Asymmetries in Linguistic Construal
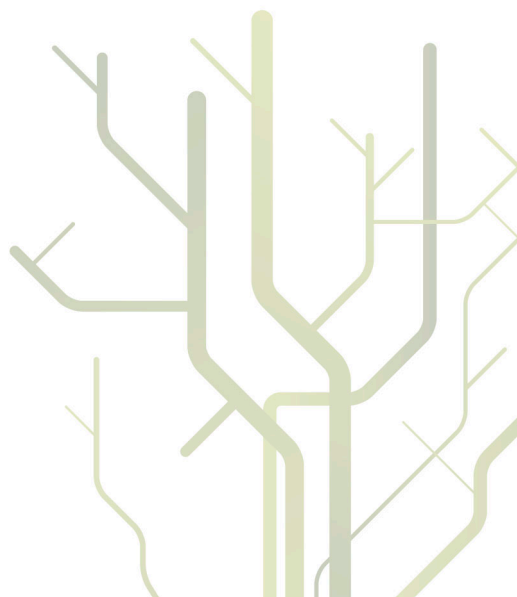
Russian Prefixes and the Locative Alternation

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CONTENTS

Acknowledgements

> …we know that to give writing its future, it is necessary to overthrow the myth: the birth of the reader must be at the cost of the death of the Author.
>
> Roland Barthes, *The Death of the Author*, 1967.

A dissertation is not just a text in itself. The flow of your thought, the development of the argument, the very choice of the topic is so much dependent on the environment that surrounds you, that every passage reminds you of the time when it was written. This dissertation is not just the product of my efforts but also the result of support of many people. Without these people and the conditions that I was provided, I would have never reached this point. So before this text becomes estranged from its roots, I would like to give tribute to the people who have invested into this text as much as the author herself, if not more.

First, it should be mentioned that this dissertation was born nearly at the "edge of the world", on the island of Tromsø. The geographical information, however, is highly misleading, since this place is characterized by such variety of things, people and activities that it reminds one more of an ark, where you find a collection of everything there is, rather than the "edge of the world". This special city with very special people becomes a perfect setting for new endeavors, where academic work intersects with all sorts of exciting activities. My case was no exception. In addition to highly informative and enlightening academic courses, workshops, conferences, discussion groups, meetings, linguistic lunches, reading groups, my being in Tromsø was composed of a whole list of activities, some of which I had never undertaken before. And this exciting life experience I owe to different people.

Following the approach of a well-known Norwegian, the author of "Naive. Super", I have decided to compose a list of things that I tried in Tromsø for the first time in my life. All of these things have shaped my daily routine and have played an important role in the creation of this text.

A list of things that I tried in Tromsø for the first time:
  ✓ writing a PhD dissertation

- ✓ having discussion groups on Skype
- ✓ working with R and MySQL
- ✓ drinking tea with the dean
- ✓ biking with your supervisors
- ✓ mountain skiing
- ✓ skiing on April 29
- ✓ speaking an exotic language, Norwegian
- ✓ teaching Norwegian students to speak an exotic language, Russian
- ✓ hiking to the top of a mountain
- ✓ running in a marathon
- ✓ running at 2 a.m.
- ✓ eating "fiskegrateng"
- ✓ doing a "cartwheel"
- ✓ combining "science" with "vodka", Russian culture with Norwegian spirit (Vodka & Vitenskap meetings)

The first person that this dissertation owes a lot to is my supervisor Laura Janda, who can fairly be called a "linguistic" mom. Laura is a person who gives her whole self to her work and to the people that she works with. She is the one who will encourage you when you feel exhausted, will push you when you are being lazy, will come and help you when you are ill, and, what is even more important, will always inspire you by her own example. Together, Laura Janda and Tore Nesset form a duumvirate that has set an example for our whole group, both in research and teaching. No matter how busy they were, these people would always find time for us if we had questions, in addition to regular meetings and discussion groups.

Laura and Tore have supported us from the very start of the "Exploring Emptiness" project, which this dissertation is part of. One of the things that I have learned while working with Laura and Tore, is that fruitful work is inseparable from the group spirit, which cannot be described in terms of a "corporate culture", but rather by the word "family", where people are the ultimate value. I will never forget one of the meals that we had at Tore and Laura's house in 2009, when the whole group gathered to try Tore's "fiskegrateng" (fish au gratin). This occasion had a full resemblance with a family gathering. It will not be an overstatement to say that this was the first and the best fish au gratin that I have tried in my whole life. Another flashback turns my mind to the day when Tore and Laura were teaching me how to ride a bike. Very patiently, they walked by my side, not paying attention to my screams and exclamations, blocking my way at the "deadly" turns. I guess that day can be treated as a miniature of what was happening during the whole four years of my PhD program in Tromsø. And I am very thankful to Laura and Tore for preventing me from falling.

My life and work in Tromso would be incomplete without the other members of our linguistic "family": Olga Lyashevskaya, Julia Kuznetsova, An-

astasia Makarova and Anna Endresen. We shared offices, rooms, meals, trips, interests and what not. To Olya I owe my first mountain skiing experience, to Julia, the wonderful movie weekends at her house, to Nastya, the loveliest excursion to Cambridge and not getting lost in China, to Anya, many hours that we have spent on joint projects, accompanied with tea and cookies. Thanks to these people, I have learned how to collaborate, how to divide and structure work in the most productive way, how to be helpful and to accept help, in a word, what it is to be part of a group. When the whole group moved to work at the Center of Advanced Studies in Oslo and I remained in Tromsø to teach, I felt some creative and emotional vacuum. These two semesters were also crucial since I was finishing this dissertation. I am particularly thankful to Julia Kuznetsova for setting up a "dissertation support group" on Skype with Nastya and Anya, which has proved to be extremely helpful and allowed me to make the last breakthrough in my dissertation. I am also thankful to Laura for having time for me on Skype every single day at the final stage of the writing process. The creativity of my four Tromsø friends has revealed itself in many ways, in and outside academia. What would you say, for instance, if you got a registration for a marathon as a birthday present?

As it has been said, the environment plays a crucial role in the process of writing a dissertation, and the University of Tromsø is lucky to have a very rich academic environment. I am very grateful to senior and junior researchers from CASTL, for providing excellent seminars, hosting wonderful conferences and reading groups, particularly to Peter Svenonius, Gillian Ramchand, Marit Westergaard, Antonio Fábregas, Thomas McFadden, and Bjørn Lundquist. It was very useful sometimes to "step out of your approach" and look at your data from a different perspective. These people have always encouraged the members of our group to participate in CASTL activities and have shown a very high level of professionalism and "political correctness". I am also thankful to CASTL PhD students: to Yulia Rodina for being a thoughtful friend, to Rosmin Mathew for the perfect organization of Linguistic Lunches and for being my companion during the trip to Nordkapp, to Pavel Iosad for constantly being my information desk (the idea behind it was that if Pasha does not know, no one knows), to Ewa Dekany and Naoyuki Yamato for teaching an excellent syntax course, to Andrea Márkus and Inna Tolskaya for the positive charge they gave me, to Monika Bader and Marina Pantcheva for being a perfect example of what a determined PhD student should be. I am indebted to some visiting scholars for the fruitful discussions of the data, first of all to Wojciech Lewandowski and Svetlana Nedelcheva. It was a privilege to get to know the Sámi language technology group. I am particularly thankful to Linda Wiechetek for her exquisite tea at the right hour, for our conversations about science and life and for my first hiking tour to the top of the mount Tinden.

As it has been pointed out, the "history" of this dissertation is manifold. It takes its roots both from theory and practice. The University of Tromso has provided me with a unique opportunity to taste different "practical activities" by

teaching Russian courses at all levels. I owe this life experience to Laura and Tore and other members of the Russian group: Yngvar Steinholt, Erik Egeberg, Marit Bjerkeng, Kristine Bakkeby Moe, Erlend Hagan. The official meetings of our Russian group were infused with a friendly atmosphere and humor and bore the spirit of the Knights of the Round Table. As a loyal knight, I tried to implement the ideals of our group in class and relate my research to the needs of the classroom. In my Russian "missionary activity" it was important for me to speak the "same language" with the audience, and I am thankful to the Norwegian department at UiT, Guro Reisæter, Birgit Elisabeth Nøstvik og Odd Egil Johnsen, for providing me with a Norwegian voice.

And my voice has been heard. Within the last months, I gained a lot of support from the students. I am particularly thankful to Kristian Dischler, Vegard Seljemo, Gustaf Olsson, Anette Nordheim and Cathrine Johansen for puzzling me with difficult and insightful questions about Russian and for showing me how to combine "science" with "vodka", Russian culture with Norwegian spirit (those who are curious may contact Lada Clubben in Tromsø for details).

When I studied in Russia at Moscow State University, seeing the dean sometimes turned into a complicated campaign, where you had to wait for several hours before getting into the dean's office. You can probably imagine my reaction when, in Tromsø, I received a letter from the dean himself, where he was wondering what time would be convenient for me to have lunch together. The agenda was to talk about my dissertation, the conditions that I am provided, to discuss my needs and expectations. This was one of the most "democratic" experiences in my life and I am very thankful to Endre Mørck and Jorun Nordmo for creating, literally, "perfect" conditions for my PhD program. I am thankful to all the people at the UiT administration and can firmly say that this is an administration one can only dream of.

I received constant support from outside the university walls, first of all from my friends Aleksander Wessel Lind and Marina Johansen. They allowed me to talk about linguistics and my dissertation at any time of day and night, were able to switch my thoughts at the right time and with the right topic. Evenings outside the university were filled with political debates, discussions of literature, aviation and rhythmical gymnastics. The discussions were so tempting that I even joined the local gymnastics union and tried doing a "cartwheel". It was also an important ingredient of my leisure to keep the writing process rolling. I am thankful to my dear friend and relative Mikhail Mukhin for all kinds of support and invaluable help with the formatting of this volume.

Everyone who is writing a dissertation invests in it a lot intellectually and emotionally. I should say that emotionally this dissertation is built up solely on the support of my family. Their energy is the heart and soul of this text and it is to them that this text is devoted.

And here the author "dies" and the discussion of the Locative Alternation begins.

Chapter 1

Introduction

"The scientific enterprise as a whole does from time
to time prove useful, open up new territory, display
order, and test long-accepted belief. Nevertheless,
the individual engaged on a normal research prob-
lem *is almost never doing any one of these things*. …
What then challenges him is the conviction that… he
will succeed in solving a puzzle…"

(Kuhn 1970: 38)

The central concepts of Cognitive Linguistics rely on the principle that "lan-
guage is all about meaning, in the broadest possible sense" (Geeraerts 2010:
72). One of the basic assumptions about the nature of linguistic meaning is that
it is based on usage and experience and is perspectival in nature. This presup-
poses that the meaning of a linguistic expression depends not only on the con-
ceptual content it evokes but also on the construal it imposes on that content. As
Langacker (2008: 55) states it, "[i]n viewing a scene, what we actually see de-
pends on how closely we examine it, what we choose to look at, which elements
we pay most attention to, and where we view it from". In the most general
sense, **construal** is the ability to conceive and portray the same situation in al-
ternate ways (as in the case of the following two sentences referring to the same
picture: *The lamp is above the table* vs. *The table is below the lamp*).

One of the questions that arises in relation to construal operations is
whether humans are completely free in focusing on different parts of the scene
in language processing. How often do we find asymmetries in linguistic con-
strual and what happens if the choice between two linguistic expressions, corre-

sponding to two different ways of construing the same situation, appears to be arbitrary? The present dissertation addresses these issues by focusing on the Locative Alternation verbs in Russian, i.e. verbs that can appear in two constructions like *John loaded the hay onto the truck* vs. *John loaded the truck with hay*. In theory, the Locative Alternation verbs allow the speaker to choose both the hay (Theme) and the truck (Goal) as their focus. Thus, it is interesting to check whether such verbs have any preferences in the distribution of the two constructions as presented in a corpus. The two clearest examples of Locative Alternation verbs in Russian are *gruzit'* 'load' and *mazat'* 'smear' since only these two verbs can alternate without prefixation. Hence the focus of the dissertation is placed on these two verbs.

