negation.) Given that imperfective is the default aspect compatible with any aspectual interpretation, a negated clause with an imperfective verb denies single events as well as pluralities of events, even in the case of telic event predicates. Such sentences may either assert that a given event property was not instantiated or deny a particular, presupposed event. In turn, negated perfective

sentences are consistently used to negate a particular atomic event, typically one that has been previously expected to take place by some discourse participants. Moreover, such sentences contribute a presupposition that some preparatory stage has taken place which is typically followed by events of the same kind as the one denied. As will be illustrated below, an expectation that a given event would take place and a belief that its preparatory stage has already been realized is often accompanied by a commitment that the participants in this event do exist. Once such a commitment is present, it is not generally cancelled by the fact that the event failed to occur or to be completed. Therefore, objects of perfective verbs under negation are likely to carry REC. For this reason, they tend to appear in accusative Case. It will be shown that, at the same time, a commitment of the kind specified above is not always present (for instance, it is absent whenever creation predicates are involved). Therefore, genitive Case-marking is sometimes possible.

The case is in part similar once number is considered. A negative sentence with a plural (narrow scope) object entails that not even a single individual with the property contributed by the NP participated in the event. Thus, by default, the object NP is predicted to be plural, as it negates the participation of both single individuals and their pluralities. The speaker will choose the more restricted singular form only if she judges it as more appropriate. This happens in the presence of a previous expectation that exactly one individual would participate in the event. Such an expectation is likely to be accompanied by a commitment that this single individual exists, which means that the object carries REC and must be assigned accusative. On the other hand, the singularity expectation could be a by-product of our knowledge of the world, rather than a belief in the existence of any particular individual. I will show that in the latter case, Irrealis Genitive turns out to be available.

2. Number

According to the approach to number that I will adopt, a curious asymmetry holds between the semantics of singular and plural NPs (e.g. Lasersohn (1990), Sauerland (2003a)). The denotation of singular NPs is claimed to contain only singular objects. In other words, it is restricted to atomic individuals. (I limit the discussion to singular *count* nouns; following Chierchia (1998), I assume that mass terms are semantically plural.) In turn, the plural form is argued to neither entail nor presuppose plurality.

The denotation of a bare plural NP contains both pluralities of objects and singular objects. Thus, the semantics of plural NPs is essentially neutral with respect to number, as illustrated in (6). (The lattice-theoretical approach to number has been originated by Link (1983)).

$$\begin{array}{l}
 6. \quad \text{SG} \quad [a \quad b \quad c] \\
 \\
 \text{PL} \quad \left[\begin{array}{ccc} & abc & \\ ab & bc & ac \\ a & b & c \end{array} \right]
 \end{array}$$

In order to formalize the semantics of number within the approach depicted above, it is necessary to first provide a formal analysis of atomicity. For the purposes of this discussion, I will assume Krifka's (1992) definition of a P-atom (I use the symbol $<$ to represent the proper part relation):

$$7. \forall x, P [ATOM(x, P) \leftrightarrow P(x) \wedge \neg \exists y [y < x \wedge P(y)]] \quad (\text{Krifka 1992:32})$$

According to (7), x is an atom of the predicate P iff x falls under the denotation of P and there is no y that also falls under the denotation of P and that is a proper part of x . I further define an *atomic predicate* as a predicate whose denotation contains only atoms (8). Crucially, such a predicate does not contain a plurality of atoms. (In this sense, this notion differs from that of an atomic predicate as defined by Krifka (1992).)

$$8. \forall P [ATOMIC(P) \leftrightarrow \forall x [P(x) \rightarrow ATOM(x)]]$$

A very important property of atomic predicates is quantization, whose definition, taken from Krifka (1992), is provided in (9).

$$9. \forall P [QUA(P) \leftrightarrow \forall x, y [P(x) \wedge P(y) \rightarrow \neg y < x]]$$

(9) essentially asserts that a predicate P is quantized iff for every x that falls under the denotation of P , no proper part of x will also fall under the denotation of P .

The fact that atomicity or singularity involves quantization is shown in Krifka (1992), Filip (2000) and Rothstein (2004), among others. This conclusion definitely follows from the definitions in (7) and (8) above. This is an important result since the intuition behind the definition of atomicity that is relevant for our current purposes is that an atom is a single bounded entity.

We can now formalize the denotation of singular and plural morphology under the approach under discussion. (10) below constitutes one way to define the two notions. It should be pointed out that the logical forms in (10) are somewhat simplified; however, this simplified version is going to be sufficient for our current purposes.

10. $[[Sg]] = \lambda P \lambda x. P(x) \wedge ATOMIC(P)$

$[[Pl]] = \lambda P \lambda x. P(x)$

According to (10), a singular NP contains only atoms in its denotation, whereas a plural NP is neutral with respect to atomicity.

A question that emerges at this point, however, is why the plural form is not normally used if a single individual is involved. In order to encode a single individual, the speaker is normally required to use a singular NP.

Sauerland (2003a) proposes that this restriction is a product of a more general informativeness constraint which is based on Grice's Maxim of Quantity. This constraint has been divided into two principles: Maximize Assertion and Maximize Presupposition. The formulation that these principles are provided in Sauerland (2003b:1) is quoted in (11):

11. *Maximize Assertion*: Use the most informative assertion that is true.

Maximize Presupposition: Use the most informative presupposition that is satisfied.

If two grammatical forms are compatible with the same interpretation, we are instructed by (11) to use the one which has a more restricted meaning, i.e. one that

contributes stronger entailments or presuppositions. If the less restricted form is used, the hearer concludes that the use of the more restricted item was impossible because its presuppositions or semantic restrictions are not satisfied.

These constraints have been claimed to determine the choice between competing grammatical forms in different languages and within the framework of various phenomena; for instance, Heim (1991), who introduces Maximize Presupposition, argues that this principle determines the choice between definite and indefinite NPs. Sauerland (2003a) claims that the same principle restricts the usage of the plural morphology. It can be seen from (6) and (7) that a singular form is more restricted in meaning than its plural counterpart; therefore, whenever the former is appropriate, the use of the latter is ruled out by (11). The choice of the plural form thus triggers a conclusion on the part of the hearer that the singular was not appropriate – in other words, that the NP in question encodes a plurality of individuals, rather than an atom.

3. Aspect

In this section, I argue for an analysis of the perfective/imperfective distinction in Russian which is essentially identical to (10) above when applied to events, rather than to individuals. This approach analyses perfective predicates as encoding atomic events (which also means that they are quantized), while the imperfective is treated as a default aspect that encompasses both atomic and non-atomic events. Once considered in separation, these approaches to perfectivity and to imperfectivity are by no means radically new. Thus, imperfective aspect has been treated as a default (e.g. Forsyth (1970), see also discussion in Klein (1995).) In addition, the claim that perfective predicates are quantized has been made under numerous analyses of perfectivity, e.g. Krifka (1992), Filip (2000), Filip and Rothstein (2006), Filip (in press). However, less attention is generally paid to the fact that these predicates are atomic in the sense specified above, i.e. that their denotation contains only single events (even though this assumption may be implicitly present in some of the approaches). One of my purposes is to clarify this point and to demonstrate that this analysis of Russian aspect is derived straightforwardly once we assume that the perfective/imperfective opposition constitutes the singular/plural distinction applied to events. I will further argue that the restrictions that govern the usage of imperfective

aspect are derived from pragmatic principles, such as Maximize Assertion formulated above.

I will begin by introducing morphological and interpretational characteristics of the perfective/imperfective distinction on a relatively intuitive level. Then, in Section 3.3, I will formulate an analysis of aspect that is based to the approach to number in (10) and show how this analysis accounts for the descriptive data.

3.1 Morphological Distinction

In Russian, every verb is morphologically specified for aspect: perfective or imperfective. Normally, the morphologically unmarked form is imperfective (see Column A in Table 1 below). A verb is made perfective by the addition of a prefix (Column B). Finally, a perfective verb can be turned into an imperfective one by an attachment of an imperfectivizing suffix, most commonly *-va* (Column C). However, not all perfective verbs can combine with such a suffix.

Table 3

A - Imperfective	B - Perfective	C - Imperfective
pisat' (write)	na-pisat' (write) do-pisat' (finish writing) pere-pisat' (rewrite) pod-pisat' (sign)	- dopisy-va-t' (finish writing) perepisy-va-t' (rewrite) podpisy-va-t' (sign)
šit' (sew)	za-šit' (stitch up) vy-šit' (embroider)	zaši-va-t' (stitch up) vyši-va-t' (embroider)

(For further examples of the attachment of prefixes to the verb *pisat'*, see Filip (2000).)

With some verbs, different mechanisms of creating perfective and imperfective forms are employed. Thus, for instance, perfective forms of semelfactives are normally constructed by the attachment of the perfectivizing suffix *-nu*:

Table 4 – Semelfactives

Imperfective	Perfective
čixat' (sneeze (repeatedly))	čix-nu-t' (sneeze (once))
morgat' (wink (repeatedly))	morg-nu-t' (wink (once))

I will not undertake a more detailed investigation of aspectual morphology. (For further discussion, see Isačenko (1960), Forsyth (1970), Smith (1991), Filip (2000), Borik (2002), and references therein.) In the next section, I turn to the different interpretations that sentences with perfective and imperfective verbs may obtain.

3.2 Perfective and Imperfective: The Usages

3.2.1 Perfective Aspect

Perfective aspect is typically used to encode a single completed event.

12 a. Ivan postroil dom.

Ivan built(perf) house(acc sg)

Ivan built / has built a house.

b. Lena vypila vino.

Lena drank(perf) wine(acc)

Lena drank the wine.

For instance, (12a) entails that the building event was completed, and (12b) entails that Lena finished drinking the contextually specified quantity of wine. It thus seems that sentences with perfective verbs obligatorily get telic readings, as is proposed in Smith (1991), Krifka (1992), Filip (1999, 2000), Filip and Rothstein (2006), among others (although see Borik (2002) and Filip (2003) for arguments against this generalization). In what follows, I will assume that the telicity approach to perfectivity is correct.

Still, this approach fails to account for certain restrictions imposed on the usage of perfective predicates. In particular, such predicates strongly tend to encode single events. Thus, the sentences in (12) cannot have a habitual reading. Moreover, the

compatibility of perfective predicates with iterativity inducing adverbials, including adverbials of definite cardinality, is highly restricted:

13. *Dima každyj den' / často / inogda pozvonil Pete.

Dima every day often sometimes phoned(perf) Petja(dat)

Dima phoned Petja every day / sometimes / often.

14 a. *Lena tri raza vyšla zamuž

Lena three times got-married(perf)

Lena got married three times.

b. *On poterjal ključi četyre raza.

He lost(perf) keys four times

As pointed out by Filip (2003), a sentence that encodes a set of events of definite cardinality is telic. Thus, the sentences in (14) are telic. In each of these sentences, the event predicate involved is telic, and the overall set of events is bounded. Still, perfective aspect is unacceptable, a fact that remains mysterious under the telicity approach.

3.2.2 Imperfective Aspect

Let us now turn to imperfective predicates. Imperfective aspect has a wide range of usages, which are briefly discussed below.

3.2.2.1 Progressive/Durative

One of the most typical usages of the imperfective is the progressive, or durative, usage, exemplified in (15):

15. Lena čitala knigu, kogda vošol Miša.

Lena read(imp) book when entered(perf) Misha

Lena was reading a book when Misha came in.

The verb *čitala* (read) is imperfective, and the best way to translate it to English is by using a progressive form. The sentence asserts that Lena was engaged in the process of reading at the temporal interval contributed by the embedded clause. Similarly to its English progressive counterpart, (15) does not entail that Lena finished reading the

book. In other words, it does not entail that the event encoded by the imperfective clause reached its natural endpoint.

3.2.2.2 Habitual/Iterative

Another typical usage of the imperfective is exhibited in habitual or iterative sentences.

16 a. Lena myla posudu každyj den'.

Lena washed(imp) dishes(acc) every day

Lena washed the dishes every day.

b. Lena zvonila ves' den'.

Lena phoned(imp) whole day

Lena phoned all day.

(16a) is a habitual sentence. In fact, due to the presence of an imperfective verb, it can receive a habitual interpretation even in the absence of the adjunct *každyj den'* (every day). (16b) does not involve habituality or genericity; however, it does encode a set of repeated events, an interpretation that, again, is associated with imperfectivity.

The two usages of imperfective aspect introduced above are associated with atelicity. Indeed, in the linguistic literature on the topic, the perfective/imperfective opposition has often been analyzed in terms of such properties as (a)telicity, (un)boundedness and (in)completion (see Forsyth (1970), Smith (1991), Krifka (1992), the analysis of the perfective in Filip (1999), (in press) and Filip and Rothstein (2006), and discussion in Klein (1995)). However, the atelicity approach to imperfectivity has important shortcomings. As often noted in the literature, in certain environments and within the framework of certain special conventions, the imperfective aspect becomes perfectly compatible with telicity (Forsyth (1970), Filip (2000), Borik (2002)). This fact is even demonstrated under the iterative usage introduced in this section. As mentioned above, a set of events of definite cardinality is telic. In turn iterative imperfective is perfectly compatible with definite cardinality adverbials:

17. Lena tri raza vyxodila zamuž
Lena three times got-married(imp)
Lena got married three times.

The acceptability of such sentences as (17) demonstrates that there is no inherent incompatibility between imperfectivity and telicity. This conclusion is further supported by a number of additional usages of the imperfective, introduced in the following sections.