Russian provides a challenging testing ground for asymmetries in the Locative Alternation since the unprefixed verbs *gruzit'* 'load' and *mazat'* 'smear' can be combined with prefixes *na-*, *za-* and *po-*, which in this case are traditionally treated as purely aspectual markers, lacking semantic content. The prefixed verbs *nagruzit'*, *zagruzit'*, *pogruzit'*, as well as *namazat'*, *zamazat'*, *pomazat'*, are claimed to be perfective counterparts of their imperfective base verbs (*gruzit'* 'load' and *mazat'* 'smear' respectively), sharing the same semantics (Ožegov and Švedova 2001). In the dissertation we will probe whether Russian 'load' and 'smear' verbs, both prefixed and unprefixed, show any preferences in their choice of constructions. The rationale is that if the speaker was completely free in placing the focus either on the Theme (the hay) or the Goal (the truck) we would expect a relatively equal distribution of the two constructions among the 'load' and 'smear' verbs. Furthermore, if prefixes were semantically "empty", the prefixed verbs would have to be equivalent to each other and their base verbs in their behavior. However, the data analyzed here suggests that this is not the case: both unprefixed and prefixed verbs show a clear preference towards one of the constructions and all prefixed verbs are different from each other. The cases with a seeming balance between the two constructions are in fact the result of an overlap between several factors, promoting different constructions (for instance, non-metaphorical uses selecting the Theme, and metaphorical uses focusing on the Goal). The present study thus demonstrates that asymmetries are essential for the construal phenomenon within the Locative Alternation.

1.1. The notion of construal

Construal operations, as one of the core concepts in Cognitive Linguistics, have been explored and described by Talmy (1978, 1988, 2000), Lakoff et al. (Lakoff and Johnson 1980; Lakoff 1987), Langacker (1987, 1999, 2008), Croft and Cruse (2004) and other scholars. Compressing much of the detail, the next two sections will briefly outline some of the phenomena that comprise the notion of construal and are pertinent to the present study.

1.1.1. Classes of construal phenomena

The concept of linguistic construal, based on the human ability to interpret a given situation in multiple ways, is related to the findings in Gestalt Psychology. A compelling research tool here are ambiguous figures, which demonstrate the dynamic nature of the brain processes underlying what we perceive. The fascinating aspect of ambiguous figures is that the physical properties of the object/scene remain the same, while we can find multiple interpretations in the output. This effect can be illustrated by the famous Face/Vase Illusion (Rubin 1921), presented in Figure 1 below:
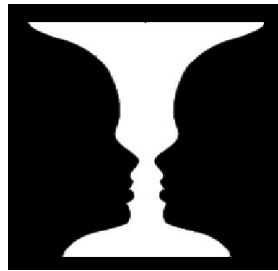
Figure 1. Face/Vase Illusion

When looking at Figure 1, one can easily profile either the white section of the picture, forming the shape of a vase, or the black section, which resembles two faces. According to cognitive psychologists (see Gregory 1997), ambiguous figures provide an excellent illustration of how the same physical input can give rise to different interpretations and, therefore, how the perception of objects goes far beyond sensation. Thus, the figures' ambiguous nature allows the dissociation of stimulus-driven (sensory) processes from conscious perception (cognitive) on a neural basis (for a detailed discussion see Wimmer and Doherty 2011).

A similar effect can be observed in linguistic expressions that "have the same content, and profile the same relationship, but differ in meaning" because they construe the situation a bit differently (Langacker 2008: 70). For instance,

the prepositions *above* and *below* both indicate the relative spatial location of two things, with respect to the vertical axis. Thus, both (1a) and (1b) can be used to describe the scene in Figure 2.

(1) a. *The lamp* (tr) *is above the table* (lm).
   b. *The table* (tr) *is below the lamp* (lm).
                                    (Langacker 2008: 70)

Figure 2. A relative spatial location of two objects (a table and a lamp)

Examples in (1a) and (1b) differ in their choice of the most prominent participant (trajector (tr)) and the second prominent participant (landmark (lm)): the preposition *above* chooses the lamp as the trajector whereas *below* focuses on the table, using the lamp as the landmark.

     Construal reveals itself in various ways, using different specific mechanisms, which Langacker describes in terms of "broad classes of construal phenomena" (Langacker 2008: 55). The two key mechanisms relevant to the present analysis are **prominence** and **specificity**. Prominence in the most general sense involves "the focusing of attention" or "a strong kind of foregrounding" and results in **profiling** and **trajector/landmark alignment** mentioned earlier. An expression selects a certain body of conceptual content as the basis for its meaning. This content is further narrowed down by selecting a particular substructure which is put "onstage" and stands out as the specific focus of attention, i.e. becomes profiled (Langacker 2008: 66). Once a relationship is profiled, varying degrees of prominence can be conferred on its participants, selecting for the trajector and the landmark. In the case of the Locative Alternation, both the hay and the truck can be selected as the trajector, thus promoting two different constructions. Furthermore, within the loading scene one of the participants can be further profiled, which results in the omission of the second participant and elaboration of the construction.

Another characteristic of construal pertinent to the present study is specificity. As opposed to schematicity, specificity refers to the level of precision and detail at which a situation is characterized. A schematic characterization is instantiated by any number of more specific ones, each serving to elaborate its coarse-grained specifications. For instance, "rat, large brown rat, vole, curious mouse, ground squirrel, ferocious porcupine with sharp quills" all in different ways and to different degrees elaborate "rodent" (Langacker 2008: 56). In this dissertation we will show that the verbs *mazat'* 'smear' and *gruzit'* 'load' are characterized by a different degree of specificity in terms of Themes and Goals: the Themes and Goals of *mazat'* are more specific, which results in less possibilities for alternation. One of the objectives of this dissertation is to show that when we deal with a linguistic construal, different mechanisms of construal (profiling, trajector/landmark alignment, specificity) interact, which results in asymmetries: for instance, specificity seems to precede profiling.

1.1.2. Construal and asymmetry

Langacker believes that the difference in trajector/landmark alignment is just a matter of construal, and we can easily profile different parts of the picture:

> If we look at our surroundings, we do not see objects bordered with heavy lines to mark them as profiles, nor is something intrinsically a trajector or a landmark. Like other aspects of construal, prominence is a conceptual phenomenon, inhering in our apprehension of the world, not in the world per se (Langacker 2008: 72).

Yet, it has been observed that, depending on the participants that are involved, certain situations tend to be construed in a particular way. Some objects tend to be trajectors/figures, whereas others more often appear as landmarks/grounds (Talmy 1978, 2000). For instance, when we locate things in relation to each other it is more likely that fixed big objects, rather than light movable objects, serve as landmarks. Thus, the sentence (2a) sounds more natural than the sentence (2b):

(2) a. *The bike is near the house*.
    b. ?*The house is near the bike*.

                                        (Talmy 1978: 628)

It appears that both the physical properties of the objects involved and their conceptual interpretation influence construal phenomena. This statement is compatible with the previously mentioned idea from psychology about the joint impact of sensory and cognitive processes on perception in general. Even given ambiguous figures like the Face/Vase figure, the first natural interpretation depends on the particulars of the picture, such as color, shape, etc. If we compare

Pictures A and B in Figure 3 below, their first interpretation might be different: it would rather be a vase for Picture A and two faces for Picture B, although we can still get a second interpretation for both pictures.
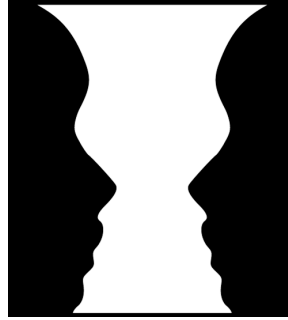
Picture A   Picture B

Figure 3. Face/Vase Illusion

The issue that we will address in this research is whether we find asymmetries in the case of the Locative Alternation. The point that in each particular case the choice of the construction is not random but rather depends on various factors (like given/new information, degree of specificity, etc.) does not seem striking. Yet, a more interesting issue is whether the number of times when the verb focuses on the Theme (the hay) or the Goal (the truck) is relatively equal. This would imply that, in general, the verb would have an equal capacity for choosing either one of the participants as the focus. However, the data suggest that this is not the case. Following Fried (2005: 505), we distinguish different types of semantic prominence: a special status of "particular event roles" (such as animacy/intention, in our case, the properties of the participants like substances vs. solid objects) and "prominence that arises from the internal structure of events (viewpoint)". The next section provides a description of how the present dissertation is organized.

1.2. Organization of the dissertation

The present dissertation examines the construal phenomenon based on a case study of the Locative Alternation in Russian. As we will show, the way in which a situation is construed depends primarily on the interaction among three factors: the semantics of the verb, the semantics of the prefix that is attached to the verb, and the semantics of the construction.

The first factor, namely the semantics of the verb, is addressed in **Chapter 2**. Here we provide an overview of previous scholarly work on the Locative Alternation and different classifications of verbal semantics. The Chapter concludes with a system that will be proposed in our analysis.

Chapter 3 discusses an additional factor relevant for the Locative Alternation in Slavic languages, i.e. the semantics of prefixes. Russian is characterized by two Locative Alternation verbs, *gruzit'* 'load' and *mazat'* 'daub, smear', that can alternate without a prefix. However, these verbs have aspectual counterparts, or Natural Perfectives, with the prefixes *na-*, *za-*, and *po-* that are considered to be devoid of semantic content and to simply change the aspectual characteristic of the verb from imperfective to perfective. The challenge that we are undertaking here is to test whether the prefixed perfectives with *na-*, *za-*, and *po-* differ from each other in their use of the Locative Alternation constructions and also are distinct from their unprefixed base verbs *gruzit'* 'load' and *mazat'* 'daub, smear'. Thus, Chapter 3 addresses the second factor relevant for the Locative Alternation, namely the semantics of the prefixes *na-*, *za-*, and *po-*.

The third factor crucial for the Locative Alternation is the semantics of the Locative Alternation constructions themselves. Each Locative Alternation construction has its own preferences for the verbs that it is compatible with. Thus, different verbs prefer different constructions. The dissertation aims to illustrate the idea that the data is nearly always skewed in favor of one particular construction. An almost equal distribution is the result of the interaction among the three factors mentioned above, as well as additional factors which show different preferences. Such additional factors include modifications at the constructional level. Constructions can be modified in three basic directions: we attest metaphorical extensions, reduction within constructions (when one of the participants is omitted), and elaboration (i.e. interaction with other constructions). Metaphorical extensions show different constructional preferences from those of literal uses and can have a crucial impact on the overall constructional properties of the verb. Reduction is more characteristic of the prefixed verbs, whereas elaboration is more common for the unprefixed verbs. An overview of the Locative Alternation constructions and their modifications is offered in **Chapter 4**.

Chapter 5 presents the data that will be considered in this dissertation and the methodology that we apply to the data. Our data include a detailed tagged database with all occurrences of the two central Locative Alternation verbs 'load' and 'smear' and their prefixed aspectual counterparts with *na-*, *za-* and *po-*. In addition, we include nine other verbs that are pertinent to the Locative Alternation. These verbs do not alternate when unprefixed, but attain additional constructions when the prefix *za-* is attached. The interaction between the three major factors and their modifications for the two central verbs is discussed in **Chapter 6**. Other verbs pertinent to the Locative Alternation with the prefix *za-* are analyzed in **Chapter 7**, where we introduce constructional maps that account for the distribution of the constructions with respect to each Locative Alternation verb. These constructional maps help us to single out both the similarities and differences among all Locative Alternation verbs and allow us to group the verbs in three major blocks according to their constructional preferences. These blocks are also in accordance with the semantics of the verbs considered.

In **Chapter 8** we summarize the conclusions drawn from our analysis and discuss further potential applications of this research.

I. BACKGROUND AND THEORETICAL ISSUES

Chapter 2
Main Approaches to the Locative Alternation

> "The lexicon is like a prison – it contains only the lawless."
>
> (Di Sciullo and Williams 1987: 3)

2.1. Terminology overview

The Locative Alternation is famous in the scholarly literature on English from examples like (1) and (2):

(1) Theme-Object
   John loaded the hay onto the truck.

(2) Goal-Object
   John loaded the truck with hay.

This phenomenon is observed in many European languages (English, German, Spanish), where a given verb can occur in two alternative constructions, both of which deliver (approximately) the same information.

The Locative Alternation has attracted much attention in scholarly literature since it presents a problematic example to one of the core principles of Generative Grammar, the Projection Principle. Under the Projection Principle, the properties of lexical items must be preserved while generating the phrase structure of a sentence (Chomsky 1986). Thus, it is not clear why a single verb (with a single thematic core) appears in more than one syntactic frame (Iwata 2005: 356). Examples showing the Locative Alternation are also problematic for language acquisition and represent an instance of the so-called "Baker's paradox" (Pinker 1989: 8). Given that a dozen verbs like *load* exhibit both structures (1) and (2), it would seem reasonable to generalize that any verb with the NP_1 __ NP_2 into NP_3 argument structure could also have a NP_1___ NP_3 with NP_2 argument structure. However, this generalization would not hold for verbs like *pour*:

(3) *Irv poured water into the glass.*
   **Irv poured the glass with water.*

(Pinker 1989: 8)

Yet, the child acquiring the language has no way of knowing this, given the lack of negative evidence. The fact that he or she has never heard the ungrammatical sentence in (3) could simply reflect that an adult had never uttered it in the

child's presence. Therefore, as Pinker states it, "the child should speak un-grammatically all his life – or more accurately, the language should change in a single generation so that exceptional verbs such as those in (3) would become regular" (Pinker 1989: 8). The Locative Alternation thus presents a challenge for both theoretical descriptions and learnability issues.

The Locative Alternation has been plagued by terminological diversity. Particularly problematic is the issue of what to call the two constructions, since nearly every author offers a different solution. Many linguists rely on phrase structure and simply use the terms "the *into/onto* variant" or "locative variant" for sentences like (1) and "the *with*-variant" for sentences like (2) (Rappaport and Levin 1988, Pinker 1989, Iwata 2005, 2008). Others look at the type of participant that is presented as a direct object, calling structure (1) "Figure frame" and structure (2) "Ground frame" (Bowerman 1982, Olbishevska 2004). A number of linguists refer to the semantics of constructions involved (Goldberg 1995, 2006; Michaelis and Ruppenhofer 2000). Other solutions offered are calling structures (1) and (2) "Locatum vs. Location" structures (Mateu 2000), or "placing vs. filling frame" (Boas 2003, 2006). We choose to follow Brinkmann (1997) and Nichols (2008) in terming the constructions Theme-Object and Goal-Object as in examples (1) and (2) above. This pair of terms makes no the-oretical assumptions and is relatively transparent. The *hay* item is the theme and the *truck* item is the goal, and "object" refers to the direct object, which is con-sistently coded with the Accusative case in both constructions in Russian (for a detailed overview of terminology within research on the Locative Alternation see Appendix).

Most of the scholarly work on the Locative Alternation can be grouped according to the approach as: 1) *lexical* (Rappaport and Levin 1988, 2005, 2007, 2008; Pinker 1989, Levin 1993, Brinkmann 1997; Dowty 2000; Mateu 2000), or 2) *constructional* (Goldberg 1995, 2006; Michaelis and Ruppenhofer 2000, 2001; Fillmore 1968, 1977, 2008; Boas 2003, 2006; Iwata 2005, 2008). In a broad sense, the two approaches can be understood as addressing the question of what motivates the Locative Alternation: what is in the verb, what is in the syntax, and how the two of them interact.

The next section presents an overview of the major approaches. First, we are going to outline briefly the earliest works on the Locative Alternation (first of all, Fillmore 1968, see the next section), then present an overview of the two main approaches. Lexical approaches, mostly represented by Pinker (1989) and Levin (2003), are described in Section 3; different variations of constructional approaches, covering Goldberg (1995, 2006), and later analyses by Boas (2003, 2006) (frame-semantic approach), Iwata (2005, 2008) (lexical-constructional approach), and Lewandowski (2009, forthcoming) are offered in Section 4. Fi-nally, Section 5 discusses research done on languages other than English and introduces the range of problems connected with morphology as an additional factor. For the goals of this research, it is particularly important to determine the role of prefixes in the alternation phenomenon.

2.2. Early Approaches to the Locative Alternation

Fillmore

One of the first scholars to draw attention to object alternations, emphasizing the formal rather than purely notional character of the direct object, was Jespersen (1924). His examples show paraphrase relations attested within one language as in (4) and (5), and across languages like that between (6) and (7).

(4) *present something to a person*
(5) *present a person with something*
(6) *furnish someone with something*
(7) *fournir quelque chose à quelqu'un*

(Jespersen 1924:162)

Similar phenomena, with special emphasis on the Locative Alternation, were later examined by Partee (1965). Most importantly, she took one form as basic, and the other as derived (the *with*-form) (Fillmore 1968: 47), this way setting the ground for "derivational analysis" of the Locative Alternation. In her approach, "derived objects" have the effect of displacing the original deep-structure object and attaching a *with* to it.

Partee's derivational approach was further developed by Fillmore, who attributed this alternation to "objectivalization", or "the effect of bringing a particular nominal element into closer association with the verb" (Fillmore 1968: 47). Fillmore (1968) proposed a model where he suggested various ways in which lexical entries can be related by case frames. For verbs like *spray* which occur with the cases sometimes in Agent – Object – Location and sometimes in Agent – Location – Object order, Fillmore used the principle of "movable cases" to unite two uses of the verb into a single notation. According to Fillmore, "objectivalization" neutralizes case distinctions to a single form (in this case, Accusative, Fillmore 1968: 47):

(8) Agent – Object – Location
   He sprayed paint on the wall.

(9) Agent – Location – Object
   He sprayed the wall with paint.

(Fillmore 1968: 48)

Both *on the wall* in (8) and *with paint* in (9) were initially provided with prepositions (as Locative and Instrumental case elements). The change in the structure can be accounted for by a simple property of the verbs like *spray*: whichever of the two elements (*on the wall* and *with paint*) is chosen as "direct object" "must fall next to it and must lose its preposition"(Fillmore 1968: 48).

In other languages, the process might be expressed as converting an original case specification to Accusative. Fillmore lists these two uses of the verb under a single Agent – Object – Location entry and lets the property mentioned above account for the change in the order of the cases and the change in meaning (Fillmore1968: 48-49). As for meaning, Fillmore observed that the *with*-variant in (9) implies that the wall becomes completely covered with paint, while sentences like (8) carry no such implication.

Fillmore's work offered two important contributions to the analysis of the Locative Alternation: the idea of transformational analysis via applying case frames and the distinction between partial and full covering. After Anderson (1971), the effect of complete covering, associated with the *with*-variant, became known as "holistic".

Since Fillmore (1968), there has been a long discussion about which verbs can alternate and why. The issues at stake here were to list all the verbs that can occur in the Locative Alternation, to classify those verbs and to say how they are different from non-alternating verbs. Such classifications were offered within lexical approaches, which are discussed in more detail in the next section.

2.3. Lexical Approaches

Pinker and Levin

After Partee (1965), the major authors supporting the derivational approach, which considered one locative structure as primary and another one as "derived" or secondary, were Rappaport Hovav, Levin, and Pinker. As stated in the previous sections, the major goal of all the works on the Locative Alternation is to answer three questions: what is in the semantics of the verb that makes it alternate, what is the syntactic nature of the two structures, and how do the semantics and the syntax interact. In the following we will see that although these authors share basic ideas, there are also differences between them.

2.3.1. Pinker's Lexical Rule Approach

2.3.1.1. The analysis of verbal semantics within the Lexical approach. Conflation classes.

The main point shared by all works within the lexical approach is the idea that by giving a fine classification of verbal semantics one should be able to predict the syntactic behavior of verbs, i.e. to predict when they can alternate and when they cannot. One of the significant contributions of these works are lists of alternating verbs that, although constantly revised, have been used in all later studies.

Analyzing the distribution of verbs of putting and covering in the Locative Alternation, Pinker observes that only 34 out of 142 verbs described by Rappaport and Levin exhibit the Locative Alternation, whereas the rest are attested either with the *into/onto* variant or with the *with*-variant exclusively. Using a set of semantic criteria, such as force, aspects of the dimensional geometry of solids, and a classification similar to the count/mass distinction, Pinker arrives at two major verb classes: content-oriented or *into/onto* verbs (alternating and non-alternating) and container-oriented or *with*-verbs (alternating and non-alternating) (Pinker 1989: 125-127). All in all, alternating verbs consist of six groups: four content-oriented and two container-oriented (Pinker 1989: 126 – 127):

(10) Pinker's list of alternating verbs
    Content-oriented *into/onto* verbs:
    i. Spray-class: Force is imparted to a mass, causing ballistic motion in a specified spatial distribution along a trajectory: *inject, spatter, splash, splatter, spray, sprinkle, squirt*

ii. Smear-class: Simultaneous forceful contact and motion of a mass against a surface: *brush, dab, daub, hang, plaster, rub, slather, smear, smudge, spread, streak*

iii. Scatter-class: Mass is caused to move in a widespread or nondirected distribution: *plant, bestrew, scatter, seed, sow, strew*

iv. Pile-class: Vertical arrangement on a horizontal surface: *heap, pile, stack*

Container-oriented *with* verbs:

v. Cram-class: A mass is forced into a container against the limit of its capacity: *cram, crowd, jam, stuff, wad*

vi. Load-class: A mass of a size, shape, or type defined by the intended use of a container is put into the container, enabling it to accomplish its function: *load, pack, stock*

The two major classes mentioned above (content-oriented vs. container-oriented) Pinker analyzes in terms of "conflation classes", i.e. certain sets of possible predicates in language. The boundaries of such sets are defined by "conflations of semantic elements" (in Talmy's terminology, which Pinker adopts), or "the thematic core of an argument structure" (in Pinker's own words), in which the elements are given a specific interpretation (Pinker 1989: 73). The possible semantic elements consist of variables standing for the participants in the event (the *X*, *Y*, and *Z*) and the elementary semantic functions "act", "cause", "go", "have", "be", and "to". Instead of labeling the participants with thematic roles, Pinker distinguishes them by the argument slots they fill in these elementary functions. For instance, the content-oriented class will be described as "X causes Y to move into/onto Z" (caused-motion class), whereas the container-oriented conflation class will have the core "X causes Z to change state by means of moving Y into/onto it" (change of state class) (Pinker 1989: 79). To sum up, a conflation class is a fixed combination of certain types of arguments. Each verb belongs to one conflation class, but verbs of certain conflation classes can be presented in terms of other conflation classes, causing the Locative Alternation.

The two classes presented above Pinker describes in terms of "broad conflation classes", representing a set of semantically related words with the same thematic core (for instance, "X causes Y to move into/onto Z") (Pinker 1989: 103, 265). It is remarkable that such "broad conflation classes" alone do not account for the Locative Alternation since both "content-oriented" and "container-oriented" classes comprise not only alternating but also non-alternating verbs. The content-oriented class cannot always be represented in terms of the container-oriented class. This is only possible in those cases where the caused motion presented by the former allows the speaker to predict exactly how the object that serves as the Goal is changed. For instance, caused motion of a substance in the direction of a particular object and in a particular spatial configura-

tion will result in the substance being deposited in or on the object in a characteristic way, changing its state. The *with*-variant requires a specific change of state of the object, and the meaning of a verb like *spray* allows the speaker to predict exactly what that change of state is. For this particular reason the alternation does not extend to verbs of "pure manner of motion" such as *pour*, or to verbs of force exertion (*push, drag, pull, tug, yank*) or verbs of positioning (*lay, place, position, put*), where "there is no way to predict on the basis of the verb meaning alone what the effect on the goal argument will be" (Pinker 1989: 80).

Thus, "broad" conflation classes are further split into conflation subclasses, or "narrow conflation classes" (corresponding to groups i-vi in (10) above), which constitute the basis for the Locative Alternation.[1] In a sense, Pinker proposes a vertical hierarchy of verbal roots in their relation to the Locative Alternation. For Pinker, alternation among verbal roots is neither a matter of independent lexical units nor broader semantic classes but rather occurs at a middle level: "Languages tie speakers not to the exact verbs they have heard, but to the *small family of verbs* (italics by SS) that are similar to the ones heard" (Pinker 1989: 162). We will return to this point in a discussion of the later proposals.

2.3.1.2. The interaction between verbal semantics and syntax within the Lexical approach. Linking rules and Lexical rule

Pinker claims that once one specifies the semantics of verbs in terms of conflation classes, their common argument structure follows from the "linking rules", which link the thematic core to the syntactic representation, as shown in Figure 1 below. According to the "linking rules", whichever argument is the Theme is linked to the direct object. In sentences like (1) and (8) it is the moving object, in sentences like (2) and (9) it is the location.