3.2.2.3 Statement of Fact Convention

For instance, the compatibility of imperfective aspect with telicity is revealed in sentences exhibiting the Statement of Fact convention of usage, discussed in Smith (1991), Klein (1995) and Borik (2002), among others, and provided a detailed analysis in Gronn (2003). Under this convention, a sentence with an imperfective verb roughly asserts that an event of a certain type did take place. The focus in this case is not on how many times the event occurred and whether it took place once or repeatedly, but rather on the mere fact that this kind of eventuality has been instantiated. In this sense, Statement of Fact convention resembles Experiential Perfect in English, as pointed out by Gronn (2003). Sentences under discussion typically assert that the subject has some kind of experience – of course, in a very broad sense of the term. For example, (18a) below states that Petja has the experience of crossing the channel. According to (18b), Lena has the experience of taking the medicine in question, and is therefore familiar with the medicine.

- 18 a. Petja (uže) peresekal etot kanal.
Petja already crossed(imp) this channel
Petja has (already) crossed this channel. (adapted from Borik (2002))
- b. Lena (uže) prinimala eto lekarstvo.
Lena already took(imp) this medicine
Lena has (already) taken this medicine.

Crucially, a single event of the specified type is sufficient to make sentences of this kind true, even if telic event predicates are involved. For instance, (18b) entails that Lena took the medicine *at least once*. This fact reveals that imperfectivity does not

entail atelicity. Rather, the imperfective aspect is compatible with both atelic and telic event predicates (even if a single event is encoded). With telic event predicates, imperfectivity does not entail event plurality or incompleteness.

3.2.2.4 Cancelled Result Convention

Sentences with perfective verbs often trigger a strong implicature that the result state brought about by the event still holds at speech time. Note that in English, this property characterizes Result Perfect.

For instance, according to (19), Boris is in Jerusalem at the reference time (which, out of context, is most likely to be the speech time). The sentence is best translated into English with Result Perfect, which contributes the same conclusion of holding result state³¹.

19. Boris prijexal v Ierusalim.
Boris arrived(perf) to Jerusalem.
Boris has come to Jerusalem.

In turn, the imperfective aspect can be used in order to avoid the conclusion that the result state holds. This usage, also discussed in Smith (1991), is referred to as Annulled, or Cancelled, Result imperfective. Thus, (20) does not contribute the information that Boris is in Jerusalem at reference time. On the contrary, it suggests that this is not the case. (In English, the same result is obtained by the usage of Simple Past tense.)

20. Boris prijezđal v Ierusalim.
Boris arrived(imp) to Jerusalem.
Boris came to Jerusalem.

Crucially, (20) can be used appropriately to report a single coming event, as long as the speaker is willing to avoid the result state implicature. This demonstrates, again, that imperfective aspect is compatible with telicity.

3.2.2.5 Negation

Especially importantly for our purposes, it has been often noted in the literature that under negation, the (non-progressive) imperfective aspect can lose its iterativity flavor. Negative sentences that contain an imperfective verb do not only deny the fact that an event took place repeatedly, or more than once, even if the event predicate is telic. Rather, they assert that the event did not take place even once (e.g. Bogusławsky (1985), Uspensky (1993), Levinson (2005)). Thus, imperfective clauses may deny even single completed events.

21. Ivan ne prišedil.

Ivan NEG arrived(imp)

Ivan didn't arrive / hasn't arrived.

For instance, (21) does not mean *It is not the case that Ivan arrived repeatedly*, although this certainly is entailed. The claim made in the sentence is stronger, however. It means that Ivan did not arrive *even once*. A single arrival event is sufficient to make (21) false. This, in turn, means that a single event (encoded by a telic predicate) is sufficient to make the affirmative counterpart of (21) true. (Negation of (21), which is identical semantically to its affirmative counterpart, is made true by a single event of Ivan's arrival.) It follows that the semantics of imperfective clauses is compatible with telicity.

3.2.2.6 Other Downward-Entailing Environments

Finally, it should be pointed out that downward-entailing environments other than negation also show that the denotation of imperfective predicates includes single completed events. For instance, the compatibility of imperfectivity with telicity is demonstrated by interrogative clauses³².

22 a. Ivan prišedil?

Ivan arrived(imp)

Did Ivan come?

b. Ty čitala etu knigu?

you read(imp) this book

Have you read this book?

A single Ivan's arrival is sufficient in order for the answer to (22a) to be positive. Similarly, the true answer to (22b) will be *yes* even if the addressee has read the book in question only once.

A similar conclusion can be obtained on the basis of clauses that function as complements of the verb *somnevat'sja* (doubt). As pointed out by Perelsvaig (2000), this verb creates a downward-entailing environment.

23. Dima somnevaetsja, chto Lena (kogda-libo) terjala ključī.

Dima doubts(imp) that Lena ever lost(imp) keys

Dima doubts that Lena has ever lost her keys.

Thus, according to (23), Ivan doubts that Lena lost her keys even once. Despite the fact that losing one's keys is an achievement, namely, the predicate is inherently telic, single losing events are included in the denotation of the embedded imperfective verb.

3.2.2.7 Imperfective Aspect: A Summary

It can be concluded that imperfective aspect is compatible with both telicity and atelicity. The semantics of imperfective verbs seems not to be aspectually restricted; it is compatible with all the possible aspectual properties. In the case of telic event predicates, imperfective aspect has been associated with a plurality of events reading. It appears, however, that even with telic VPs, an imperfective verb can encode not only a plurality of events but also a single event. The latter point is reminiscent of a claim that has been made regarding the semantics of plural morphology, which has been argued to denote both pluralities of individuals and single objects, as discussed above. In the next section, I propose that this similarity is not accidental. The proposal is to a large degree inspired by intuitive insights in Uspensky (1993). Uspensky notices that sentences with iterative imperfective in Old Russian and Modern Russian can be made true by a single event, just as sentences with plural NPs are sometimes satisfied by a single object (he focuses primarily on NPs that appear in non-canonical genitive Case). His conclusion is based to a large extent on negative contexts, which are of a special importance for the present investigation.

3.3. Perfective/Imperfective Distinction As Singular/Plural On Events

3.3.1. The Proposal

I propose that the perfective/imperfective contrast in Russian should be assigned essentially the same semantics as the singular/plural opposition is in (10). Once the number distinction introduced in the previous section is applied to events, what we get is precisely the aspectual contrast that has been discussed in Section 3.2. The analysis of Russian aspect I am proposing is formalized in (24):

$$24. \begin{aligned} [[\text{Perf}]] &= \lambda P \lambda e. P(e) \wedge \text{ATOMIC}(P) \\ [[\text{Imp}]] &= \lambda P \lambda e. P(e) \end{aligned}$$

According to this approach, perfective predicates denote atomic events³³. This accounts for the fact that perfective predicates are telic. As pointed out above, atomicity involves quantization, which, in turn, means that, when applied to event predicates, it involves telicity. (See Krifka (1992) and Filip (2000), among others, for a formal analysis of telicity in terms of quantization.) In addition, the atomicity approach accounts for the fact that, at least in the absence of explicit iterativity-inducing operators, a perfective predicate can only encode a single event in Russian³⁴. This fact is accounted for straightforwardly if we assume that perfective predicates have only atomic events in their denotation.

As already stated above, the quantization, or telicity, approach to perfectivity is by no means new; however, analyzing perfective predicates as telic does not necessarily predict that their denotation contains only singular events. For instance, Rothstein (2004) proposes that telic predicates denote atomic events and pluralizations of such events. If the latter approach to telicity is assumed, the claim that a perfective predicate is obligatorily atomic predicts that *perfectivity constitutes a special case of telicity*. (A perfective event predicate may denote an atomic set but not its pluralization.) This is a desirable result, since, as discussed above, perfective predicates are obligatorily telic, but some telic predicates (and in particular, those that denote pluralities of events) cannot be realized via perfective aspect³⁵. The view that perfective predicates are atomic can be found in Kiparsky (1998), who assumes that boundedness involves atomicity.

Turning to the semantics of imperfectivity, according to (24), a clause with an imperfective verb asserts that an event property specified by the verb and its arguments is instantiated. The semantics of imperfective aspect does not involve any aspectually relevant restrictions. Therefore, imperfectivity is compatible with telicity and atelicity, atomicity and non-atomicity, iterative as well as single event interpretation³⁶. This accounts for the fact that telic event predicates may be realized as imperfective verb phrases, and sentences with such predicates are made true by a single (atomic) event. Thus, this approach captures the usage of the imperfective in (16) and (18) above. It also accounts for the negation facts introduced in Section 3.2.2.5. An affirmative sentence with an imperfective verb entails that an event property was instantiated. Accordingly, its negative counterpart is predicted to entail that this event property was not instantiated; in other words, an event of the type encoded by the predicate did not take place even once.

In the next section, I discuss the ways in which the analysis proposed in (24), together with independently motivated pragmatic principles, accounts for the distribution of perfective and imperfective predicates and captures the different usages of imperfective aspect.

3.3.2 The Choice of Aspect and the Interaction of Semantic and Pragmatic Restrictions

3.3.2.1 Single Completed Events (=Atomic Events)

According to (24), both perfective and imperfective verbs are predicted to be acceptable whenever atomic events are to be encoded. In reality, however, such an interpretation is strongly associated with perfectivity. Unless the special Statement of Fact or Cancelled Result convention is invoked, imperfective aspect is not used in sentences that encode a single completed event. For instance, (25) is very unlikely to be interpreted as encoding a single event. Given that the sentence contains an achievement event predicate, it can get only an iterative reading, unless the special Statement of Fact convention interpretation is triggered.

25. Lena zamečala pjatna.

Lena noticed(imp) stains(acc pl)

Lena noticed stains.

The strong tendency for atomic events to be encoded by perfective, rather than imperfective, predicates is not predicted by (24). The question emerges as to what is the source of the relevant restriction imposed on the usage of the imperfective.

I propose that this restriction is pragmatic in nature. Similarly to the choice of number, the choice of aspect for the verb is subject to the 'Maximize' principle derived from Gricean Maxim of Quantity. In particular, the usage of the imperfective aspect is sensitive to Maximize Assertion. As shown in (24), an imperfective form is much less informative than a perfective one; therefore, whenever both forms are available as far as their semantics is concerned, Maximize Assertion forces the speaker to use the perfective. The usage of perfective aspect contributes an entailment that the event described by the speaker is atomic. In turn, the choice of the less restricted imperfective form leads the hearer to conclude that the atomicity requirement is not satisfied, or at least that the speaker does not have sufficient evidence that the event she is reporting is indeed atomic.

3.3.2.2 Incomplete Events

Suppose, on the other hand, that the event predicate is atelic or, alternatively, that it is telic but the speaker knows that the reported event did not reach completion (or the speaker is not certain whether it was completed or not). In all of these cases, the perfective form is inappropriate. Under these circumstances, the usage of the perfective aspect is ruled out by the Maxim of Quality, which dictates the speaker not to make an assertion if she knows it to be false or lacks evidence that it is true. As a result, imperfective aspect has to be used. Crucially, however, an imperfective clause does not entail that the event in question is not atomic. Rather, this piece of information is contributed by implicature, which arises as a result of the fact that the competing grammatical form has not been used. The implicature can be cancelled, as is demonstrated by the acceptability of (26):

26. Segodnja Lena pisala Dime pis'mo. Verojatnee vsego,
 today Lena wrote(imp) Dima(dat) letter more-probably all(gen)
 ona ego dopisala.
 she it(acc) finished-writing(perf)
 Lena has been writing a letter to Dima today. Most probably, she has completed it.

3.3.2.3. Iterativity

Since perfective predicates denote atomic events, they are not normally appropriate once event repetition is encoded (certain exceptions to this generalization do exist, but they will not be discussed here). The semantics of imperfective aspect is, in contrast, compatible with iterativity. So, our analysis predicts that imperfective aspect will be used in iterative and habitual sentences, independently of whether the event predicate involved is telic or not.

3.3.2.4. Statement of Fact Convention

I now turn to the Statement of Fact convention of usage, which has been exemplified in (18) above (18b is repeated below for the sake of convenience).

- 18 b. Lena (uže) prinimala eto lekárstvo.
 Lena already took(imp) this medicine
 Lena has (already) taken this medicine.

Most researchers treat this convention as a special, exceptional usage of the imperfective aspect. However, according to the analysis proposed in this chapter, this usage is most natural, as it follows straightforwardly from the semantics assigned to the imperfective. As stated above, Statement of Fact imperfective asserts that a certain type of event has been instantiated, while it is irrelevant whether it was instantiated once or repeatedly. This is precisely the meaning of the imperfective aspect formalized in (24). An imperfective clause asserts that an event property is instantiated, while such an instantiation may constitute either a single event or a set of events.

If the speaker knows that the event in question has been instantiated more than once, the usage of the imperfective aspect in such sentences as (18b) is predicted to be acceptable. However, a Statement of Fact sentence is made true by a single event, and it can be uttered by a speaker who knows that the event type in question was realized only once. For instance, the speaker may utter (18b) even if she knows that Lena took the medicine in question only once. Why is the imperfective not ruled out in this case, in favor of the more informative perfective?

I propose that, once iterativity is not being encoded, the Statement of Fact imperfective may be licensed in two situations.

a). The speaker may not know whether the event property was instantiated once or several times. In this case, perfective aspect is ruled out by the Maxim of Quality. This maxim dictates us not to provide information if we lack sufficient evidence that it is correct. Being uncertain as to whether a single event or a plurality of events has taken place, the speaker will be dictated not to use an atomic event predicate.

b). As stated in Section 3.2.2.3, under the Statement of Fact convention, it is in some sense irrelevant how many times the event in question was instantiated. The important thing is that it has been realized. Thus, according to (18b), it is important that Lena has a certain experience, that she is familiar with the medicine, while further details are considered to be redundant. In this case, although the perfective form is more informative, the information it contributes is considered unimportant. Therefore, the use of the perfective is ruled out by the second part of the Maxim of Quantity, which dictates us *not to provide more information than is needed*. In contrast, the imperfective clause provides precisely the amount of information that is needed. Therefore, it does not violate the Maxim of Quantity. At the same time, the semantics of the imperfective aspect is compatible with the intended meaning, given that imperfectivity does not entail atelicity or plurality of events.

3.3.2.5. Cancelled Result Convention

I propose that in the case of the Cancelled Result convention, imperfective aspect is licensed because the Maxim of Quantity, which typically rules it out once an atomic event is involved, is overruled by the Maxim of Quality. Consider again (19), which contains a perfective verb, and (20), its imperfective counterpart which exhibits the Cancelled Result usage.

19. Boris prijexal v Ierusalim.
Boris arrived(perf) to Jerusalem.
Boris has come to Jerusalem.

20. Boris prijezđal v Ierusalim.

Boris arrived(imp) to Jerusalem.

Boris came to Jerusalem.

As discussed in Section 3.2.2.4, (19) contributes an implicature that Boris is in Jerusalem now, namely, that the result state holds at speech time. In turn, (20) does not contribute such an implicature; this sentence essentially informs the hearer that Boris came and left. Crucially, (20) can be used to encode a single arrival event, if the speaker wants to avoid the result state implicature.

On the one hand, a speaker who intends to encode a single arrival event which took place successfully is dictated to choose (19), rather than (20), by the Maxim of Quantity. Semantically, (20) is compatible with single event, repetitive and habitual readings. In contrast, (19) encodes a single completed event and is therefore more informative. On the other hand, however, (19) contributes the information that Boris is still in Jerusalem. This information is contributed not by entailment but via an implicature; still, this implicature is rather strong, and, unless it is explicitly cancelled, the hearer is going to conclude that the result state holds at the time of speech. If this information is false, (19) as it is comes to be ruled out by the Maxim of Quality. As a result, it becomes possible to use (20), which contains a less informative form but does not contribute false information. Thus, the Maxim of Quality overbears the Maxim of Quantity.

3.3.2.6 Downward-Entailing Environments

It has been shown above that under negation, as well as in other downward-entailing environments, the compatibility of imperfective aspect with telicity becomes especially obvious. Imperfective reveals itself as a default aspect which can be used to deny atomic events. In this section, I propose an explanation of this fact which is based on the analysis of aspect formulated above.

(27) below, a simple affirmative clause, constitutes an example of an upward-entailing environment, i.e. an environment in which an entailment is sustained from a subset to a superset. Thus, given that the set of beautiful girls constitutes a subset of

the set of girls, (27a) entails (27b). The fact that John saw a beautiful girl (a member of a subset) entails that John saw a girl (a member of a superset).

27 a. John saw a beautiful girl.

b. John saw a girl.

In contrast, in a downward-entailing environment, entailment relations are reversed: an entailment is sustained from a superset to a subset. For instance, negation creates a downward-entailing environment. As a result, under the narrow scope reading of the indefinite NPs, (28b) entails (28a), rather than vice versa. The assertion that John did not see a girl (i.e. did not see any member of the superset) entails that he did not see a beautiful girl (did not see any member of the subset).

28 a. John didn't see a beautiful girl.

b. John didn't see a girl.

This property of downward-entailing environments has important consequences for the interpretation of aspect discussed in the previous sections. Since entailment relations in these environments are reversed, what is more informative in an upward-entailing context becomes less informative in a downward-entailing one. Thus, while (27a) is more informative than (27b), once negation is applied, the situation becomes reverse: (28b) is more informative than (28a), as the former makes a stronger statement.

As a result, in downward-entailing environments, the plural and the imperfective forms become more informative than the singular and the perfective, respectively. Levinson (2005) demonstrates this for aspect: he shows that under negation, a sentence with an imperfective verb makes a stronger claim than its counterpart with a perfective predicate. In other words, a sentence with the imperfective entails its perfective counterpart, but not vice versa. In affirmative clauses, the opposite is true³⁷.

Consequently, we predict that the usage of the imperfective form should be less restricted in downward-entailing environments than in upward-entailing ones, as it will not be ruled out by the Maxim of Quantity. Thus, the semantics of imperfective

aspect specified in (24) is expected to be revealed more straightforwardly in downward-entailing environments, since it is not interfered with by the *Maximize Assertion* principle. More specifically, we predict that in these environments, it will be clear that the denotation of an imperfective predicate includes both pluralities of events and single events, even if the predicate in question is telic.

In other words, it has been suggested above that the incompatibility of imperfective aspect with telicity is an illusion created as a result of the application of the Maxim of Quantity. In downward-entailing environments, this maxim does not constrain the usage of the imperfective in the same way. Therefore, we predict that in these environments, the imperfective will be clearly compatible with both telicity (crucially, including atomicity) and atelicity. Naturally, we do not expect imperfectivity to entail telicity. This is not predicted by the definition of imperfectivity as a default aspect. But we expect imperfective sentences to constitute statements about telic as well as atelic events, atomic as well as non-atomic, depending on the context and the lexical aspect of the VP. This prediction is borne out.

In particular, it appears that the imperfective form is perfectly compatible with telicity and atomicity in downward-entailing environments, such as negation (as demonstrated in Section 3.2.2.5), interrogatives and the complement of *somnevat'sja* (doubt) (Section 3.2.2.6), relative clauses embedded under the universal quantifier, antecedent of conditional sentences, etc. (For further discussion of imperfectivity in the various downward-entailing environments, see Kagan (in press a,b).) In these environments, the neutral aspect is imperfective, independently of the telicity of the predicate (as noted for negation in Boguslawsky (1985), Levinson (2005), among others).

3.3.3 Summary

To sum up, in this section, I have proposed that the semantics of the perfective/imperfective distinction in Russian is essentially identical to that of the singular/plural opposition, applied to events. We can thus capture the intuitive association between imperfectivity and plurality of events without postulating, contrary to fact, that imperfectivity entails non-atomicity. Rather, similarly to nominal plurality, it is semantically compatible with both atomic and non-atomic entities, its

usage being restricted by strong pragmatic principles. In the next section, I turn to the interpretational contrast created by the perfective/imperfective opposition under negation.

4. Aspect and Case-Assignment under Negation

4.1. The Perfective/Imperfective Distinction under Negation

As stated above, under negation, as in other downward-entailing environments, imperfective aspect turns out to be more informative than the perfective. This accounts for the observation that under negation, imperfective constitutes the default aspect, with both telic and atelic predicates (e.g. Levinson (2005)). Then when is perfective aspect used in negative sentences? After all, denial of atomic events can be achieved by a negative clause with an imperfective predicate. How do perfective and imperfective clauses differ in meaning under negation if atomic events are involved?

Within event-based semantics, a negative sentence can have two possible interpretations. It may assert that the event property contributed by the verb with its arguments was not instantiated. This is the strongest possible meaning of a negative sentence. Alternatively, such a sentence may deny a particular, expected event, which has been previously mentioned in the discourse and/or previously expected by some discourse participants, but ultimately did not take place. Imperfective aspect is compatible with both these interpretations (see Gronn (2003) for a detailed discussion of the distinction between what he refers to as *existential* as opposed to *presuppositional* imperfective.) Consider, for instance, the example in (29):

29. Lena ne zvonila nikomu iz nas.

Lena NEG phoned(imp) nobody(dat) from us

Lena phoned none of us.

This sentence may mean roughly that the event property of Lena phoning one of the contextually specified individuals has not been instantiated. Alternatively, (29) may be uttered in a context whereby Lena was expected to phone one of these individuals under certain circumstances and at a particular temporal interval, or at least if the possibility of this event taking place has been mentioned in the discourse. In this case, a particular phoning event is being negated (in the terminology of Gronn,

presuppositional imperfective is involved). Indeed, under the latter reading, the sentence is perfectly compatible with Lena having phoned some of the individuals in question previously, under different circumstances.

In turn, negative perfective sentences can only be used to deny specific events. Thus, (30) below can only be uttered if Lena was supposed or expected to phone Dina under particular circumstances, and this expectation was not fulfilled. In other words, the perfective sentence means that a particular, expected event, probably identifiable from the context, was not realized.

30. Lena ne pozvonila Dine.
Lena NEG phoned(perf) Dina(dat)
Lena didn't phone Dina.

Thus, a perfective sentence can only deny a particular, expected event. Moreover, a further restriction is imposed on such sentences, which distinguishes them from their imperfective counterparts. Perfective clauses do not merely negate an event that has been previously mentioned or expected. They also presuppose the realization of some preparatory stage which typically precedes events of the type denoted by the predicate. According to these sentences, such a preparatory stage has taken place in the actual world, which has enhanced the likelihood of the event actually occurring and may therefore have caused it to be expected. To illustrate, consider the following minimal contrast:

- 31 a. Ja ne ubivala Ivana.
I NEG killed(imp) Ivan(acc)
I didn't kill Ivan.
- b. Ja ne ubila Ivana.
I NEG killed(perf) Ivan(acc)
I didn't kill Ivan / I haven't killed Ivan.

Both these sentences are likely to deny a particular killing event. However, a curious difference between their meanings can be observed. (31a) may be uttered by a speaker who has been accused of murder and who wishes to justify herself: She asserts that

the previously mentioned event did not take place (or at least, that she was not the agent). In contrast, the speaker of (31b), despite denying the event, appears to acknowledge her guilt in a certain sense. The sentence presupposes that, even though the killing did not occur, the speaker has tried to murder Ivan, or that she intended to murder him, or at least that she was seriously considering the option of committing the crime. In other words, some preparatory stage that is likely to precede a killing event must have taken place. What exactly this stage has been will depend on the context. Indeed, out of context, (31b) sounds somewhat strange. It forces the speaker to accommodate the preparatory stage, but this cannot be easily done, given that there are numerous options for what exactly this stage could have consisted of. An appropriate context, however, will make this clear, as the presupposed preparatory stage will be part of background information.

Consider an additional example:

32. Lena ne kupila stiral'nuju mašinu.

Lena NEG bought(perf) [washing machine](acc sg)

Lena didn't buy a washing machine / Lena hasn't bought a washing machine.

(32) can be uttered in a context according to which Lena intended to buy a washing machine, or perhaps was being persuaded to do so by her relatives, or at least debated the matter in her mind. However, if the speaker only denies the event because someone mistakenly thought that Lena did the buying, and no preparatory stage of the type exemplified above is presupposed, the verb has to be imperfective.

It should be pointed out that in invoking a typical preparatory stage that is likely to precede an event, negated perfective sentences are reminiscent of progressive achievements in English. Whenever an achievement predicate can appear in the progressive, the resulting sentence encodes a preparatory stage that is likely to be followed by the achievement, rather than the achievement itself. For instance, *John was winning* does not entail that John actually won, but it asserts that a state of affairs held which typically precedes a winning. What exactly is going on within this pre-winning situation is heavily dependent on the context, just as is the case with a

preparatory stage presupposed by negated perfective clauses. (For a discussion of progressive achievements, see Rothstein (2004) and references therein.)

To sum up thus far, negative sentences with imperfective verbs may deny any instantiation of event property or a particular, presupposed, event. In turn, their counterparts with perfective verbs can only deny a particular, expected or previously mentioned event, and presuppose a preparatory stage that is likely to be followed by the event in question.

With this difference between perfective and imperfective negated clauses in mind, we can now turn to the interaction of Case and aspect under negation.

4.2. How Aspect Affects Case

4.2.1. Expected Events and Presupposed Objects

Below, I propose that one of the reasons for the fact that GenNeg is more likely to be assigned to objects of imperfective verbs results from the association of perfective aspect with specific, expected events and their preparatory stages. In particular, I believe that objects which function as participants in expected events are likely to be expected to exist as well. In many cases, the preparatory stage that is presupposed to have taken place will already involve these participants – which would mean that these participants are presupposed to exist. In other words, NPs that denote participants of expected events are likely to carry existential commitment. Thus, they tend to denote objects in the actual world, rather than properties. For this reason, they tend not to appear in GenNeg. However, existential commitment is not obligatorily present for such NPs, and that is why GenNeg can, in fact, be assigned to objects of perfective verbs in some cases.