Besides linking rules, which match thematic cores with syntactic structures, Pinker introduces the notion of a "lexical rule" to correlate the two locative variants: "it is a rule that takes a verb containing in its semantic structure the core "X causes Y to move into/onto Z", and converts it into a new verb whose semantic structure contains the core "X causes Z to change state by means of moving Y into/onto it" (Pinker 1989: 79). In a broader sense, lexical rules are rules that "allow a speaker to take the sound paired with a verb in one conflation class and use it with a new, related meaning belonging to another conflation class" (Pinker 1989: 76). Figure 1 below offers a schematic representation of the Lexical rule approach.

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[1] "Membership in a broad conflation class is only a necessary condition for a verb to alternate; it is membership in one of the narrow conflation classes that is a sufficient condition" (Pinker 1989: 103).
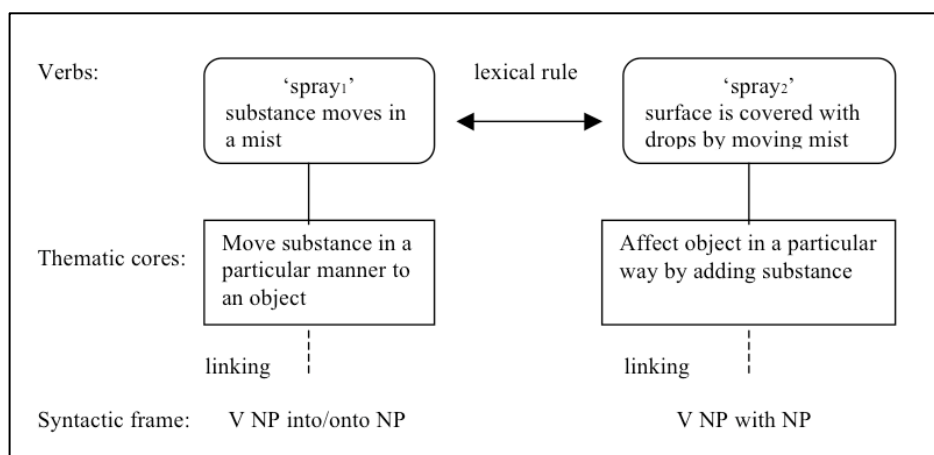
Figure 1. Lexical rule approach (adapted from Pinker 1989: 80)

Pinker describes the lexical rule phenomenon in terms of a "gestalt shift": one can interpret loading as moving a Theme (e.g. hay) to a location (e.g. truck), but one can also interpret the same act in terms of changing the state of a Theme (the truck), in this case from empty to full, by means of moving something (the hay) into it. The difference in argument structure follows from the linking rules: in the old verb, the moving thing was the Theme and hence was linked to the direct object; in the new verb, the location is the theme (of a change of state) and hence is linked to the object. Thus, in order to account for the Locative Alternation, not only do we need to determine the right "narrow conflation classes", but we should also make sure that the two verbs from those conflation classes (for instance, *spray1* and *spray2*) can represent the same situation with a different focus. As noted by Iwata (2005), in this statement Pinker is very close to the idea of construal (in the sense of cognitive linguistics) and a potential double interpretation of the predicate, which was later used in constructional approach (Iwata 2005: 370).

To sum up, both Rappaport and Levin (1988) and Pinker (1989) agree that: (1) the rule which makes the verb occur in two constructions directly changes its semantic structure; specifically, it changes which argument serves as the theme; (2) the first meaning - *move Z to Y* - is incorporated as part of the second meaning - *change Y's state by moving Z to Y*; and (3) the semantic change effected by the general linking rule requires specification of information – a specific kind of state change – that can be predicted from the intrinsic meaning of some verbs but not others. These scholars argue that the holistic effect is actually an epiphenomenon of the fact that the verb specifies a change of state. Another point, uniting their approaches, is the way they view the nature of thematic roles, as opposed to Fillmore (1968). According to Fillmore, thematic roles are drawn from a fixed list and can be ordered in a hierarchy, every argument has exactly one thematic role and linking rules apply to arguments in

terms of the roles they play in motion events (thus, object is linked to the moving or located entity). According to Rappaport and Levin (1988) and Pinker (1989), thematic roles are positions in a structured semantic representation ("conflation class" for Pinker) so that each thematic role triggers a specific linking rule. Linking rules in turn can apply to the roles that entities play in any semantic field, not just physical location. Thus, a verb can have two arguments playing the role of theme: one corresponding to what moves, the other corresponding to what changes the state. So, instead of a complete list of thematic roles each of which can be applied to a given verb, they propose fixed sets of arguments, which are somewhat similar to the idea of constructions. Yet, unlike construction grammar, where a construction exists independently of the verb, Pinker's sets of arguments, or "conflation classes", are intrinsic properties of verbs.

2.3.1.3. The relation between the two syntactic structures within the Lexical approach

The major difference between Rappaport and Levin (1988) and Pinker (1989) is in the way they represent the relation between the two structures. Rappaport and Levin (1988) adopt the idea of unidirectional derivation, claiming that change of state is caused by means of change of location:

(11) *John loaded the hay onto the truck.*
    [x cause [y to come to be at z]

(12) *John loaded the truck with hay.*
    [x cause [z to come to be in STATE]] BY MEANS OF [x cause [y to come to be at z]]

For Pinker, directionality depends on the ability of the direct argument to stand as the sole complement: if the locational theme (the content) is obligatory, it was assumed that the derivation is from *into* to *with*; if the simple two-argument form of the verb can appear with the locational goal (the container) but not the locational theme, it is assumed that the verb "naturally" takes the goal as a direct object and that the form with the Theme as object is derived from it. When both arguments are optional, the derivation could have gone in either direction, as in (15):

(13) a. **He stuffed the breadcrumbs.*
    b. *He stuffed the turkey.*

(14) a. *He piled the books.*
    b. **He piled the shelf.*

(15) a. *He loaded the gun.*
    b. *He loaded the bullets.* (Pinker 1989: 125)[2]

Thus, the relation between the two structures is presented as bidirectional (Pinker 1989: 228).

2.3.1.4. Problems with the Lexical Approach

As representatives of the constructional approach point out, the idea of one structure being derived from another is often problematic (Boas 2006, Iwata 2005, 2008). Pinker's sole complement diagnostic does not always make the correct predictions:

(16) a. *John heaped books on the shelf.*
    b. *John heaped the shelf with books.*
    c. **?John heaped the books.*
    d. **John heaped the shelf.*

(17) a. *John packed books into the box.*
    b. *John packed the box with books.*
    c. *John packed the books.*
    d. *John packed the box.*
<div align="center">(Pinker 1989:38)</div>

As can be seen from examples (16) and (17) above, sometimes it is impossible to say which way the derivation goes since some verbs forbid sole compliments (16), while other verbs can allow both compliments to stand alone.

    Boas (2006) has also pointed out that some non-alternating verbs from Pinker's list can in fact alternate. For instance, verbs like *drizzle*, *drip*, and *slop*, which Pinker places in the group of non-alternating content-oriented verbs, exhibit *with*-variants, contrary to Pinker (1989):

(18) *I tried using a normal bit with a standard drill as I dripped it with oil.*
    (re.antiques.radio+phono)

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[2] Already at this point we see that the semantics of *load* is not strictly defined, as Pinker first speaks about *loading the hay*, and then about *loading the bullets*, dealing with an idiomatic sense of *load*. This vagueness in the definition of *load* sometimes leads to different predictions on the side of different scholars. While Pinker claims that in the case of *load* both arguments can be omitted, Goldberg points out that sentences with a sole *truck*-compliment (A) are better than sentences with a sole *hay*-compliment (B): (Goldberg 1995: 178):
(A) Sam loaded the truck.
(B) ?? Sam loaded the hay.

(19) *I made a fresh mashed-spider cake and drizzled it with raspberry sauce just for you.* (acadia.chat)

(20) *I slopped it with Ketchup, smacked my lips, and took a bite.* (alt.religion.christian.roman-catholic)

(Boas 2006: 123-124)

Moreover, it is unclear how one determines which verb sense is the "basic" variant among alternating verbs. Without a clear concept of what a base form is, lexical rules may fail to apply adequately. So-called stuff-verbs such as *cram, crowd*, and *stuff* are assumed to denote events where a mass is forced into a container against the limits of its capacity. According to Pinker, these verbs "can trigger the formation of corresponding content-oriented or *into/onto* forms" which "involve the notion of a container's intended capacity" (Pinker 1989: 234). However, his account does not explain why verbs such as *squeeze*, which fit his definition of stuff-verbs, do not exhibit similar syntactic behavior:

(21) a. *Dawn stuffed the turkey with breadcrumbs.*
    b. *Dawn stuffed breadcrumbs into the turkey.*

(22) a. **Christian squeezed the turkey with breadcrumbs.*
    b. *Christian squeezed breadcrumbs into the turkey.*

(Boas 2006: 123-124)

As our analysis (see Chapter 6) will show, the content-oriented vs. container-oriented distinction does not always line up with the distribution of the two structures that different locative verbs show in the Russian National Corpus. For instance, according to Pinker *load* is a container-oriented verb, which would make a prediction that it should be more frequent in the Goal-Object construction. The Russian data, however, shows that unprefixed *gruzit'* 'load' prefers the Theme-Object construction.

Furthermore, Pinker himself points out that definitions of "conflation classes" cannot predict the Locative Alternation on their own but only in combination with "lexical rules": "Clearly, conflation class definitions by themselves can only be property-predicting, not existence-predicting. A word is more than a meaning; it needs a sound, too, or people won't know how to pronounce it. Lexical rules map entries from one conflation class into another, and crucially, they provide a sound for the new entry: the stem associated with the old entry. Conflation class definitions by themselves, on the other hand, don't tell you where the sound for a new word is supposed to come from" (Pinker 1989: 161). In other words, Pinker underlines the importance of what is being lexicalized in the verbal root. This further implies that the ability of verbs of certain conflation classes to appear in the Locative Alternation will be language-dependent, since different languages can lexicalize the same "conflation classes" differently (cf.

Scatter-class (verbs like *scatter*, *strew*) in (10) and the Russian verb *sypat'* 'strew', which obviously belongs to the same class but appears only in the Theme-Object construction). So, Pinker's "conflation classes", or classification of verbal roots, will always only mark a probability for an alternation, not its prediction.

Thus, there are certain problems with the Lexical approach: it is not clear which verb sense is "basic", although this basic sense forms the ground for semantic classification; the divisions into content- vs. container-oriented and even more narrow classes do not always make correct predictions.

2.3.2. Levin's Projectionist Approach

2.3.2.1. The analysis of verbal semantics within Levin's Projectionist Approach. Basic event structure.

Levin (2003) introduces a projectionist analysis, which uses a different classification of verbal types to explain the distribution of verbs in the Locative Alternation. Her analysis is based on Rappaport and Levin's (1998, 2001) concept that a verb's meaning consists of two parts, namely 1) a root and 2) a structural part, also known as the event structure. According to Rappaport and Levin, the root represents certain ontological types (state, manner, instrument, etc.) and does not include any information relevant to the grammatical behavior of the verb. In contrast, the structural part of the verb's meaning, its event structure, represents grammatically relevant information and is described in terms of event structure representations combining primitive predicates such as ACT, CAUSE, or BECOME. There is only a limited set of possible event structures.

An important distinction is whether verbs have simple or complex event structures. Simple events like *Joe runs* (23a) are associated with one subevent, and complex events such as *Miriam broke the cup* (23b) are associated with two subevents:

(23) a. [x ACT <*MANNER*>]
    b. [[x ACT<*MANNER*>] CAUSE [BECOME [y<*STATE*>]]]
                             (Rappaport and Levin 1998:108)

(24) The argument-per-subevent condition
    There must be at least one argument XP in the syntax per subevent in the event structure
               (Rappaport and Levin 2001: 779)

Event complexity is taken as a determiner for a verb's range of argument realizations. Rappaport and Levin's argument-per-subevent condition (24) ensures

that verbs describing simple events such as *run* typically appear with only one argument, whereas verbs describing complex events such as *break* usually appear with two arguments.