I will begin illustrating my point by considering the sentences in (1), repeated below:

- 1 a. Dima ne čital stat'i / statej.
Dima NEG read(imp) articles(acc pl)/(gen pl)
Dima didn't read articles.

- b. Dima ne pročital stat'i / *statej.
Dima NEG read(perf) articles(acc pl)/(gen pl)
Dima didn't read (the) articles.

Let us begin with a discussion of (1b), the perfective variant. This sentence cannot mean that Dima has never read any articles. Rather, it denies a particular event of Dima reading some articles, and reading them all the way through³⁸. The sentence further presupposes that some stage that typically precedes article-reading has been realized: for instance, that Dima has intended to read some articles, or that he has been assigned to read certain articles at the university. This state of affairs causes the article-reading event to be expected, or at least enhances the probability of this event taking place. Thus, as discussed in Section 4.1, we deal with a non-realization of a particular, expected event.

I suggest that the semantics of the perfective sentence has important consequences for the interpretation of the object NP. Thus, if the speaker has expected Dima to read some articles and believes that some preparatory condition that is likely to precede a reading event has been satisfied, she is also likely to assume that there actually exist some relevant articles which Dima could potentially read. Otherwise, it would be strange to expect Dima to do the reading. Crucially, the preparatory stage which is presupposed to have taken place is likely to involve already existing articles. For instance, if we assume that reading certain articles constitutes part of Dima's homework assignment, these articles are supposed to exist. Thus, a commitment that such a preparatory condition has been satisfied (e.g. the homework assignment has been given) involves a commitment that articles exist. But this means that the object NP carries AEC (and, consequently, REC). Crucially, the commitment that relevant articles do exist is unlikely to be affected by Dima's not having done the reading. After all, existence of articles is not affected by the reading process. If the previous state of affairs causes us to believe that the relevant articles are present in the actual world, the fact that Dima did not ultimately read them does not cancel REC. To sum up, we can see that even if the object NP is not interpreted as specific, it still carries REC and refers to or quantifies over objects in the actual world.

In turn, (1a), in which the verb is imperfective, need not encode an expected event and doesn't presuppose a preparatory stage. This sentence can relate to a state of Dima not reading any articles, either permanently or temporarily. One potential reason for such a state could be that there were no articles within his reach. Under this reading, the sentence neither asserts nor presupposes existence of any given articles. This means that existential commitment is not present. The NP *articles* may be interpreted as a property, rather than a set of objects in the actual world. As a result, genitive Case-marking is licensed. (Of course, the object may also receive a wide scope, specific reading, and accusative Case-marking is available as well.)

A rather similar example is provided in (33):

33 a. Miša ne podpisывal dokumenty / dokumentov.

Misha NEG signed(imp) documents(acc pl)/(gen pl)

Misha didn't sign (the) documents.

b. Miša ne podpisal dokumenty / ???dokumentov.

Misha NEG signed(perf) documents(acc pl)/(gen pl)

Misha didn't sign (the) documents / Misha hasn't signed (the) documents.

Again, for many speakers, genitive Case-assignment is possible only if the verb is imperfective (33a), not when it is perfective (33b). (33a) may be used to assert that the event property of Misha signing (any) documents was not instantiated; in this case, the sentence does not contribute a presupposition (or entailment) that there exist any relevant documents for Misha to sign. In contrast, according to (33b), a state or event has taken place in the actual world which is likely to be followed by document-signing on the part of Misha. A very likely candidate for such a preparatory stage is one whereby documents were given to Misha and he was asked to sign them (but he then refused to do so). Exactly which event constitutes the actual preparatory stage would depend on the context, but in any case, a preparatory stage that is typically followed by document-signing is likely to involve existing documents. All this shows that the object NP is likely to carry EC; hence, accusative Case is highly preferable.

Let us consider an additional example in (34).

34 a. Včera večerom Maša ne prinimala snotvornoje / snotvornogo.

yesterday evening Masha NEG took(imp) sleeping-pills(acc)/(gen)

Last night Masha didn't take sleeping pills.

b. Včera večerom Maša ne prinjala snotvornoje / ???snotvornogo.

yesterday evening Masha NEG took(perf) sleeping-pills(acc)/(gen)

Last night Masha didn't take sleeping pills.

(34a), which contains an imperfective verb, can be interpreted as asserting that the event property of Masha taking (any) sleeping pills was not instantiated the night before speech time. The object NP need not be specific and need not carry REC. The fact that the object of the imperfective *prinimat'* (take) need not carry existential commitment is supported by the perfect acceptability of a sentence like (35) below:

35. Drevnie ljudi ne prinimali snotvornogo i prekrasno spali.

ancient(pl) people NEG took(imp) sleeping-pills(gen) and very-well slept(imp)

Ancient people didn't take any sleeping pills and slept very well.

Assuming that there were no sleeping pills at the time referred to, it is clear that the object of the imperfective verb does not carry a commitment that its referent exists. For this reason, genitive Case-assignment is possible in both (34a) and (35).

Let us now turn to (34b). According to this sentence, containing a perfective verb, Masha has been expected to take a sleeping pill, but she did not do that. (34b) could be uttered, for instance, if the speaker knows that Masha takes sleeping pills every night, or if sleeping pills have been recently prescribed to her by a doctor. In both these cases, the speaker would probably assume that there exist sleeping pills that Masha could potentially take. Of course, the speaker is not likely to have a particular tablet in mind, but she is most probably able to come up with a description which would make a whole set of pills identifiable (*the pills that the doctor prescribed, or those pills that she takes every night.*) In any event, the presupposed preparatory stage is likely to contribute EC to the object NP, and, therefore, the chosen Case is accusative.

To conclude thus far, specific, expected events encoded by clauses with perfective verbs, which presuppose a preparatory stage, tend to involve participants that are (or have been) expected to exist. And since genitive Case cannot be assigned to NPs bearing (R)EC, perfective verbs are more likely to take accusative complements.

4.2.2. Genitive Objects of Perfective Verbs

If this is so, why do perfective verbs actually license genitive objects in some cases? This happens because in order to expect that a certain event whose preparatory stage has been realized will take place, it is not always necessary to be committed that a participant in that event exists. A most convincing example is provided in (36):

36. Miša ne napisal pis'ma.
Misha NEG wrote(perf) letter(gen sg)
Misha hasn't written a / the letter.

This sentence is acceptable, even though it contains a perfective verb and a genitive object. The reason is that *(na)pisat'* (write) is a verb of creation. Therefore, the existence of its object depends on whether the writing event takes place (and reaches its natural endpoint) or not. As a result, an individual who concludes, on the basis of certain facts, that Misha is going to (or is relatively likely to) write a letter, need not believe that this letter already exists. In fact, such an existential commitment is rather unlikely. (See Chapter 4, Section 2.2 for the claim that REC should be evaluated relative to the time at which the belief is held.) And, obviously, the knowledge that the expectation has not been fulfilled is not likely to create a commitment that the letter exists. (Quite to the contrary, if the writing did not take place, it follows that the letter did not come into existence.) Therefore, despite the expectation that Misha would write a letter, the object NP is not associated with REC, does not come to denote an entity in the actual world (either according to speaker's current or past beliefs), and, as a result, it can be marked genitive.

It is not only verbs of creation, however, that can take genitive objects despite being perfective. Thus, consider the example in (37):

37 a. Dima ne našel dokumenty / dokumentov.

Dima NEG found(imp) documents(acc pl)/(gen pl)

Dima didn't find (the) documents.

b. Dima ne našel dokumenty / dokumentov.

Dima NEG found(perf) documents(acc pl)/(gen pl)

Dima didn't find (the) documents.

Here, both the perfective and the imperfective verb can take either a genitive or an accusative object. Why is perfective aspect compatible with genitive Case-assignment? I believe that the explanation is along the following lines. Indeed, a perfective verb can be used if the speaker believes in the existence of some documents which Dima has been expected to find – and, in fact, in that case the object NP is likely to be accusative, at least according to my intuitions. However, this is not the only context in which perfective aspect is acceptable. More generally, a finding event is typically (though not obligatorily) preceded by a search. If we know that a search has taken place, a finding event can be considered an expected or at least a natural consequence. Therefore, a search constitutes an appropriate preparatory stage for a sentence like (37b). Crucially, the knowledge that Dima has been engaged in a search does not force us to believe in the existence of relevant documents. We may know that Dima was seeking documents without sharing his belief that the documents do exist in reality. A search does not imply actual existence of the object that is being sought. And the sentence does not contain an intensional verb that would introduce an accessibility relation to Dima's worldview. In addition, (37b) could be uttered if Dima was not looking specifically for documents but rather was just searching a certain place. In this case, an event of finding (anything) would be considered a natural consequence (a factor that makes perfective appropriate), and the sentence can be used to assert that no instantiation of the property *documents* was found in the process of this search. Thus, the presupposition that a preparatory stage that is likely to precede a finding event has taken place need not contribute a presupposition that relevant documents exist. This means that even in the presence of a perfective verb, the object NP need not carry EC, and that is why Irrealis Genitive can be assigned³⁹.

To sum up, I have proposed that the relative reluctance of perfective verbs to take genitive objects under negation results from the interpretational properties of the

sentences that contain them. These sentences normally denote expected, specific, identifiable events and the participants in these events are also likely to be presupposed and to carry (possibly relative) existential commitment. Therefore, the object NPs get assigned accusative Case. However, the fact that we deal with an expected event does not always trigger a commitment that the complement NP quantifies over a non-empty set, as demonstrated in (36) and (37b) above. Such a commitment may be absent for different reasons. Thus, the NP may lack REC and need not be interpreted as an object in a particular world; rather, it may get a property interpretation. As a result, genitive Case-marking becomes acceptable.

4.2.3 Previous Approaches: Making the Picture Complete

In this section, I will consider two explanations of the phenomenon under discussion that have been previously proposed. It will be suggested that each of the analyses, together with the account proposed in this chapter, makes a contribution to our understanding of the relation between aspect and Case-assignment under negation.

4.2.3.1 Pereltsvaig (1998,1999)

Pereltsvaig (1998,1999) argues that the Case of an object under negation depends on referentiality. In particular, she claims that genitive objects are obligatorily non-referential; only in this case they can be quantified over by the empty quantifier q , which is responsible for their Case-marking. (See Section 2.2.1 of Chapter 2 for a more detailed discussion of this approach.) Her account is therefore different from the analysis presented in this dissertation. However, I believe that for the purposes of the discussion of aspect, this difference is going to be relatively unimportant.

Pereltsvaig divides the imperfective aspect into the progressive and habitual uses. She notes that the progressive use, similarly to the perfective aspect, is episodic. In contrast, the habitual use is generic, and it appears that sentences with generic readings are more likely to contain genitive objects than the ones with episodic readings. Following Dahl (1975), Pereltsvaig notes that the genericity of a sentence may affect the interpretation of an NP. She claims that NPs that appear in generic sentences “can be interpreted generically (namely...non-referentially)” (Pereltsvaig 1999, page 37 of the manuscript). As a result, they can be marked genitive.

The term *generic interpretation* as applied to NPs may be somewhat problematic in this context. It is not perfectly clear which NPs should be treated as generically interpreted. One option would be to state that these are kind-referring NPs. However, such NPs can in some sense be considered referential; indeed, they tend to behave similarly to specific NPs with respect to some properties, such as word order (see Diesing (1992), among others). Therefore, such NPs do not, in fact, seem to constitute the most likely candidates for genitive Case-marking. Alternatively, one may treat as *generically interpreted* those NPs that fall within the scope of the generic operator. I believe that this approach is preferable for the current purposes. Crucially, genericity involves an intensional component, and is therefore expected to interact with the choice of Case under negation.

Consider, for instance, the habitual imperfective sentence in (38):

38. Lena ne jest ovošče.
Lena NEG eats(imp) vegetables(gen pl)
Lena doesn't eat vegetables.

(38) contains a generic operator that quantifies over situations (probably over Lena's eating situations). The NP *ovošče* (vegetables) also appears within the scope of this operator. Thus, the sentence does not mean that there exists a certain set of vegetables such that Lena consistently does not eat. Rather, we get an interpretation according to which the relevant set of vegetables changes from situation to situation. Moreover, some (or even all) of the situations in question may contain no vegetables at all – which may be the reason for why Lena does not eat any. It is therefore obvious that the NP is used non-referentially, and does not carry REC. Therefore, it can appear in the genitive Case.

The approach to the relation between Case and aspect proposed by Pereltsvaig can be adopted within the framework of the analysis developed in this dissertation. NP complements contained in generic sentences are relatively likely to receive a narrow scope interpretation and, in the presence of the negative operator, to lack (even relative) existential commitment. For this reason they rather easily receive genitive Case. I believe that this factor indeed contributes to the relative likelihood of

imperfective verbs to take genitive objects. However, I suggest that Pereltsvaig's analysis is insufficient to account for the complex relation between Case and aspect.

Firstly, as demonstrated in Section 3.2.2, the non-progressive imperfective is not always generic. It can be used to refer to a restricted set of (non-habitual) repeated events, and sometimes even to a single completed event. This is especially evident in downward-entailing environments, but is also possible in simple affirmative clauses (see Section 3.2.2 for Statement of Fact and Cancelled Result conventions). A non-generic negative sentence exhibiting non-progressive imperfective aspect was exemplified in (34a).

34 a. *Včera večerom Maša ne prinimala snotvornoje / snotvornogo.*

yesterday evening Masha NEG took(imp) sleeping-pills(acc)/(gen)

Last night Masha didn't take sleeping pills.

b. *Včera večerom Maša ne prinjala snotvornoje / ???snotvornogo.*

yesterday evening Masha NEG took(perf) sleeping-pills(acc)/(gen)

Last night Masha didn't take sleeping pills.

(34a) is not a habitual sentence, as indicated by the presence of the temporal adverbial *včera večerom* (yesterday evening, last night), which locates the event in time. Despite this fact, the imperfective verb can take a genitive object, and genitive Case-assignment is much more easily available with this verb than with its perfective counterpart in (34b). It thus follows that genericity by itself cannot provide a full account for the contrast in Case-assignment. Both sentences in (34) are episodic; still, the perfective/imperfective contrast affects the choice of Case.

One of the reasons for which Pereltsvaig's analysis does not account for the contrast in (34) is the following. While Pereltsvaig accounts for the fact that generic imperfectives are likely to take genitive objects, she leaves unexplained the often observed "reluctance" of perfective verbs to take such complements. This is insufficient for two reasons. Firstly, although episodic sentences do not contain the generic operator, they are still expected to contain non-referential, property-denoting complements rather easily under negation. After all, the negative operator is sufficient to license such NPs; the non-referential interpretation is perhaps especially likely in

the presence of the generic operator, but it can be obtained in its absence as well. Therefore, if only genericity were responsible for the effect that aspect has on Case-marking, we would expect a much weaker contrast between clauses with perfective and imperfective verbs. The fact that perfective verbs often cannot take genitive objects suggests that there is something about the semantics of *perfective* aspect that may make it incompatible with the genitive. The second reason that the genericity approach is insufficient is because, as already stated above, the non-progressive imperfective aspect is relatively likely to allow genitive complements even in non-generic sentences, as in (34a).

The pattern described in the previous section accounts precisely for those facts that are left unexplained under the genericity analysis. It explains the relative reluctance of perfective verbs to take genitive complements (without making the genitive Case completely incompatible with perfective aspect) and, as a result, accounts for such contrasts as in (34). However, it should be emphasized that the genericity approach makes an important contribution to our understanding of the relation between aspect and Case-marking.

4.2.3.2. Timberlake (1986)

Timberlake (1986) also notes that imperfective verbs are more likely to take genitive objects than their perfective counterparts. He proposes an explanation of this phenomenon which is based precisely on the semantics of sentences with *perfective* verbs. What he proposes is approximately the following. Perfective aspect introduces an endpoint of an event. Therefore, in negative sentences with perfective verbs what is negated is not the whole event, but rather its endpoint. Namely, such sentences mean that an event was not finished. (Note that this is of importance only if we deal with an accomplishment. If a sentence encodes an achievement, there is no difference between negating a whole event and negating its endpoint, since the event essentially consists only of the endpoint.) Timberlake states that as a result, “the object of a perfective verb is included in the scope of negation to a lesser extent than the object of an imperfective verb, and it appears in the genitive less often” (Timberlake 1986:348). Namely, since the event as a whole is not negated and is assumed to have been taking place, and only its endpoint is negated, Timberlake concludes that the object NP is in some sense not completely included within the scope of negation. Its participation in

the event is still being assumed. This semantics makes genitive Case-assignment less likely.

A claim that an object can appear within the scope of an operator to a lesser or to a larger extent is problematic. We would assume that either an NP appears within the scope of an operator or it does not. In addition, I believe, contrary to Timberlake, that negative sentences with perfective verbs can not only deny that an event was finished, thus negating its endpoint, but also negate an event as a whole, asserting that it did not take place at all. As mentioned above, this is trivially the case with achievements. However, I believe that even when we deal with accomplishments, both these options are present. Thus, consider (39) below:

39. Dima ne s'jel sup
Dima NEG ate-up(perf) soup(acc)
Dima didn't eat up / hasn't eaten up the soup.

This sentence certainly has a reading according to which Dima did not even begin to eat the soup. In other words, it can mean that the whole event did not take place. Of course, it could also mean that Dima did not finish eating the (contextually presupposed quantity of) soup and, thus, the event took place but was not completed.

Still, it is true that negative sentences with perfective verbs *may* negate the endpoint of an event that is assumed to have started. Note that such sentences exhibit an important similarity to the examples analyzed in Section 4.2, in which whole events have been negated. In the latter cases we dealt with a denial of an event while presupposing its preparatory stage. Under the readings discussed by Timberlake, the natural endpoint, or the result state of an accomplishment is denied, while the process component of the accomplishment (which can be conceived of as a preparatory stage preceding the result state) is presupposed to take place.

In sentences of the latter type, genitive Case is indeed unlikely to be assigned to an object. Typically, if the speaker assumes that an event did take place (even though it did not reach its endpoint), she must also be committed that the participants in that event do exist⁴⁰. Thus, the complement NP in such sentences will denote not a

property but an object which has participated in an event and, consequently, is present in the world in which the event took place.

Typically, in accomplishment clauses that deny an endpoint only, negation does not really affect the interpretation of the object. The object plays the same role in the event as it does when the clause is affirmative and gets the same interpretation as in affirmative clauses. Among other things, it carries existential commitment just as it does in affirmative clauses (but see note 40 for a discussion of objects of creation verbs). Therefore, it will appear in accusative Case. I believe that Timberlake's intuition about the role of scope in such clauses is, in fact, correct. However, the complement NPs do not appear within the scope of negation *to a lesser extent* than their counterparts in other types of sentences. Rather, whenever it is only the fact that the event reached its natural endpoint that is negated, while the event is presupposed to have taken place, the complement NP simply appears outside the scope of negation. And indeed, NPs that take wide scope relative to negation do not appear in the genitive Case since they carry REC (unless another non-veridical operator is present above negation).

To conclude, I believe that Timberlake provides an additional reason for the relative reluctance of perfective verbs to take genitive objects. If a sentence containing the verb denotes an event that did occur but did not reach its endpoint, the NP will normally be interpreted outside the scope of negation and will therefore appear in accusative Case. This fact, together with the tendency of sentences with perfective verbs to denote expected events and the likelihood of generic sentences with imperfective predicates to affect the interpretation of NPs, contributes to the understanding of the relation between genitive Case and aspect.

5. Genitive Case and Number

In this section, the relation between Irrealis Genitive and the number of an NP is considered. The genitive/accusative alternation is sensitive to the number distinction: plural NPs are more likely to appear in genitive Case than singular ones. Below I propose that this happens for essentially the same reason as the one that causes genitive Case to be assigned more often in imperfective clauses, which were associated with plurality of events.

It has been suggested in this chapter that the denotation of imperfective predicates contains both pluralities of events and singular events. Under negation, an imperfective sentence makes a strong statement, as it denies complete as well as incomplete events, their pluralities as well as single instantiations. As a result, by default, the aspect under negation is imperfective, while perfective verbs can only appear in semantically marked sentences that deny a particular atomic event.

I believe that the state of affairs with number is essentially the same. Under the approach assumed in this chapter, the denotation of a plural NP contains both pluralities of individuals and single objects. As a result, under negation, a sentence with a plural argument (that takes narrow scope) entails that neither a plurality nor a single individual in the NP denotation participates in the event. Just as a sentence with an imperfective verb denies not only a plurality of events but also a single event, so a clause with a plural NP denies participation of even a single individual in the event. Thus, if somebody says: *John didn't see (any) dogs in the street*, we do not conclude that John did not see any collection of dogs that consists of at least two members. We are likely to conclude that John did not see even a single dog. And if a person says *I don't have children*, we conclude that she is childless, and not that she has only one child.

The same is true for Russian, especially if the plural object appears in the genitive Case.

- 40 a. Ja ne videl tam domov.
I NEG saw(imp) there houses(gen pl)
I haven't seen (any) houses there.
- b. Ja ne videl tam doma.
I NEG saw(imp) there houses(acc pl)
I haven't seen houses there.

Both (40a) and (40b) strongly suggest that the speaker did not see even a single house in the specified location. In the case of (40b), the accusative variant, it might be possible to cancel this conclusion, as demonstrated in (41):

41. Ja ne videl tam DOMA, ja videl tol'ko odin dom.

I NEG saw(imp) there houses(pl acc) I saw(imp) only one house(acc)

I haven't seen HOUSES there; I've seen only one house.

This is possible only with a heavy stress on the object, and is rather marginal even in that case. Crucially, in this case, we deal with metalinguistic negation, which differs in important ways from the more classical negative operator, and which succeeds to negate aspects of meaning that typical negation cannot deny, e.g. presuppositions. (A detailed discussion of metalinguistic negation can be found in Horn (1989).) However, with (40a) such an interpretation cannot be achieved even marginally. This follows straightforwardly if we assume that in (40a), the genitive NP denotes the property *house*, which constitutes a function from possible worlds to sets of houses, with both single houses and collections of houses functioning as members of these sets. The sentence asserts that the speaker did not see any instantiation of this property. Since single houses constitute instantiations of this property, the sentence entails that not even a single house was seen by the speaker.

Thus, a plural NP causes for a strong statement to be made under negation. Given that negation constitutes a downward-entailing environment in which entailment relations are reversed, the plural form turns out to be stronger than the singular one in this context. As a result, the usage of the former is not ruled out by the 'Maximize' principles. By default, if the speaker has no expectation as to whether a single individual or a plurality would have participated in the event if it had taken place, the plural form is likely to be used, as its semantics is neutral with respect to number. This is presumably what happens in (40). In turn, a singular NP is expected to be used if the speaker has a reason to choose precisely this form, just as perfective aspect is used under negation only if the speaker has a reason to prefer this form over the stronger and more neutral imperfective. The choice of a singular NP would mean that, for some reason or other, the speaker (or possibly other discourse participants) has expected for exactly one individual to participate in the currently denied event. One possible reason for such a choice is that the speaker has a specific object in mind that she wants to refer to. Alternatively, she may not be able to identify the object in question but still have some reason to believe that, had the event taken place, the internal argument would have been realized as exactly one individual. In this case the

speaker is also going to choose the singular form of the NP since it conforms to her expectations. Consider the example in (42):

42 a. Ja ne (u)videla⁴¹ v komnate cvetov.

I NEG saw(imp/perf) in room flowers(gen pl)

I didn't see flowers in the room.

b. ???Ja ne (u)videla v komnate cvetka.

I NEG saw(imp/perf) in room flower(gen sg)

I didn't see a flower in the room.

If the speaker is willing to assert that she saw nothing with the property *flower* in the room, (42a) is likely to be used. As predicted by the approach to plurality we have adopted, this sentence means that the speaker has seen neither a collection of flowers nor a single flower. A singular complement NP would not be used in this situation. The speaker may choose the singular form only if there is a reason to do so. For instance, a singular NP will be used if the speaker has a particular flower in mind that she did not see. In this case the NP would be specific. Naturally, it is predicted to be accusative, for reasons discussed in Chapter 5. A specific NP carries REC, as it encodes an object that exists in a given world, typically, the actual one. This, in turn, makes genitive Case-assignment unacceptable.

Alternatively, the speaker could have a special reason to expect to see precisely one flower in the room. But in this case we deal either, again, with a specific flower or at least with a flower existing in the world of the speaker's beliefs, rather than the property of "floweriness" in general, and, again, genitive Case-assignment would be impossible. Before entering the room, the speaker believed, or expected that there would be exactly one flower there (which suggests that she believed in the existence of such a flower). This, in turn, means that the NP carries existential commitment, at least in its relativized form. In turn, if the speaker did not have such a belief before entering the room, she is not expected to use a singular NP.

In other words, the singular form tends to be chosen if the speaker has expected a single object to participate in a certain event (or believes that exactly one object actually participated in an event that was not completed). Therefore, singular NPs

often denote expected, presupposed or even specific objects, just as sentences with perfective verbs denote expected, presupposed or specific events. For this reason singular NPs tend to be assigned accusative rather than genitive.

However, it is certainly true that singular NPs do rather often appear in genitive Case. This happens because it is not only specificity or presuppositionality of an NP that may constitute a reason for choosing a singular form. Thus, consider (43) below, which contains a singular genitive NP:

43. Ja ne (u)videla v komnate kovra.
I NEG saw(imp/perf) in room carpet(gen sg)
I didn't see a carpet in the room.

In spite of the apparent similarity between the two sentences, (43) is acceptable and (42b) is not. Still, the sentences differ only in the complement NP, and this NP is in both cases singular and concrete and marked genitive. What is the reason for the contrast in acceptability? I believe that the relevant difference between the two sentences is pragmatic. We normally expect there to be a single carpet in one room; at least, our knowledge of the world tells us that this is a very likely situation. This knowledge is sufficient to cause the speaker to choose a singular form of the NP in (43). However, this choice has nothing to do with either specificity or presuppositionality; it is a product of our general knowledge of the world only. Therefore, REC is absent, and thus, there is nothing in the semantics of the sentence that rules out genitive Case-marking.