2.3.2.2. The interaction between verbal semantics and syntax within Levin's Projectionist Approach. Template augmentation.

According to Levin, the Locative Alternation occurs when a verb, typically associated with simple event structure, is found in complex event structures, characterized by a particular type of end result (Levin 2003: 10). This occurs due to a "template-augmentation" rule according to which "event structure templates may be freely augmented up to other possible templates in the basic inventory of event structure templates" (Rappaport and Levin 1998: 111). Levin's prediction is that multiple alternations are possible only with those verbs that have roots describing means or manner (and which can be used to obtain various types of results). If the verb is associated with simple event structure but only with one type of result it does not alternate. Cf., the syntactic differences between *sew* and *vacuum* (where *sew* can express a variety of types of results, but *vaccum* can express only one):

(25) Creating an object
    a. *Dale sewed the piece of silk into a ball gown*.
    b. *Dale sewed a ball gown out of the piece of silk*.

(26) Covering a surface
    a. *Dale sewed bows on the costume*.
    b. *Dale sewed the costume with bows*.

(27) Attaching things/impressing an image
    a. *Dale sewed the lining to the skirt*.
    b. *Dale sewed the lining and skirt together*.
                  (Levin 2003:10)

(28) a. *Avery vacuumed the dust off the rug*.
    b. *Avery vacuumed the rug*.

(29) a.*Avery vacuumed the dust onto the rug*.
    b.*Avery vacuumed the rug with the dust*.

(30) a.*Avery vacuumed the dust into a pile*.
    b.*Avery vacuumed a pile from the dust*.
                 (Levin 2003:10-11)

Thus, the differences between alternating and non-alternating verbs are

explained by pointing to the various structure types: verbs such as *fill* and *pour* show only one variant of an alternation, because they have roots associated with the complex result state event structures and not with simple means/manner event structures. Similar to the way Pinker tries to establish the basic verb sense, Levin attempts to define the basic event structure for a given verb.

For Levin (2003), in order to alternate, the verb needs to fulfill three criteria: it should be a manner verb, it should be associated with a simple event structure (it should be possible to use it without any object), it should be associated with various types of end results. Then a "template-augmentation" rule can be applied which allows a simple event structure to be presented as a complex event structure: additional arguments are added to simple event structures.

2.3.2.3. Problems with Levin's Projectionist Approach.

As shown in Boas (2006), once Levin's approach is applied to other semantically related verbs, her predictions about different argument realizations do not always hold. For instance, the verb *stitch*, which is closely related in meaning to *sew* and can also be characterized by obtaining various end results, does not show the same alternations as *sew*.

(31) a. **Joe stitched the piece of silk into a ball gown*.
  b. **Joe stitched a ball gown out of the piece of silk*.

(32) a. *Joe stitched bows on the costume*.
  b. **Joe stitched the costume with bows*.

(33) a. *Joe stitched the lining to the skirt*.
  b. *Joe stitched the lining and skirt together*.
<div align="right">(Boas 2006: 128)</div>

The way in which verb classes are defined within the Lexical approach is too coarse-grained to account for the distribution of verbs in the locative alternation. When comparing the syntactic properties of two verbs, we often find that one verb participates in the Locative Alternation, but another verb that is closely related in meaning does not. In other words, projecting syntactic behavior solely from lexical properties seems problematic. The next section presents an overview of constructional approaches, which solve some of the problems of the Lexical approach.

2.4. Constructional approaches

Goldberg, Boas, Iwata, Lewandowski

If the lexical approach assumes the semantics of the verb as the basis for the Locative Alternation, then the constructional approach views semantics as a combination of both the properties of the verb and of independent structures – constructions.

2.4.1. Goldberg's Constructional Approach

2.4.1.1. The nature of the two syntactic structures within Goldberg's Constructional Approach.

Goldberg (1995) accounts for the Locative Alternation by assuming that a single verb meaning is able to fuse with two different constructions, viz. the caused-motion construction (34a) and a causative construction plus *with*-adjunct (34b):

(34) a. *Pat sprayed paint onto the statute.*
    b. *Pat sprayed the statue with paint.*   (Goldberg 1995: 175)

Examples like (34a) are an instance of the much broader caused-motion construction, and can occur with a wide variety of path phrases besides *onto*[3]:

(35) *Pat sprayed the paint toward the window/ over the fence/ through the woods.*

Each such example shares the same surface syntax: each has a direct object and a prepositional phrase. The meanings are closely related as well; in each case the subject argument serves to cause the motion of the direct object argument along the path or to the location specified by the oblique argument:

(36) a. *Pat loaded the hay onto the wagon.*
    b. *Pat put the hay on the wagon.*
    c. *Pat shoveled the hay into the wagon.*   (Goldberg 2006: 36)

    By contrast, example (34b) is interpreted to mean that Pat completely covered the statue with paint. This "holistic" effect follows from treating this

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[3] In a sense, it points out why using the term the "locative variant" and the "*into/onto* variant" is problematic.

example as an instance of the causative construction. On this analysis, the *with*-phrase is an adjunct, closely related to the *with*-phrase of instrumentals (Rappaport and Levin 1985, Gropen et al. 1991):

(37) a. *Pat loaded the wagon with hay.*
     c. *They covered the wall with posters.*
     e. *They tiled their bathroom with blue tiles from Mexico.*

The examples in (37) are all licensed by the combination of two constructions: a causative construction and an independent construction headed by *with*, which in her (2006) work Goldberg treats as an "intermediary".

2.4.1.2. The interaction between verbal semantics and syntax within Goldberg's Constructional Approach. The Semantic Coherence Principle and the Correspondence Principle

For Goldberg, the final syntactic structures are the result of the combination of the verbal semantics (first of all, the participant roles of the verb) and the construction via *The Semantic Coherence Principle* and *The Correspondence Principle*. *The Semantic Coherence Principle* ensures that the participant role of the verb and the argument role of the construction must be semantically compatible. *The Correspondence Principle* states that profiled participant roles of the verb must be encoded by profiled argument roles of the construction, with the exception that if a verb has three profiled roles, one can be represented by an unprofiled argument role (and realized as an oblique argument) (Goldberg 2006: 40).

Goldberg (1995: 176–77) illustrates how the fusion works as follows. Verbs like *slather* require all three participant roles to be expressed: Both full variants of the alternation are acceptable as in (38), and none of the verb's participant roles may be left unexpressed as in (39).

(38) a. *Sam slathered shaving cream onto his face.*
     b. *Sam slathered his face with shaving cream.*

(39) a. **Sam slathered shaving cream.*
     b. **Sam slathered his face.*
     c. **Shaving cream slathered onto his face.*

Thus *slather* has the following lexical entry, where profiled roles are indicated by boldface:

(40) slather <**slatherer**, **thick-mass**, **target**>

Both the caused-motion construction and the causative-plus-*with*-adjunct construction allow all three roles to be expressed, so there is no problem satisfying the constraint that profiled roles are obligatory. Since there are three profiled participants, one may be fused with a nonprofiled argument role, in accordance with the Correspondence Principle. The fusion of *slather* with the two constructions also meets the Semantic Coherence Principle. The three participant roles are compatible with the caused-motion construction's argument roles, in that the slatherer can be construed as a cause, the thick-mass as a type of Theme since it undergoes a change of location, and the target as a type of Goal-path. They are compatible with the causative-plus-with-adjunct construction's argument roles as well, for the target can be construed as a type of patient. Goldberg claims that *slather* is thus compatible with both of the two constructions.

The shared meaning between the alternants can be attributed directly to the shared verb involved. For example, if we assign the participant roles of *load* the labels loader, loaded-theme, and container, we can see that these roles line up with the roles in the caused-motion construction and causative + with constructions as follows:

(41) Caused-motion (*Pat loaded the hay onto the truck*)
      CAUSE-MOVE (**cause**   **theme**   path/location)
         | | | |
      Load   (**loader**   **loaded-theme   container**)

(42) Causative + with constructions (*Pat loaded the truck with hay*)
      CAUSE (**cause**   **patient**) + INTERMEDIARY (instrument)
         | | | |
      Load   (**loader   container   loaded-theme**)

(Goldberg 2006: 41)

In *load* all three roles are profiled, thus one of the roles may be expressed as an oblique argument, in accordance with the Correspondence Principle. The important thing here is that in Goldberg's analysis the two variants are claimed to come from a single verb meaning.

Another thing worth mentioning in relation to the verbal meaning is that Goldberg recognizes the importance of frame semantic knowledge (Fillmore 1975, 1977, 1982). Goldberg argues that the verb meanings must be frame semantic meanings, i.e., they must include reference to a background frame "rich with world and cultural knowledge" (Goldberg 1995: 27), as opposed to describing verbal semantics in terms of "decompositional structures", such as 'X causes Y to move Z' (Goldberg 1995: 28). In Goldberg's account, such semantic decompositional structures correspond to "constructional meanings". The particulars of the manner designated by verbs are typically taken to be opaque to syntax; the only syntactically important part is whether the verb encodes a

manner or not. However, in order to account for lexical restrictions within certain syntactic structures, like the distribution of adverbs and adjuncts, it is essential to refer to particulars of manner. Goldberg illustrates the necessity of rich frame semantic knowledge with examples like (43):

(43) a. *Joe walked into the room with the help of a cane*.
 b. ?*Joe marched into the room with the help of a cane*.
 c. ??*Joe rolled into the room with the help of a cane*.
 d. **Joe careened into the room with the help of a cane*.
<div align="right">(Goldberg 1995: 30)</div>

In order to predict the distinction between (43a) and (43d), for instance, it is not enough to know that *walk* and *careen* are motion verbs with a manner component, because in that case both of them should combine with the adjunct *with the help of a cane*. It becomes crucial that *careen* implies a quick, uncontrolled motion and therefore (43d) becomes contradictory.

Another phenomenon that, according to Goldberg, speaks for including frame-semantic knowledge in lexical entries, is "preemption", or "blocking" (Goldberg 1995: 30). This phenomenon reveals itself in the ability of children to stop using overgeneralized forms upon learning an irregular form with the same meaning. For instance, children tend to overgeneralize the past tense of *go* to *goed*, but once they realize that *went* is synonymous they stop using *goed*. As Goldberg indicates, in order for "preemption" to occur, the hypothesized regular form and the real irregular form must have identical semantics, which presupposes that the entirety of frame-semantic knowledge associated with them must be recognized.

This claim is further supported by the findings of Bowerman (1982), who tests how children acquire verbs with the associated semantic roles Agent, Figure (Theme), Ground (Goal). This includes both verbs that take only Theme as the direct object (*pour*), verbs that take only Goal as the direct object (*fill*), verbs that show both patterns (like *hit* and *bump*). It is remarkable that at an early stage (1-1.5 years) children do not show confusion between the two patterns (Theme-Object vs. Goal-Object) or overgeneralization of one of the patterns. Rather, they are strikingly accurate with verbs of all types, correctly choosing as direct object whatever the adult would choose. This indicates that children "learn piecemeal for each verb" which noun argument associated with it should appear as its direct object (Bowerman 1982: 337). However, in the age range 4;3 – 7;2, children start to make errors with the mentioned types of verbs, using verbs like *fill* in the *pour*-pattern and verbs like *pour* in the *fill*-pattern, with yet more frequency of the first type of errors. Importantly, such generalizations do not extend to verbs outside the Agent-Theme-Goal oriented verbs:

(44) *I read a book to Mary -> *I read Mary with a book*

Errors like (44) are not attested, which means that the child recognizes that the potential for converting NP1 -V – NP2 – on - NP3 to NP1 – V – NP3 – with- NP2 is not general across all sentences meeting these syntactic descriptions. Moreover, the category of verbs whose noun arguments play the roles of "Figure" and "Ground" appears to be defined "not by the nature of the world but by the semantic structure of English" (Bowerman 1982: 341). It is consistent within this interpretation that children do not begin to generalize non-alternating verbs as alternating until they learn verbs of all three types (Theme as object, Goal as object, alternating). It is only later that children also acquire the frame-semantic knowledge associated with each such verb and stop producing errors.