The same reasoning cannot be applied to (42b) because our knowledge of the world does not tell us that, normally, only one flower appears in a room. In fact, the opposite is true: flowers are more likely to come in collections. Therefore, we need some other reason to use the singular form, and, as already suggested above, this reason is likely to be associated with specificity and presuppositionality.

An additional example of a genitive singular NP is provided in (36), a sentence which has been discussed above with respect to aspect:

36. Miša ne napisal pis'ma.

Mishe NEG wrote(perf) letter(gen sg)

Misha hasn't written a / the letter.

In fact, the reason for the acceptability of genitive Case-assignment to a singular NP is similar to the reason for the compatibility of the genitive with perfective aspect. Indeed, the fact that the object NP is singular strongly suggests that, according to the speaker's state of knowledge, Misha was supposed to write a single letter (or at least a single letter that is relevant for the discourse). In fact, it is very likely that the speaker has a particular letter in mind in the sense of knowing to whom it was supposed to be addressed, what information it was supposed to contain, etc. Still, since the sentence contains a verb of creation and we know that the process of creation did not take place, it follows that the letter did not come into existence. As a result, as discussed above, the NP does not carry existential commitment of any type; it is neither entailed nor presupposed to exist in any salient version of reality. The letter does not exist in the actual world as the speaker sees it or has seen it previously. This NP certainly may denote a property. Most probably, this will not be a property of being a letter in general. Rather, it will be a property of being the letter that Misha was supposed to write. For each possible world, it will render either a *singleton* set or an empty set if in that version of reality the letter did not come into existence, as is the case in the actual world. This is certainly a sufficient reason for a *singular* NP to be used, without ruling out genitive Case-marking. In other words, a property-denoting NP certainly can be singular if it encodes a property whose instantiation is expected to constitute only a singleton set.

To conclude, in this chapter, I have discussed the relation between aspect and number on the one hand and Case-assignment under negation on the other. I proposed that the Case-assignment tendencies under discussion result from the fact that objects of perfective verbs, as well as singular objects, are relatively likely to carry REC (and, typically, AEC) and to denote individuals, rather than properties. For this reason, they tend to appear in accusative Case.

Conclusion

In this work, I have investigated two instances of non-canonical genitive Case in Russian: Genitive of Negation and Intensional Genitive. I have argued that these two types of non-canonical genitive should be provided a unified account and analyzed as instances of the same phenomenon, Irrealis Genitive. This conclusion was based on the fact that Genitive of Negation and Intensional Genitive share a considerable number of semantic properties, and mostly pattern together in terms of their cross-linguistic distribution and historical development.

I have proposed a semanticopragmatic analysis of Irrealis Genitive that is based on the notion of existential commitment. In particular, I argued that this Case is licensed in the absence of Relative Existential Commitment. This is a version of commitment to existence that is relativized not only to w_0 but also to other worlds that stand to it in an accessibility relation introduced in the sentence. Both negation and weak intensional verbs can cancel REC of the object NP; therefore, these operators create an environment in which Irrealis Genitive is licensed.

The analysis accounts for a wide range of semantic and distributional properties of genitive objects. For instance, it explains the fact that Irrealis Genitive is licensed by weak intensional verbs but not by strong ones. The object of a strong intensional verb is characterized by existential entailment relative to those possible worlds that form the embedded context set. Therefore, objects of these verbs obligatorily carry REC, and must appear in accusative Case. In contrast, within the scope of a weak intensional verb, REC may be cancelled. It has been argued that for objects of these verbs, the choice of Case depends on the presence versus absence of REC. Further, the proposed analysis accounts for a range of semantic properties that characterize genitive NPs, including their non-specific, narrow scope interpretation, lack of existential commitment and the tendency to receive indefinite readings. All these properties follow directly from the requirement that the NPs lack REC.

The analysis captures the analogy between the genitive / accusative contrast in Case on the one hand and the subjunctive / indicative opposition in mood, on the other. Irrealis Genitive Case-marking of NPs is treated as a nominal counterpart of

subjunctive mood. Both phenomena are sensitive to the notion of commitment: the subjunctive is licensed in the absence of commitment to truth, and Irrealis Genitive is assigned in the absence of commitment to existence. This approach accounts for the parallels that can be found in the semantic contribution of genitive Case-marking and subjunctive mood, as well as in their distribution.

Finally, this study addresses the issue of how Case-assignment interacts with number and verbal aspect. I proposed an analysis of grammatical aspect in Russian which treats the perfective/imperfective opposition as parallel to the singular/plural distinction when applied to events. I have also demonstrated how this analysis accounts for the choice of aspect in various contexts and environments. I have then argued that both singular objects and NP complements of perfective verbs under negation are often accompanied by REC. For this reason, such NPs tend to appear in accusative Case, rather than Irrealis Genitive.

Irrealis Genitive is an intricate and challenging phenomenon that is sensitive to a wide range of semantic, pragmatic and syntactic factors. The present study, in addition to investigating the properties of genitive arguments, relates to a number of issues in a broader perspective. It provides evidence for the problematicity of the two-way Inherent/Structural distinction in Case. It contributes to the investigation of intensional verbs and their complex semantic properties, as well as of the ways in which verbal semantics may interact with the interpretation of nominal complements. Further, it makes a contribution to our understanding of the parallelism between the nominal and the clausal domains.

Finally, we have seen that the notion of commitment plays an important role in the semantics and grammar of natural language. The choice of Case and mood appears to be governed by the presence or absence of commitment to existence or commitment to truth. I believe that the sensitivity of natural language to this notion reveals the importance of distinguishing between constituents that denote entities in a particular version of reality (no matter whether the actual one or not) and constituents that encode *types* of entities, independent of any particular instantiations. Constituents of the latter kind do not trigger commitment relative to any given world. This contrast between a property, or a concept, and its instantiation, partly reminiscent of the type /

token distinction, plays an important role in natural language and human mind. The present study provides further evidence of the importance of this distinction.

Notes

¹ As demonstrated in the work by Hajičova, existential presupposition should be distinguished from existential “allegation”. While in some positions, definite NPs normally carry an existential presupposition, there are positions in which such a presupposition seems to be absent (and what we find instead is existential “allegation”). (See Hajičova (1973), (1984a,b), Hajičova et al. (1998) for details.)

² Here and in what follows, I do not specify in the glosses the number of mass nouns (which are typically morphologically singular). Also, I will not specify the number of proper names.

³ In the recent literature, the same approach has been taken in work by Kagan and Partee and Borshev (e.g. Partee and Borshev (2004), Kagan (2005)).

⁴ Since Intensional Genitive involves only a genitive/accusative alternation on objects, in this section, I will be mainly concerned with the genitive/accusative, rather than genitive/nominative, contrast.

⁵ The tree is slightly adapted in order to fit Case-checking, rather than Case-assignment, strategy.

⁶ Bailyn discusses definiteness, specificity and presuppositionality as a cluster of properties that distinguish genitive NPs from their accusative or nominative counterparts. He does not specify which of these properties is determined by the structural position an NP occupies.

⁷ It should be pointed out that the unacceptability of (3) and (4) can be accounted for within the framework of the analysis proposed in Borshev and Partee (e.g. Borshev and Partee (1998)), discussed in Section 3 of this chapter.

⁸ Neidle assumes that accusative Case can only be assigned to wide scope NPs, whereas the genitive is compatible with any interpretation. This state of affairs apparently represents a somewhat earlier stage of Modern Russian. Today, it is the accusative rather than the genitive that behaves as the less marked Case.

Neidle assumes that wide scope NPs can bear genitive as well as accusative Case, and she proposes the following explanation for this fact. For those speakers who accept genitive Case-marking on wide scope objects, this Case is licensed as long as the [+Q] feature characterizes the VP node (and independently of whether it is further transmitted to the object). This means that under negation as well as in the presence of an appropriate intensional verb, genitive Case-assignment will be licensed. In contrast, for other speakers, genitive Case-assignment is only possible as long as the NP node itself is [+Q]. These speakers will accept genitive Case-marking only on narrow scope NPs.

⁹ The analysis of Irrealis Genitive proposed in this study is based on the notion of existential commitment and captures the distribution of genitive objects in Russian more successfully than the Property Type Hypothesis. However, the state of affairs is different for Serbo-Croatian. In this language, in contrast to Russian, the subject of

both negative and affirmative existential sentences can appear in genitive Case, as shown by Borshev and Partee (2002a). This means that in this language, the type of genitive Case under consideration is compatible with existential entailment and does not require the presence of a non-veridical operator. In this sense, Serbo-Croatian is radically different from Russian, and the analysis that will be proposed in Chapter 4 does not capture the Serbo-Croatian facts. For Serbo-Croatian, the Property Type Hypothesis may turn out to be more successful, since the subject NPs in affirmative (as well as negative) existential sentences are indeed property-denoting.

¹⁰ Of course, under negation, existential commitment can sometimes be cancelled even for an agentive subject. This is especially likely to happen under metalinguistic negation, which can cancel presuppositions and other meaning components that are not cancelled by simple negation (Horn 1989). Still, I believe that if metalinguistic negation is not involved, existential commitment tends to be sustained for agentive NPs.

¹¹ Of course, the semantics of all weak intensional verbs is not identical. For instance, *want* and *wish* both trigger world ranking anchored to the subject, but the subject of *want* must believe that the embedded proposition may become true, whereas *wish* does not pose such a requirement, as discussed by Heim (1992), among others. I assume that directives, such as *demand* and *ask for* do trigger some kind of world ranking; however, this ranking is not identical to the one imposed by *want*, since the subject of a desiderative need not, strictly speaking, wish for the embedded proposition to hold. For instance, an individual A may *demand that p* because she understands that p is important for some purposes, even though for her, personally, $\neg p$ feels like a better state of affairs. However, I assume that even in this case, A believes that worlds in which p is true are, for some reason or other, preferable over those worlds in which it is false, even if this ranking has nothing to do with her personal desires.

The state of affairs is perhaps even more complicated if we consider the weak intensional verb *wait*. An individual A may wait for p in two cases, or for two reasons. One option is that A desires for p to become true and believes that p becoming true is not absolutely impossible (I think that *wait*, similarly to *want*, does place the latter requirement). This is the case in such sentences as *Mary is waiting for somebody to come and rescue her*. Here, we deal with the subject's desire, and, therefore, I assume that world ranking is involved: those worlds in which p holds are ranked higher than the ones in which it does not, as far as the wishes of the subject are concerned. Alternatively, A may wait for p because she believes that p is likely to become true in the future, without necessarily wanting for it to hold. This is how we would interpret *John is waiting for his opponent to attack*. Still, I believe that even in sentences of this type, world ranking is involved. A mere belief that something will (or may) hold in the future is not sufficient for A to be waiting for it. We do not wait for next week to begin merely because we believe that this will happen. Rather, we wait for things if they are of some importance for us, which often means that they are associated with either positive or negative attitude on our part. Thus, I may be waiting for next week to begin because then I will be able to go to the cinema or, on the contrary, because on Monday, I have an unpleasant meeting or an interview that I feel nervous about. I therefore believe that waiting is always related to some kind of world ranking. For instance, p-worlds may be judged better or worse than non-p worlds in

terms of the subject's desires or p-worlds may be treated as more convenient for the purposes of some activity the subject intends to participate in, etc.

Examining the individual lexical meaning components of each weak intensional verb in further detail will not be undertaken here. Crucially, it will be assumed that all weak intensional verbs have the following properties in common. They introduce an accessibility relation to the set of worlds representing the epistemic state of some individual (typically the subject). They do not trigger a commitment that the embedded proposition is true in these worlds; i.e. the CCP of their complement clause is –Decided. They trigger a world ranking relative to some anchor (again, typically, the subject). Relating to this cluster of properties shared by weak intensional verbs will be sufficient for our purposes.

¹² In this sense, it differs from the sentence *Je pense que Jean n'écrira pas la lettre* (I think that Jean will not write the letter). Here, negation appears in the embedded clause, and the proposition *Jean will write the letter* is entailed to be false in all the possible worlds within $E^{Sp,w}$.

¹³ It still remains to be explained why, in such negative sentences as (6), the mood of the complement clause is not obligatorily subjunctive. It can be indicative as well, as demonstrated by the Russian example below:

- i). Ja ne pomnila, čto my ob etom govorili.
I NEG remember(past) that we about this speak(past)
I didn't remember that we had talked about this.

As will be discussed in more detail in Chapter 5, the choice of indicative mood in complement clauses embedded under negation contributes a commitment that the embedded proposition is true according to the speaker. (In (i), we can contradistinguish the speaker's beliefs at speech time and her beliefs at the time of the event. Here, the commitment to truth is relative to speech time.) Thus, while the remembering state is being negated, the embedded proposition is presupposed to be true. This, in turn, means that the clause is positively decided relative to the matrix context set. Crucially, this makes it +Decided, which accounts for the usage of the indicative.

¹⁴ Within a context set framework, the condition in (4) would have to be reformulated. AEC would be defined not as commitment to existence in w_0 but rather as commitment to existence in all the possible worlds that belong to the context set, i.e. all the possible worlds that are compatible with the mutually held beliefs of discourse participants. The condition can then be formulated as follows:

- ii). $\forall w [w \in W_c \rightsquigarrow \exists x P(x,w)]$

The choice between (4) and (ii) is not crucial for my proposal. However, as suggested above, the context set framework may turn out to be somewhat less convenient once NP complements of intensional verbs are analyzed. It is not quite clear whether and how the notion of CCP can be applied to nominal complements.