2.4.1.3. Problems with Goldberg's Constructional Approach

Although in Goldberg's approach the problem of directionality does not arise since she assumes two independent constructions with their own meaning, her approach does not seem to provide a sufficient analysis of verbal semantics. The issue of compatibility between verbs and constructions is held to be simply one of compatibility between semantic roles. The Correspondence Principle dictates that profiled participant roles are fused with profiled argument roles. Profiling in its turn is understood as follows: all and only obligatorily expressed participant roles are lexically profiled; all and only argument roles which are expressed as direct grammatical relations are constructionally profiled. One small difference between Goldberg (1995) and (2006) is that in (2006) she explicitly admits that the Correspondence Principle is a default principle and thus can be "overridden by particular constructions that specify that a particular argument be deemphasized and expressed by an oblique or not at all" (Goldberg 2006: 40).

In this way, The Semantic Coherence Principle becomes largely responsible for the fusion of a verb and construction. Yet, all the Semantic Coherence Principle requires is that the participant roles (of the verb) instantiate the argument roles (of the construction). Put differently, the issue of compatibility between verbs and constructions is held to be simply one of compatibility between semantic roles. Within this approach, the verb *spray* can alternate because its participant roles are construable as instances of the argument roles of the two constructions. It seems unlikely though that alternating verbs can be distinguished from non-alternating verbs by reference to participant roles alone (for instance, it does not seem that participant roles of *pour* are that much different from participant roles of *spray*). As Goldberg pointed out herself, "the question that is often asked is, what aspects of meaning are relevant for a particular highly circumscribed domain? […] [I]f we wish to ultimately account for a wider domain of language than the syntactic expression of arguments, we will need to appeal to a much richer notion of semantic structure" (Goldberg 1995: 30).

The Constructional approaches that follow elaborate this part of Goldberg's analysis, in a way combining Pinker's and Golberg's achievements.

2.4.2. Boas's Frame-semantic Approach

The frame-semantic approach is represented in Fillmore (2008) and Boas (2001, 2003, 2006). According to Boas, other approaches propose some version of a basic lexical entry which licenses the default argument structure. To license additional (alternating) argument structures, they must apply different types of mechanisms (lexical rules (Pinker), template augmentations (Levin), grammatical constructions (Goldberg)) in order to provide the basic entry with additional information (Boas 2006: 133). On the contrary, Frame Semantics "takes a "splitting" approach to sense descriptions instead of a "lumping" approach, where the latter considers one sense as basic and derives other senses from it" (Boas 2006: 135). The next subsection provides a more detailed overview of the Frame-semantic approach.

2.4.2.1. The analysis of verbal semantics within Boas's Frame-Semantic Approach. Levels of verb Descriptivity.

The Frame-semantic approach describes a word's various lexical units (pairings of a word with a sense) with respect to the semantic frames that they evoke: "In Frame Semantics the syntactic alternations in which a verb participates do not determine its membership in a specific class. Instead, verbs are classified based on the types of semantic frames that they evoke, which, in turn, may result in an intricate system of cross-classification where different lexical units associated with the same verb evoke distinct frames". (Boas 2006: 137). For instance, the verb *load* is associated with two different lexical units, each of which evokes a distinct frame ("filling" and "placing").

Boas shares Snell-Hornby's idea of verb descriptivity. According to Snell-Hornby, the semantics of verbs is intrinsically complex. This is because they describe participants and circumstances as well as further semantic elements that are expressed in the verbs' definition by one or more adjectives or manner adverbs. The semantics of a verb can be divided into its act nucleus (ANu) and its modifying adverbials or modificants (Mod), as shown for the verb *strut* in Figure 2:

Strut

```
        /‾‾‾‾‾‾‾‾‾‾\
```

ANu (act nucleus)   Mod (modificants)
-*walk*   -distinct physical characteristics (stiff, erect)
                       -value judgments passed on the agent and his manner of walking (proud, pompous, self-satisfied, etc.)
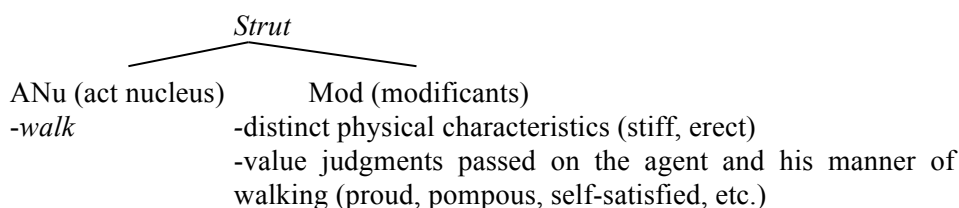
Figure 2. Snell-Hornby's idea of verb descriptivity.

According to Snell-Hornby, verbs like *strut* exhibit a high degree of verb

descriptivity, for which reason he calls them descriptive verbs (DVs). Such verbs can be represented by the formula in (45), where x is understood "as an optional element without evaluative properties and not expressible in terms of adjectives or manner adverbs" (Boas 2006: 138):

(45) "descriptive verbs"(DV): DV = ANu + Mod (+x)

There are two types of verb descriptivity: direct descriptivity, when the modificant refers directly to the activity described by the verb (e.g. *shout*); indirect descriptivity, where modificant refers to a participant or circumstance behind the action or a combination of these (e.g. *strut*). The more semantic weight is taken by the modificant as against the act-nucleus, the higher the degree of descriptivity.

The crucial point in Boas's approach is that the level of descriptivity appears to influence syntactic distribution (range of argument realization). Thus, lexical units such as *walk* show a low level of descriptivity and broad range of argument realization, while lexical units such as *totter* show a high level of descriptivity and narrow range of argument realization:

(46)   a. *Claire {walked/paraded/*staggered/*tottered} the dog down the street.*
        b. *The dog {walked/paraded/staggered/tottered} down the street.*

To summarize Boas's contribution to the issue at stake, we can briefly outline how his approach is different from his predecessors. Pinker (1989) tried to come up with the right semantic classification by proposing his idea of "conflation classes" and manner vs. path components. Levin (2003) attempted to present the semantics in a more structured way by distinguishing between "root" semantics and "basic event structure". In a sense, what Boas proposes is a more elaborated version of Levin's account of verbal semantics, taking apart the "root" component and introducing the "nucleus" and "modificants". Although Boas follows Goldberg in singling out constructions as a separate unit, independent of verbal semantics, his analysis is different from Goldberg's in two respects. On the one hand, he further specifies the semantic potential of the verb; on the other hand, he shows how different constructions are related to each other at a higher level, which will be illustrated in the next subsection.

2.4.2.2. The nature of the two syntactic structures within Boas' Frame-Semantic Approach. Constructions vs. frames

One of the issues that is relevant for Boas is establishing the connections between various frames. The Theme-Object construction represents the Placing frame while the Goal-Object construction instantiates the Filling frame. Both frames are related to other frames, such as Transitive Action, and are parts of a bigger picture, which can be presented as a framenet. A part of the framenet

including Placing and Filling frames is given in Figure 3 below.
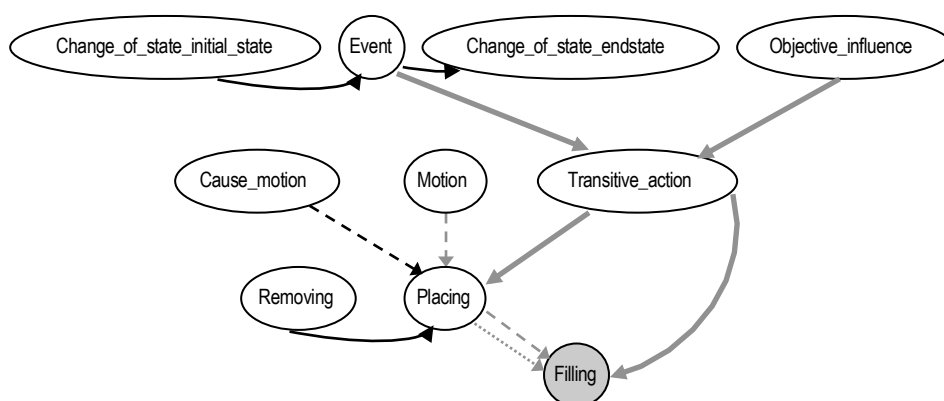
Figure 3. FrameNet with Placing and Filling frames (Boas 2008).

As can be seen from Figure 3, both Placing and Filling frames are related to the Transitive Action frame, since both of them refer to a transitive action. Placing also represents an instance of a caused motion, which is illustrated in Figure 3 by a linking arrow from Cause_motion to Placing. Thus, according to Boas, it is not only important to describe the correlation between verbal semantics and constructions but also to link constructions together in a framenet, showing different levels of abstraction. In a sense, Boas offers a horizontal network of various constructions.

2.4.2.3. Problems with Boas's Frame-Semantic Approach

Boas claims that the frame approach involves splitting the meanings of the verb rather than uniting them. If that is the focus it becomes unclear why different meanings (matching different frames) are united within one word and how we know which frames the word will go with, i.e. what makes a word one single unit. To cover for this, Boas makes use of Snell-Hornby's idea of verb descriptivity, which presents the semantics of the verb as a nucleus and a number of modificants. The question still remains how to define the number of modificants.

The Frame-semantic approach enables us to relate the Locative Alternation constructions to each other and to bigger frames (Transitive, Cause_Motion, etc.). Within Boas's approach frames are connected but they do not interact, to be more precise, one can't have an intermediate frame that would be both Placing and Filling. However, as we show in Chapters 4, 6, and 7, for the Russian data we attest Hybrid constructions as in (47) below and this contradicts Boas's claims:

(47) *bryzgat' vodoj na pol*
   [spatter water-INS on floor-ACC, lit. 'to spatter with water onto the floor']
   'to spatter the floor with water'

Hybrid constructions like (47) do not have a direct object. Neither the Theme (water) nor the Goal (floor) are expressed as direct objects because the Theme appears in the Instrumental case and the Goal in the preposition phrase. Such constructions appear to be the result of an interaction between the Theme-Object and the Goal-Object constructions and the Decausative construction, which makes the final structure intransitive (a detailed discussion of such constructions is offered in Chapter 4). Thus, it appears that in addition to frames we still need the notion of constructions in order to account for the possible interactions.

2.4.3. Iwata's Lexical-constructional Approach

Following both the Lexical Approach (mostly Pinker 1989) and the Constructional Approach by Goldberg (1995), Iwata (2005) proposes a "Lexical-constructional Approach". Contributions by Iwata reveal themselves in two major ways.

2.4.3.1. The analysis of verbal semantics within Iwata's Lexical-constructional Approach. L-Meaning vs. P-Meaning.

One of the crucial differences between Iwata's approach and the Lexical Approach is that Iwata treats both meanings "sending a substance" and "covering a surface" as primary. Iwata draws an important distinction between the verb *spray* on the one hand, and *spray paint onto the wall* or *spray the wall with paint* on the other. In a conventional spraying scene, one sends substance in a mist back and forth, and as a result the substance eventually comes to cover a large portion of the surface to which it has been applied. Thus, the meaning of the verb *spray* originally contains the information about both sending and covering activities and can be expressed as 'to send a liquid in a mist or fine droplets AND to cover a surface with an even coat of deposited liquid adhering to it'. This original meaning Iwata calls the Lexical Head Level Meaning (L-Meaning) (Iwata 2005: 362). By contrast, the phrases *spray paint onto the wall* or *spray the wall with paint* entail a construal of this scene either as a sending activity or as a covering activity and can be referred to as Phrase Level Meaning (P-Meaning). The locative alternation arises when the L-Meaning may yield more than one P-Meaning. In this way, the ability of *spray* to alternate arises

from the fact that a spraying scene can be construed either as moving paint onto the wall (sending activity) or as covering the wall with paint (covering activity).