¹⁵ The NP *Mary's house* triggers a presupposition that Mary has a house, or at least that Mary believes that she has a house. I will not address the issue of presupposition projection in embedded contexts in this work. For a discussion of this intricate issue, see Heim (1992) and Farkas (2003).

¹⁶ If Genitive of Negation can, in fact, be assigned to arguments of unergative verbs, the generalization should be formulated somewhat differently. It should then apply not only to NPs that appear in the direct object position but rather, more generally, to non-oblique arguments of a verb. See Appendix to Chapter 2 for discussion of the unaccusativity approach to GenNeg.

¹⁷ The situation is, of course, somewhat more complex with fiction predicates. Here, it is commitment to existence in a fictional world that is relevant, and time in such a world need not match the time in the actual world. I assume that if John *imagines* a storm, there is a commitment to the existence of a storm in the worlds that conform to John's imagination *at the temporal interval during which the imagining event takes place*. This is so independently of whether John believes that what he is imagining is a past, present, future or fictional event. There is a set of world that represents John's imagination state, and in these worlds, a storm exists (at the time of imagining). Crucially, I take *foresee* to be a fiction predicate, similarly to *imagine* or *dream*. *Foresee* does not introduce an accessibility relation to the future developments of the actual world, but rather to a different set of worlds, which represents certain aspects of the subject's *current* mental state. The embedded context does not represent the subject's vision of reality, as in the case of *believe*. Rather, it represents the subject's mental state, the state of affairs that she perceives at present, as if she was watching a movie or having a dream. It is thus comparable to a set of worlds that represents one's imagination state. If an individual *foresees* a storm, this means that there exists a storm in the set of worlds introduced by the verb *at the time at which the state of foreseeing takes place*. We should not treat the foreseen events as taking place in a future development of w_0 ; rather, they take place at the time at which the foreseeing holds in the worlds that represent the mental state of the subject. In this sense, the object of *foresee* carries EC relative to the attitude time. Thus, it is characterized by REC.

¹⁸ Since this verb consistently takes genitive complements, it could be claimed to assign inherent Case. However, I believe that the reason for the unavailability of the accusative is a by-product of the semantic restrictions imposed by the verb *žadždat'* on its complement. For instance, the complement of this verb normally has to be abstract, non-specific, etc. In other words, it is characterized by precisely those semantic properties that are associated with genitive Case-marking.

¹⁹ Certain exceptions can be found. Thus, the Russian verb *ždat'* (wait), which is a weak intensional predicate, often takes an indicative complement clause. However, its complement clauses can be subjunctive as well, as illustrated in (10c); in addition, it licenses subjunctive mood in relative clauses embedded within its scope. Semantics of such relative clauses and its relation to the notion of commitment will be addressed in Chapter 5.

²⁰ In this respect, my approach differs from Zimmermann (1993), who claims that even proper names that function as complements of intensional verbs receive a property interpretation.

²¹ The verb *iskat'* (seek) cannot take a clausal complement; however, it licenses subjunctive relative clauses within NPs that are interpreted under its scope (see example (12f)).

²² The analysis developed in Section 3.2 fails at this point to account for the unacceptability of genitive Case-marking in (iii):

iii) Dima xočet dočku / *dočki.
Dima wants daughter(acc sg)/(gen sg)
Dima wants (to have) a daughter.

This sentence clearly exhibits Instantiation-Oriented Attitude: the subject wants for a non-existent individual to come into existence. However, the Case of the object is obligatorily accusative.

Note that, at the same time, (iv) below is perfectly acceptable with genitive Case-marking; moreover, accusative Case-marking would not be possible.

iv) Eto priznak togo, čto životnoje ždjot potomstva. (Internet)
this sign this(gen) that animal waits brood(gen)
This is a sign of the fact that the animal is waiting for offspring (= is pregnant).

(iii) and (iv) involve the same verb and the same kind of attitude. The only relevant difference apparently has to do with the fact that in (iii), the object is characterized by the following features: +human and +count singular. The object in (iv) is a mass term, and it is animate, but not human.

Intuitively, it seems that the features +human and +count singular make the object in (iii) too individuated to be assigned Irrealis Genitive. The fact that genitive NPs are low on the individuation scale has been noted, for example, by Timberlake (1986), who concentrates on Genitive of Negation. The main problem with the term *individuation* stems from the fact that it is not easy to provide a formal definition of this term that would make it explicit which property it refers to. The analysis proposed in this study achieves this goal in some sense. I have argued that genitive NPs must lack REC. In turn, an NP that does not carry REC is clearly very low on the individuation scale, since it does not pick up any individual in any given world. Still, the unacceptability of (iii) seems not to be captured.

There are two possible directions for solving this problem. First, (iii) contains a singular object, and count singular NPs are in general less likely to appear in Irrealis Genitive than count plural NPs and mass terms. An explanation of this fact is proposed in Section 5 of Chapter 6. It is possible that this explanation can be extended to capture such cases as (iii). Second, we may consider the possibility that the absence of REC is not the whole story for Irrealis Genitive. Rather, there is a more general property, for instance, lack of individuation, that has to characterize genitive objects. Absence of REC is one of the conditions for being not individuated; however, some

further conditions have to be satisfied as well. For instance, being characterized by a cluster of such features as +animate, +human, +count singular makes an NP individuated even if it lacks REC, and as a result, genitive Case-assignment is ruled out. If this approach is taken, it would be essential to provide a detailed, explicit definition of individuation (or a version of individuation that is relevant for the purposes of the assignment of Irrealis Genitive). Absence of REC would then constitute an obligatory ingredient of non-individuated NPs, and, thus, a necessary condition for the assignment of Irrealis Genitive.

²³ Not all weak intensional verbs license abstract accusative NPs. Apparently, the availability of an appropriate interpretation (whereby EC is present) is possible only with some of these verbs. It is available with *zasluživat'* (deserve), as shown in (22), as well as with *iskat'* (seek), as will be demonstrated in Section 3.2.4, at the end of which properties of this verb that distinguish it from most other weak intensional predicates are considered.

²⁴ A similar example is treated in Franks (1995) as acceptable; however, my informants consider this sentence ungrammatical.

²⁵ The claim that NPs and clauses share a substantial number of properties is further supported by the discussion of aspect and number in Chapter 6. I propose that number and aspect can be viewed as essentially the same feature applied within the nominal and the verbal domain, respectively. If we assume that the perfective or imperfective aspectual feature percolates to a clausal projection, we get an additional parallel between the clausal and the nominal domains.

²⁶ Typically, under negation, contrasting between AEC and REC is redundant. As mentioned briefly in Chapter 4, the negative operator cancels AEC of an NP that is interpreted within its scope. At the same time, this operator, unlike intensional verbs, does not introduce alternative versions of reality relative to which REC would be present. Therefore, under negation, the absence of AEC often means the absence of EC of any type. Of course, the state of affairs may be different if the negative sentence contains additional non-veridical operators, or, more generally, if a set of accessible possible worlds other than w_0 is, by some mechanism, introduced in the sentence. In this case, REC relative to these worlds may be present.

²⁷ Here and in what follows, *gen=acc* means that the genitive and the accusative forms of the NP are identical and since in the given environment, both Case-marking options are available, it is impossible to determine empirically which of them is used in the sentence.

²⁸ I now use the term *existential sentences* in the traditional sense, namely, only for sentences that contain the verb *byt'* (be) or, in the present tense and under negation, the negative existential marker *net*. I am not referring by this term to all the sentences that exhibit genitive Case-assignment to arguments of intransitive verbs, as is done in Borshev and Partee, since not all sentences of the latter type allow GenNeg marking on proper names. Thus, the intransitive verb *najtis'* (be found) can take a genitive argument under negation, but not if the latter is realized as a proper name (21c).

²⁹ Due to a similarity in terminology, a confusion may arise between the environments in which EC is interpreted relative to a location and Location-Oriented Attitude sentences discussed in Chapter 4. It is important to distinguish between the two types of contexts. In Location-Oriented Attitude clauses, the internal argument is entailed to exist in those possible worlds that conform to the worldview of the subject. The subject wishes for the individual(s) denoted (or quantified over) by the object to come to occupy the same location as herself, but she need not associate it with any specific location at the time of speech. EC on her part has to do with a belief that the individual exists in the actual world as a whole (not in any given location). This is what rules out genitive Case-marking and makes the object obligatorily accusative.

In contrast, in existential sentences and sentences with perception predicates, as is argued in this section, the domain of existence is reduced from worlds to spatiotemporal locations. As a result, EC in these environments is reanalyzed as commitment to existence in a given location, rather than in a whole world. Genitive Case-marking is therefore impossible in the presence of commitment to instantiation in this location (e.g. one's field of perception).

³⁰ The idea that there exist significant parallels within the domain of objects on the one hand and events, on the other (and, thus, between the semantics of NPs and VPs) is by no means new. For instance, Krifka (1992) discusses a number of properties that can characterize NPs as well as VPs, such as quantization and cumulativity. Verkuyl (1972) examines ways in which semantic properties of an object NP can affect the corresponding semantic properties of the resulting verbal predicate. The interrelation between the (aspectually relevant) semantics of the verb and its complement is further investigated by Krifka and Filip, among others (e.g. Krifka (1992), Filip (1999)). In this chapter, I will focus on a somewhat different point. In particular, I will concentrate on grammatically relevant distinctions and argue that once the singular/plural distinction in number is applied to events, what we get is precisely the perfective/imperfective distinction.

³¹ An important question is how exactly the implicature of a holding result state is created. A sentence with a perfective verb entails that the result state has been achieved, and if it is not explicitly stated that it has been cancelled, an implicature arises that it still holds. At this point I do not know of an analysis that explains what mechanism is responsible for the emergence of this implicature.

³² I assume that interrogative clauses constitute a downward-entailing environment since they license negative polarity items (e.g. *any*), and also following Pereltsvaig (2000).

³³ I assume that an event predicate P includes the verb together with its arguments; thus, it is not only the verb but also its arguments that determine which events fall under the denotation of P. For instance, if the verb *leave* combines with an argument *three students*, the resulting event predicate contains in its denotation only events whereby a sum of three students leaves. An event of three students leaving will constitute a P-atom relative to this predicate. It is true that events of this kind can often be decomposed into subevents (e.g. an event of one student leaving); however, such a subevent will not belong to the denotation of P. In this sense, a sentence like *Three students left* encodes an atomic event, since it reports a single instantiation of

an event of the kind denoted by the verb together with its argument. More generally, I assume that an event predicate can be atomic even if an argument it involves denotes a sum of individuals.

³⁴ As noted in the literature (e.g. Forsyth (1970)), perfective predicates are sometimes compatible with iterativity-inducing operators. This fact does not contradict the proposed analysis, given that the event variable introduced by an atomic predicate may be interpreted within the scope of some operator, which will ultimately result in a multiple events interpretation. Analogously, a singular NP may be interpreted within the scope of an operator. Thus, the object NP in (v) is atomic; however, it appears within the scope of the phrase *každoje utro* (every morning). As a result, the hearer concludes that more than one sandwich was consumed.

v). On *každoje utro* *jel* *buterbrod* *s* *syrom*.
He every morning ate(imp) sandwich(acc sg) with cheese
He ate a cheese sandwich every morning.

In the absence of an iterativity inducing operator, a perfective clause is interpreted as encoding a single event. However, an appropriate operator may trigger an iterative interpretation. What is more surprising is the fact that the compatibility of perfective predicates with iterativity operators is highly restricted, as has been exemplified in (13) and (14).

Further, it should be noted that when a perfective verb does appear in a habitual sentence, a clearly unusual use of perfective aspect is involved. Indeed, there exists a special type of habitual sentences in Russian, discussed by Forsyth among others, which involves *non-past* perfective verbs (vi). Although such verbs consistently receive a future interpretation in Russian, such sentences as (vi) encode patterns that hold *at the speech time* (thus, (vi) describes the speaker's character at the time of speech). Moreover, perfective habituais can even encode patterns that used to hold before the speech time, thus exhibiting an exceptional usage of non-past perfective verbs.

vi) *Ja - čelovek, kotoryj vseгда pridjot* *na pomošč*.
I man that always come_{PERF NON-PAST} on help
I am the kind of person that always comes to the rescue.

It thus seems that perfective verbs are compatible with habituality only under a non-standard usage which in any event requires a special treatment. Moreover, the interpretational properties of sentences like (vi) appear to lend further support to the approach proposed in this chapter. Klimek-Jankowska (2008) demonstrates that perfective habituais in Polish receive an interpretation similar to that of generic sentences with singular indefinite subjects. In other words, the contribution of perfective aspect to habitual sentences is analogous to the contribution of singular number of the subject to generics. Once again, we see a parallel between perfective aspect and singular number. Further discussion of perfective habituais is beyond the scope of this study.

³⁵ See Kagan (in press b) for a discussion of special cases in which perfective aspect seems to be compatible with a pluralization of atomic events. It is argued that these are cases in which a whole set of events is conceived of as a single complex event.

³⁶ The assumption is that the denotation of imperfective accomplishments, such as *čítat' knihu* (read_{IMP} a book), contains both completed and incomplete events of the specified type. This leads to a certain problem once the denotation of perfective accomplishments is calculated, as it becomes unclear which of the events that fall under the denotation of the imperfective predicate should be treated as atoms. I believe that this problem is solved under the recent approach to perfectivity developed by Filip and Rothstein (2006) and Filip (in press). According to this account, perfective predicates denote *maximal events*. Following this approach, we can conclude that perfective predicates are atomic in the sense that their denotation contains *single maximal events*, and not pluralities of such events. Importantly, the notion of maximality does not distinguish the verbal domain from the nominal one. An analogous notion is also needed in order to capture the semantics of such nouns as *sequence* or *fence*, as suggested in Zucchi and White (1996), Filip (2000) and Rothstein (2004), among others. Thus, an entity that falls within the denotation of the singular NP *a sequence of numbers* may contain a proper part that is also a sequence of numbers. However, an NP headed by the singular noun *sequence* is typically used to encode the maximal sequence present in the given context. It thus follows that a more detailed account of aspect and number that would capture the parallel between the two domains should include both atomicity and maximality restrictions, with singular NPs and perfective predicates denoting single maximal entities.

³⁷ See also Kuryłowicz (1971) and the discussion of his work in Levinson (2005). Kuryłowicz demonstrates that entailment relations are reversed under negation in the context of the accusative/partitive opposition. In an affirmative clause, a sentence with an accusative object entails its counterpart with a partitive object, but not vice versa. Thus, (vii a) below entails (vii b) (the examples are taken from Levinson 2005:16):

- vii) a. On vypil vodu.
he drank(perf) water(acc)
He drank the water.
b. On vypil vody.
he drank(perf) water(gen)
He drank some water.

The object NP in (vii b) appears in Partitive Genitive. (vii a) entails that the subject drank the whole contextually specified amount of water. According to (vii b), he drank some water, not necessarily all the contextually relevant water. (vii a) therefore entails (vii b).

Under negation, the entailment relations are reversed: the partitive variant (viii b) entails the accusative one (viii a), and not vice versa.

- viii) a. On ne vypil vodu.
he NEG drank(perf) water(acc)
b. On ne vypil vody.

he NEG drank(perf) water(gen)

According to (viii_b), the subject did not drink any amount of water. In turn, (viii_a) entails that he did not drink all the contextually specified water (but may have drunk some part of it). Thus, under negation, it is the partitive variant, (viii_b), that constitutes a stronger statement.

³⁸ This factor is contributed by perfective aspect, normally associated with telicity and, thus, with an event reaching its natural endpoint (e.g. Krifka (1992), Filip (1999), (2000), (in press)). In the case of reading an article, the natural endpoint comes when the whole article is finished. Since in the discussed example, the object is plural, Dima is expected to finish reading a number of articles.

³⁹ It should be noted that (37_a) does not require any of the scenarios mentioned above. Thus, it is acceptable even if the speaker has not expected Dima to find any documents and does not know of any search conducted by Dima. The sentence can be merely used to assert that it is not true that Dima has, by accident, come across any documents. Such an interpretation does not seem to be available for (37_b). This sentence seems to presuppose either that Dima has been engaged in a search, or that the speaker has expected Dima to find some documents – whether by chance or as a result of looking for them.

⁴⁰ An exception might be constituted by verbs of creation, in such sentences as *He didn't write a letter*. However, even in these sentences, once it is assumed that an accomplishment event did take place but was not completed, one tends to conclude that the created object did come into existence, even though the creation process was not finished. Thus, if we hear that *John didn't finish writing a letter*, we may conclude that a letter does exist, even though it is not completed. This, in turn, would mean that the object NP has a referent in the actual world, and is likely to be interpreted as an entity in that world, rather than a property. This approach is controversial, however. Thus, Parsons (1990) treats such NPs as *a letter* in the sentence above as denoting objects. In contrast, Landman (1992) does not accept this view.

⁴¹ Perfective aspect is compatible here with genitive Case-marking. Perfectivity does not force a specific or presupposed reading of the NP. The knowledge that the speaker was present in the room in question is sufficient to trigger an expectation that a seeing event would take place, i.e. that the speaker would see those objects that were present in the room, within her field of perception. Apparently, the presence of an expectation of this kind is sufficient to license genitive Case-marking. The NP therefore need not receive a presupposed existence reading. In addition, existence of flowers in the room could be expected by some other discourse participant but not by the speaker. The speaker could then use the genitive form in order to emphasize that an expectation or commitment of this kind is groundless.

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על הסמנטיקה של יחסה סטרוקטוראלית

חיבור לשם קבלת תואר דוקטור לפילוסופיה
מאת

אולגה קגן

הוגש לסינט האוניברסיטה העברית, בירושלים
נובמבר 2007

עבודה זו נעשתה בהדרכתה של:

פרופ' עידית דורון

תקציר

עבודה זו הינה בתחום הסמנטיקה הפורמאלית, והיא כתובה במסגרת התיאורטית של הבלשנות הגנרטיבית. העבודה עוסקת בתופעה לשונית המתגלה בסימון המורפוסניטקטי, ומציעה לה הסבר סמנטי חדש. היא בונה הקבלה סמנטית בין הסימון המודאלי לבין סימון היחסה, ומראה כי שניהם מוסברים על-ידי המושג של השתמעות (השתמעות אמת והשתמעות קיום).

העבודה עוסקת בסימון של יחסה גניטיבית המופיע עם המושא הישיר, ואף עם נושא המשפט, בשפה הרוסית. סימון היחסה הגניטיבית מופיע בסביבות מיוחדות, והעבודה מתרכזת בגניטיב השלילה ובגניטיב האינטנציונלי. המושג גניטיב השלילה מתייחס לסימון היחסה הגניטיבית בארגומנט של הפועל השלול, אשר מופיע ביחסה אקוזטיבית או נומינטיבית במשפט החיובי. הגניטיב האינטנציונלי הינו תופעה של סימון המושא הישיר ביחסה גניטיבית בסביבה של פעלים אינטנציונליים מסוימים (כגון "לרצות", "לדרוש", "לבקש", "לחפש" ועוד), ללא תלות בשלילה.

אני מראה כי שתי התופעות מתאפיינות בתכונות משותפות רבות. שתיהן רגישות לתכונות סמנטיות זהות. לדוגמא, גם צירופים שמניים המופיעים בגניטיב השלילה וגם אלה המופיעים בגניטיב האינטנציונלי נוטים להתפרש כלא מיודעים ולא ספציפיים. שתי היחסות מסמנות צירופים שמניים אבסטרקטיים לעיתים יותר קרובות מאשר צירופים קונקרטיים, וגם

מסמנות צירופים בצורת הרבים לעיתים יותר קרובות מאשר צירופים בצורת היחיד. בנוסף, שתי היחסות מתאפיינות בכך שהצירוף השמני מתפרש בטווח של אופרטור לא וורידיקלי (גם השלילה וגם פעלים אינטנציונליים מהווים אופרטורים לא וורידיקליים). כמו כן, גם גניטיב השלילה וגם הגניטיב האינטנציונלי מאופיינים על-ידי ווריאציות משמעותיות בשיפוטים של דוברים ילידיים של רוסית. כך, דוברי השפה לעיתים קרובות אינם מסכימים לגבי אפשרות סימון היחסה הגניטיבית במשפט נתון. חשוב לציין כי בדרך כלל, תופעות הקשורות בסימון יחסה אינן מתאפיינות בווריאציות כה משמעותיות בשיפוטים.

על סמך קווי הדמיון אלה אני מסיקה כי גניטיב השלילה והגניטיב האינטנציונלי מהווים גילויים של אותה תופעה, שאותה אכנה IRREALIS GENITIVE.

העבודה מציעה מושג סמנטי חדש של השתמעות קיום, ומראה כי ה- IRREALIS GENITIVE הינו הביטוי המורפולוגי של העדר השתמעות קיום. השתמעות הקיום מחייבת (כגרירה או קדם-הנחה) כי צירוף שמני נתון מכמת קבוצה שאינה ריקה, או מציין אובייקט קיים בעולם הממשי. על מנת להסביר את בחירת היחסה באופן מדויק, דרושה הכללה של המושג הזה. אני מציגה הבדל בין שני סוגים של השתמעות קיום: השתמעות קיום מוחלטת והשתמעות קיום יחסית. המושג הראשון מתייחס להשתמעות קיום בעולם הממשי. המושג השני כולל השתמעות קיום הן בעולם הממשי והן בעולמות

אחרים, אשר בחירתם תלויה ביחס נגישות המוגדר ע"י אופרטורים המופיעים במשפט. אני מראה כי IRREALIS GENITIVE יכול להיות מסומן רק בהעדר השתמעות הקיום היחסית. מבחינה זו ניתן להתייחס ל- IRREALIS GENITIVE כהקבלה השמנית של הצורה המודאלית של הסוביונקטיב, כיוון שתופעה זו מתאפשרת רק בהעדר השתמעות אמת של הפסוק. גם את מושג השתמעות האמת יש להחיל לא רק על העולם הממשי אלא גם על עולמות נגישים נוספים.

אני מראה כי הניתוח המוצע מסביר את תפוצתם של צירופים שמניים גניטיביים גם בשלילה וגם בסביבת פעלים אינטנציונליים, וכן את התכונות הסמנטיות הנוספות המאפיינות ארגומנטים גניטיביים בסביבות אלה. למשל, צירופים מיוחדים וספציפיים מאופיינים בדרך כלל בהשתמעות קיום מוחלטת (וכתוצאה מכך גם היחסית), ולכן אינם יכולים להופיע ב- IRREALIS GENITIVE. בנוסף, ניתן להסביר את העובדה שיחסה זו מתאפשרת רק בנוכחות אופרטור לא וורדיקלי, וזאת מכיוון שהשתמעות הקיום יכולה להיות חסרה אך ורק לצירופים המתפרשים בטווח של אופרטור מסוג זה.

מלבד זאת, אני מסבירה את העובדה שפעלים מסויימים בכל זאת אינם מאפשרים סימון היחסה הגניטיבית תחת שלילה. אני מראה כי פעלים אלה תורמים קדם-הנחה של קיום למושא שלהם. כתוצאה מכך, המושא מאופיין

על-ידי השתמעות קיום, ולכן סימון של IRREALIS GENITIVE אינו אפשרי.

בנוסף, הניתוח מסביר את העובדה שהן ה- IRREALIS GENITIVE והן הסוביונקטיב מאופיינים על ידי תפוצה משותפת ותכונות סמנטיות משותפות. לדוגמא, צירופים שמניים אשר כוללים משפטי זיקה בסוביונקטיב מתפרשים כלא מיוחדים, לא ספציפיים וחסרי השתמעות קיום, וגם חייבים להופיע בטווח של אופרטור לא וורידיקלי. כלומר, ההגבלות על האינטרפרטציה שלהם זהות להגבלות על הסמנטיקה של מושאים גניטיביים.

לבסוף, אני מסבירה את הקשר בין בחירת היחסה לבין אספקט ומספר. כפי שצוין כבר בספרות הבלשנית בנושא, גניטיב השלילה מסמן משלימים של פעלים אימפרפקטיביים לעיתים קרובות יותר מאשר משלימים של פעלים פרפקטיביים. אני מציעה הסבר חדש לעובדה זו אשר מתבסס על הניתוח הנוכחי. משפטי שלילה הכוללים פועל פרפקטיבי שוללים אירועים ספציפיים שהם צפויים, ועל כן נוטים לתרום קדם-הנחה שהמשתתפים באירועים אלה קיימים אף הם בעולם הממשי. קדם-הנחה זו מובילה לחוסר אפשרות של סימון היחסה הגניטיבית. לעומת זאת, האינטרפרטציה של משפטי שלילה הכוללים פועל אימפרפקטיבי מוגבלת פחות, מכיוון שהאימפרפקטיב מהווה אספקט ברירת מחדל תחת השלילה. מכאן שאין השתמעות קיום של המושא במשפטים הכוללים פעלים אימפרפקטיביים. קונטרסט זה מתקשר גם להשפעת המספר על בחירת היחסה. גניטיב השלילה מסמן צירופים שמניים

בצורת הרבים לעיתים קרובות יותר מאשר בצורת היחיד. בדומה לאספקט אימפרפקטיבי, צורת הרבים מהווה צורת ברירת מחדל תחת השלילה, ואילו צורת היחיד הינה צורה מסומנת בסביבה זו. אני מראה כי צירופים אשר מופיעים בצורת היחיד במשפטי שלילה נוטים להתפרש כספציפיים או להתאפיין בקדם-הנחה של קיום. כלומר, צירופים אלה נוטים להתאפיין בהשתמעות קיום ועל כן נוטים להופיע ביחסה האקוזטיבית, ולא ביחסה הגניטיבית. הניתוח של IRREALIS GENITIVE אשר מתבסס על המושג של השתמעות קיום גם מסביר אפוא את הקשר בין סימון יחסה זו לבין תכונות מורפויסינטקטיות אחרות כגון אספקט ומספר.