Next, Iwata also elaborates on the mechanism that ensures the form-meaning correspondence of the two locative variants. Following Pinker, he argues that a verb appears in a particular syntactic frame if its meaning is compatible with a thematic core associated with that syntactic frame, where a thematic core is "a schematization of a type of event or relationship that lies at the core of meanings of the class of possible verbs" (Pinker 1989: 73). In the literature it has been stated repeatedly that the entity which can appear in direct object position is that to which a force is transmitted in a causal chain, which is confirmed by the "What X did to Y" test (Jackendoff 1990, Rappaport and Levin 2001, Iwata 2005). Thus, with pour-verbs the Theme argument is acted upon, with cover-verbs the Goal argument is acted upon, and with Locative Alternation verbs both arguments can be acted upon, as presented in (48-51):

(48) a. *What she did to the water was pour it into the glass.*
  b. ?*What she did to the glass was pour water into it.*

(49) a. ??*What she did to the rug was cover the floor with it.*
  b. *What she did to the floor was cover it with a rug.*

(50) a. *What Bill did to the paint was smear it on the wall.*
  b. ?*What Bill did to the wall was smear paint on it.*

(51) a. ?**What Bill did to the paint was smear the wall with it.*
  b. *What Bill did to the wall was smear it with paint.*

(Jackendoff 1990: 130)

Iwata further assumes that the two thematic cores associated with the locative variant syntax and *with* variant syntax are two subtypes of "X acts upon Y": for pour-class verbs it can be phrased as "X acts upon Y, thereby causing Y to go to Z"; for cover-class verbs it can be phrased as "X acts upon Y by exerting force horizontally over the surface of Y with Z" (Iwata 2005: 364-365). Thus, Iwata's and Pinker's analyses differ in two major points: the L-meaning/P-meaning distinction proposed by Iwata vs. Pinker's proposal of two verbal meanings united by a lexical rule; and the way the two researchers describe the thematic core that correlates with a *with* variant, as can be seen from Figures 4 and 5 below:

Verbs:

	lexical rule	
'spray₁' substance moves in a mist	◄──────►	'spray₂' surface is covered with drops by moving mist

'spray₁'
substance moves in
a mist

'spray₂'
surface is covered with
drops by moving mist

Thematic cores:

Move substance in a
particular manner to
an object

Affect object in a particular
way by adding substance

linking   linking

Syntactic frame: V NP into/onto NP   V NP with NP

Figure 4. Lexical rule approach (adapted from Pinker 1989: 80)

Iwata (2005)

L-Meaning:

substance moves in a mist, and as a result the
surface is covered with drops by moving mist

Langacker (1987)

alternate
construal/
Gestalt shift

'spray1'
substance moves in a
mist

'spray2'
surface is covered with
drops by moving mist

P-Meaning:

Thematic cores:

X acts upon Y, thereby
causing Y to go Z

X acts upon Y by
exerting force over the
surface of Y with Z

Goldberg (1995)
construction

Syntactic frame: NP V NP directional NP   NP V NP with NP

Figure 5. Constructional approach (Iwata 2005: 369, 371)

As can be seen from Figure 4, Pinker derives *spray the wall with paint* from *spray the paint onto the wall*, not from *spray*. According to Iwata, that is "a fundamental flaw" in lexical rule approaches (Iwata 2005: 369). Interestingly, Pinker recognizes the Locative Alternation as a gestalt shift, "One can interpret loading as moving a theme (e.g., hay) to a location (e.g., a wagon), but one can also interpret the same act in terms of changing the state of a theme (the wagon), in this case from empty to full, by means of moving something (the hay) into it" (Pinker 1989: 79). However, Pinker implements this idea by means of a lexical extension.

Iwata's idea that a single lexical meaning gives rise to two phrase meanings is not new, but is also found in Langacker (1987) and Goldberg (1995), whose key terms are presented on the right side of Figure 5. A verb can appear in a syntactic frame when its lexical meaning is compatible with the semantics

of a construction. The verb *spray*, whose lexical meaning includes both 'putting' and 'covering', is thus capable of taking both constructions. Which syntactic frame is chosen is determined by which aspect of the lexical meaning is profiled, based on a gestalt shift or "alternate construal of the same situation" (Langacker 1987). In other words, Langacker and Goldberg neither introduce any lexical rules that derive one lexical meaning of the verb from another nor distinguish between L-Meaning and P-Meaning. The Locative Alternation verbs are no different from non-alternating verbs in their basic form-meaning correspondences; the possibility of alternation is entirely attributed to individual L-meanings.

Iwata convincingly argues that the derivational approach of Pinker and Rappaport and Levin looks plausible because one can mistakenly assume a temporal and causal order between the two events ("placing" and "covering"): since our world knowledge tells us that one first transfers bricks onto the truck, and then the truck becomes full, one may infer that the event denoted by the locative variant temporally precedes the *with* variant and that the latter cannot take place without the former, i.e. the two events are in a "quasi-precedence" relation (Iwata 2005: 375).

Thus, the Constructional approach helps to account for some issues that are problematic within the derivational approach. Firstly, it explains the multiple alternations of verbs like *wrap*:

(52) a. *He wrapped shiny paper around a present*.
    b. *He wrapped a present with paper*.
    c. *He wrapped a present in paper*.

The L-Meaning of *wrap* is compatible with the semantics of each of the three constructions underlying their respective forms.

Secondly, it also eliminates the problem why it is more tolerable to say that *loading the wagon with hay* is brought about by means of *loading hay onto the wagon* (explained by means of entailment relation within the derivational approach) than to say that *hitting the wall with a stick* is brought about by means of *hitting a stick against the wall*.

Despite fundamental similarities, Iwata's and Goldberg's accounts crucially differ as to 1) how to represent the verb meaning, and 2) how a verb and a construction are integrated. In Iwata's account, the verb meaning is a Fillmorean scene, and the integration of a verb with a construction is simply based upon semantic compatibility. On the other hand, Goldberg represents the verb meaning as a list of participant roles, and the integration of a verb with a construction is identified as the fusion of semantic roles, which is regulated by the Semantic Coherence Principle and the Correspondence Principle. In a sense, Goldberg's approach primarily aims at capturing form-meaning correspondences that fall outside of lexical encoding, i.e. examples like (53):

(53) a. *Sally baked her a cake.*
     b. *He wiped the crumbs off the table.*

In (53a), the sense of transfer is not lexically specified by *bake* and is contributed by the ditransitive construction. Similarly, in (53b), the sense of motion is not specified by *wipe* and is contributed by the caused-motion construction.

By contrast, Iwata's account of the Locative Alternation focuses on syntactic and semantic information that is lexically encoded, also known as the subcategorization frames (Iwata 2005: 380). In this sense, it is closely related to Boas' (2001, 2003) analysis. Boas includes two types of frame semantic information in verb meanings, i.e. "on-stage" information about the prototypical participants in an event (corresponding to Iwata's L-meaning) and "off-stage" information, a kind of world knowledge one is aware of when encounting a word in discourse, but usually does not bother to mention.

2.4.3.2. The nature of the two syntactic structures within Iwata's Lexical-constructional Approach. The Hierarchy of constructions

Iwata treats constructions as abstractions or schemas from occurrences of a given type of form-meaning paring in context. Since schemas are available at varying degrees of abstraction (Langacker 2008), constructions should be available at varying levels of abstraction, as presented in Figure 6 below.
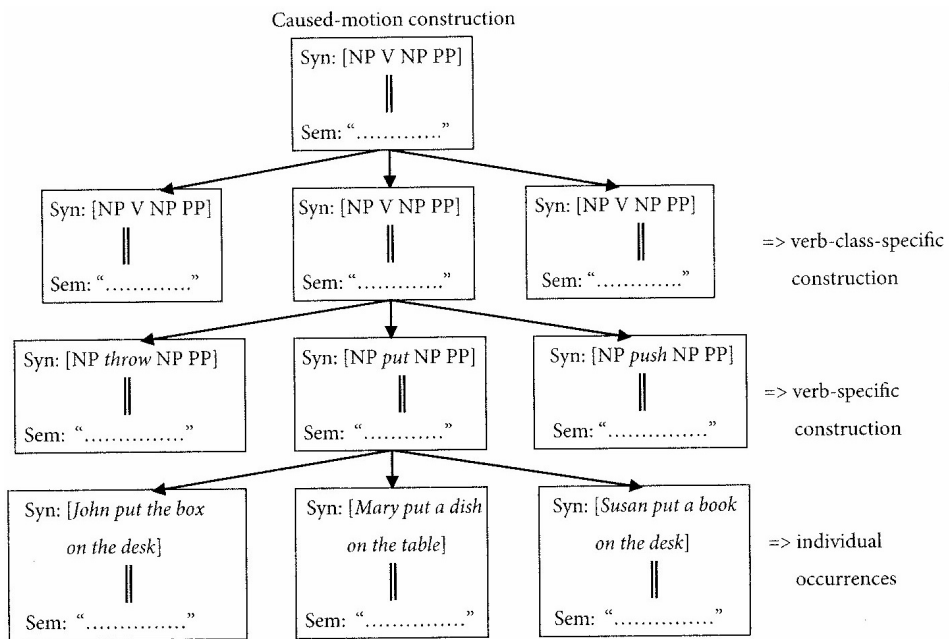
Figure 6. The hierarchical organization of constructions (Iwata 2008: 37).

In the case of such construction hierarchy, a verb-specific construction handles so-called subcategorization properties and selectional restrictions, while a verb-class-specific construction captures syntactic and semantic regularities of a verb class. Thus, it is constructions of the second degree of abstraction, i.e. verb-class-specific constructions (see Figure 6), not the level of the caused-motion construction as stated by Goldberg, that captures argument structure alternations. Note that here Iwata gets close to Pinker, who also claims that lower level "conflation classes" are responsible for the Locative Alternation. Thus, Iwata follows Goldberg in treating the two alternating variants not as derivationally related structures but rather as two verb-specific constructions of a single verb. Yet, he elaborates the hierarchy of such constructions, emphasizing that the Locative Alternation occurs at level of the verb-class-specific construction.

2.4.3.3. Problems with Iwata's Lexical-constructional Approach.

Iwata's approach summarizes the major contributions of his predecessors. He accepts Goldberg's constructional approach, claiming that it is not the lexicon alone that is responsible for the Locative Alternation. On the one hand, he contributes to Goldberg's findings by presenting the hierarchy of constructions based on Langacker (1999) and Croft (2001, 2003). On the other hand, he underlines the importance of a more detailed analysis of verbal semantics and introduces a semantic hierarchy by distinguishing between P-Meaning and L-meaning. However, Iwata's approach also faces certain problems. For one, it is not clear why Iwata needs P-Meaning. It appears that according to him, a P-Meaning is just a construed L-Meaning. Could it also be interpreted as the meaning of the possible collocations or linguistic phrases that a given verb can go with? How will it work for other verbs that are not involved in the Locative Alternation? For instance, can we say that in the case of metaphorical uses of the Russian 'load' verbs we have a different P-Meaning? Is the so-called "off-stage" information stored in P-Meaning or L-Meaning? Why is it necessary to single out the P-Meaning (as a separate level or ingredient?) instead of just saying that the L-Meaning is construed in different ways?

2.4.4. Lewandowski's Constructional Approach

2.4.4.1. The analysis of verbal semantics within Lewandowski's Constructional Approach. Three-member classification.

It has been widely assumed that verbs from various lexical fields can be classified as lexicalizing manner (e.g. *wipe*, *float*) or result/path (e.g. *clean*, *enter*). Levin and Rappaport Hovav (1991) postulate that manner and result/path are in complementary distribution: a verb can codify either one or the other meaning component, but not both at the same time. Even if some verbs refer to results

brought about using a conventionally associated manner or, analogously, some manner verbs specify actions performed to bring about a conventionally associated result, only one of these semantic components is codified in the verbal root, whereas the other can only be expressed outside the verb. For instance, although the action of *wiping* is usually used to clean a surface, the verb *wipe* only denotes a manner of motion (which can be characterized as "surface contact"), whereas the final state of the surface is codified in a separate linguistic unit, i.e. the adjectival phrase *clean* (ex. 54):

(54) *Pat wiped the table clean*.

Quite importantly, Rappaport Hovav and Levin (1998) argue that the ontological type of the root has serious consequences for the grammatical behavior of a verb. They show that manner verbs, but not result verbs, can be used without an object (ex. 15) and allow so-called unselected objects, i.e. nominal phrases that are not licensed by the verbs argument structure (ex.56).

(55) a. *Kim swept*.
    b.**Kim broke*.
(56) a. *Kim scrubbed her fingers raw*.
    b.**Kim broke her fingers raw*.

On the other hand, a majority of result verbs exhibits anticausative uses, like those in (ex. 57), which are never found with verbs with explicit manner components.

(57) a. *The table broke*.
    b.**The table wiped*.

Talmy (1985, 2000) shows that the manner/path dichotomy is relevant for characterizing crosslinguistic lexicalization patterns. He argues that languages can be categorized as either *verb-framed*, such as Romance or Turkish, or *satellite-framed*, such as Germanic and Slavic. Whereas the former lexicalize the path of motion in the verb and express the manner, if specified, in a secondary element (e.g. a prepositional phrase or a Gerund), the latter codify the manner of motion in the verb, with the Path being relegated to a secondary element, commonly a preposition or prefix (cf. ex. 58 and 59).

(58) Spanish:
    La botella entró en la cueva (flotando).
    [the bottle entered in the cave floating]
    'The bottle entered the cave (floating).'

(59) *The bottle floated into the cave*.

Although it is an uncontroversial fact that there are prototypical manner or path/result verbs, as Levin and Rappaport Hovav (1991), Rappaport Hovav and Levin (1998) and Talmy (1985, 2000) convincingly demonstrate, it has been postulated that a strict dichotomy is empirically not justifiable. Some verbs encode both manner and path and, most importantly, this hybrid nature of their roots is relevant for the grammar (cf. Alonge 1997, Lewandowski 2009). In particular, according to Alonge (1997), Italian manner verbs such as *correre* 'run' or *volare* 'fly' also lexicalize direction. This is why they exhibit directed motion usages, which, according to Talmy's typology, should be impossible in Romance languages with manner verbs (ex. 60).

(60) Italian:
   La rondine è volata al nido.
   [the swallow is fly.PSTPRT at.the nest]
   'The swallow flew to the nest.'
<div align="right">(Levin et al. 2009: 1)</div>

On the other hand, Lewandowski (2009) classifies verbs entering into the Locative Alternation in Polish and Spanish as "manner", "path" and "hybrid", see below:

Two groups of manner verbs[4]:
   a)   Wide-spread or undirected distribution of a liquid

   Polish:
   bryzgać 'splatter'
   pryskać 'spray'

   b) Contact of a mass against a surface

   Polish:
   mazać 'daub'
   smarować 'smear'

"Manner" verbs do not codify path: you can smear something up, down, to the left, to the right, etc. Thus, path is underspecified in their verbal meaning and they are more likely to be used in the Goal-Object construction.

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[4] The characterization of the manner component is taken from Pinker (1989), who claims that alternation does not extend to verbs of "pure manner of motion" such as *pour*, verbs of force exertion (*push, drag, pull, tug, yank*) or verbs of positioning (*lay, place, position, put*) since there is no way to predict on the basis of the verb meaning alone what the effect on the goal argument will be (Pinker 1989, 80).

Path verbs:
  Polish:
  kłaść 'lay'
  wieszać 'hang'
  stawiać 'stand'

"Path" verbs imply path, i.e. they denote movement of the theme from one place to another. The prediction will be that they favor the Theme-Object construction.

Hybrid verbs:
  Polish:
  ładować 'load'
  pakować 'pack'
  pchać 'stuff'
  lać 'pour'
  sypać 'strew'

Manner verbs, such as the Polish verb *chlapać* and the Spanish verb *salpicar* 'splatter' provide information about how the action denoted by the verb is performed (in this particular case, the liquid is distributed in a widespread fashion; cf. Pinker 1989). Path verbs, such as *wieszać*, *colgar* 'hang', clearly imply displacement of the theme. In contrast, hybrid verbs lexicalize both manner of motion and path. For instance, *ładować*, *cargar* 'load' implies that a large quantity of things is displaced, but since things are usually loaded into a container this verb also evokes, as the verb "enter" does, the trajectory "outside-inside". Lewandowski (2009) shows, through a corpus study, that the distribution of the alternating verbs in one or the other pattern of the locative alternation is statistically different depending on the root type. Simplifying somewhat and leaving aside the important cross-linguistic differences, manner verbs are more likely to appear in the change of state variant, path verbs – in the change of location pattern, while the distribution of hybrid verbs is similar in both constructions.

2.4.4.2. Problems with Lewandowski's Constructional Approach

The division of verbal semantics into "path" and "manner" verbs can roughly be compared to Pinker's content-oriented vs. container-oriented classes. However, Lewandowski tries to avoid further splitting the classes into subclasses as Pinker does (remember that Pinker further divides these broad conflation classes into narrow conflation classes, only some of which can alternate). Instead of singling out alternating and non-alternating verbs in both groups (i.e. "path" (content-oriented) and "manner" (container-oriented)), Lewandowski introduces an additional group, where he puts all the alternating verbs. Thus, "path" verbs would be predicted to choose the Theme-Object construction, "manner" verbs

should favor the Goal-Object construction, and "hybrid" verbs should alternate between the two constructions since they share the properties of both groups.

Although elegant and concise, Lewandowski's analysis faces the problem that "hybrid" verbs do not form a uniform class. For instance, in Polish, some verbs are called hybrid because they can appear in the Theme-Object construction with some prefixes and in the Goal-object construction with other prefixes. Yet, when unprefixed they do not show any alternation and could easily be attributed either to "manner" verbs or to "path" verbs, depending on the construction that they are used with. For instance, the Russian unprefixed verb *stavit* 'put, place', as well as its Natural Perfective with *po-* (*postavit'*), are used in Theme-Object construction, while its perfectives with *za-* and *ob-* choose the Goal-Object construction (*zastavit'* 'cover something with standing objects'; *obstavit* 'furnish'). In Polish, we find a similar effect with the hybrid verbs like *pchać* 'stuff' that appear in the Theme-Object construction without a prefix but favor the Goal-Object construction when used with the prefix *za-* (*zapchać* 'stuff, choke') (see Sokolova and Lewandowski 2010, Lewandowski forthcoming). Another problem is that even if we do accept the existence and diverse nature of the "hybrid" class, we would still struggle to find where to draw the line between the three groups. This distinction would be language specific and quite often problematic even within one particular language. For instance, within Slavic data there does not seem to be enough evidence for singling out "hybrid" and "path" verbs. Most of the verbs that Lewandowski attributed to the "hybrid" group show the same behavior as the so-called "path" verbs. For instance, Polish "hybrid" verbs like *lać* 'pour' and *sypać* 'strew' and "path" verbs like *stawiać* 'stand' are used only in the Theme-Object construction when unprefixed, and only in the Goal-Object construction when prefixed in *za-*. Thus, it is not clear why these verbs should belong to different groups.

2.4.5. Semantics of verbs and Constructions in the present study

In this chapter, we have shown that the theoretical challenges relevant to the Locative Alternation involve three major issues: 1) appropriate description of verbal semantics; 2) defining the nature and the relation between the two syntactic variants; and 3) analysis of the interaction between the first two factors. In this dissertation we address the issues mentioned above plus an additional factor, verbal prefixes.

The semantics of the verb is described in terms of classifying Themes and Goals. The Themes can refer to substances (mass) or dry solid objects (count), whereas the Goals can be represented as containers or surfaces. For more accurate predictions one should specify the classes of nouns that appear as Themes and Goals. As our analysis will show, all Locative Alternation verbs are indeed different in their selection of Themes and Goals. Thus, the more the Themes and Goals are specified, the easier it is to predict which verb will be used and in

which construction. In this sense, we accept Iwata's claim that the contribution of NPs and PPs is crucial for the Locative Alternation (the importance of semantic and syntactic features of the nominals in case alternations has also been emphasized by Salkoff 1983, Fried 2005). Iwata considers the use of the verb *spread* with different nouns as in (61) and (62) below:

(61) a. *He spread butter on the bread.*
    b. *He spread the bread with butter.*

(62) a. *He spread a blanket on the sleeping child.*
    b. **He spread the sleeping child with a blanket.*

Iwata mentions that "the contrast between (61) and (62) is somehow effected by the contributions of NPs and PPs" (Iwata 2008: 20). Most of the previous studies hold verbs alone to be responsible for the locative alternation. In Iwata's account, there is no need to proliferate verb senses. The verb *spread* remains the same. The difference in (61) and (62) is that *spread the bread with butter* can instantiate a verb-class-specific construction with the "cover" semantics, but **spread the child with a blanket* cannot (Iwata 2008: 45).

    Thus, the ability of the verb to alternate depends on which nouns it is used with. The verbs that can take both substances and solid objects as their Themes, and both containers and surfaces as their Goals, have more potential for Alternation between the two central Locative Alternation constructions (cf. the verb 'load'). Our data also support the idea that the verbal classification should be language specific. One might also consider Iwata's statement that "what [has] been called 'locative alternation' across languages in the literature may not be a homogeneous phenomenon after all" (Iwata 2005: 397).

    Taking the classification of Lewandowski (2009, forthcoming) as the point of departure, we compose a list of alternating verbs for Russian, which comprise three major groups: central, with verbs *gruzit'* 'load' and *mazat'* 'daub, smear', and two peripheral groups, which we tentatively present with the terms "left periphery" and "right periphery". The left periphery group takes mostly substances (mass) as Themes and surfaces as Goals and contains verbs *kapat'* 'drip', *pryskat'* 'spray', *bryzgat'* 'splatter', *sypat'* 'strew', *lit'* 'pour', whereas the right periphery group is characterized by solid objects (count) as Themes and for the most part containers as Goals. The right periphery block includes the verbs *pakovat'* 'pack', *pixat'* 'stuff', *vešat'*[5] 'hang', *stavit'* 'stand', *klast'* 'lay'. The basic semantic and grammatical properties of these verbs are summarized below in Table 1:

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[5] When prefixed, the verb *vešat'* has two stems -*vešat'* and -*vesit'*, cf. *zavesit'* and *zavešat'* with the prefix *za-*. Both verbs are treated as one lexical unit in the Russian National Corpus. We are also considering them as one unit in Chapter 7.

Block	Verb	Gloss	Semantic properties		Grammatical properties	
			Theme	Goal	NP	DO required
Left periphery	*kapat'*	'drip'	mass	surface/ container	+ (1)	no
	pryskat'	'spray'	mass	surface	+ (1)	no
	bryzgat'	'splatter'	mass	surface	-	no
	sypat'	'strew'	mass	surface/ container	-	no
	lit'	'pour'	mass	surface/ container	-[6]	no
Center	*mazat'*	'daub, smear'	mass	surface	+ (6)	yes
	gruzit'	'load'	mass/ count	surface/ contaier	+ (3)	yes
Right periphery	*pakovat'*	'pack'	count	surface/ container	+ (2)	yes
	pixat'	'stuff'	count	container	-	yes
	vešat'	'hang'	count	surface	+ (1)	yes
	stavit'	'stand'	count	surface/ container	+ (1)	yes
	klast'[7]	'lay'	count	surface/ container	+ (1)	yes

Table 1. Three blocks of the Locative Alternation verbs based on their semantic and grammatical properties.

NP – Natural Perfective (+ indicates that this unprefixed verb has a Natural Perfective; the number in parentheses shows how many Natural Perfective are associated with this verb.)
DO required – Direct Object ("yes" in this case indicates that the verb is used only in construction with a direct object, its absence occurs only if the sentence is elliptical;
"no" indicates that the verb can be used in construction with a sole subject argument in Decausative constructions (about Decausative constructions see Chapter 4)

As can be seen from Table 1, the verb *gruzit'* 'load' is the most prototypical Locative Alternation verb since it is characterized by a smaller degree of specificity, its Themes can be both solid objects and substances (though the preference is for solid objects), and the Goals can be represented as both containers

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[6] The verb *lit'* has Natural Perfectives only in the meaning of 'mould, cast' (with the prefixes *vy-* and *ot-*, see a complete database of aspectual pairs in Russian collected by the CLEAR group at the University of Tromsø: emptyprefixes.uit.no). In the meaning 'pour' it is not characterized by any Natural Perfectives.
[7] When prefixed, *klast'* is replaced by *ložit'*. Together –*klad*- and –*lož*- form a suppletive root.

and surfaces (with a preference for containers as will be shown in Chapter 6). This verb has three Natural Perfectives with the prefixes *na-*, *za-* and *po-* and requires a direct object (cannot be used in Decausative constructions). The verb *gruzit'* 'load' introduces the right periphery block. The verb *mazat'*, on the other hand, is connected with the left periphery block and is characterized by a higher degree of specificity since its Themes are always a substance and Goals are always a surface. However, since Themes with the verb *mazat'* are rather specified substances (spread, grease) that can be fully applied to the Goal (a surface) this verb can be associated with many ways of modifying the Goal, for which reason it has six Natural Perfectives with the prefixes *na-*, *za-*, *po-*, *iz-*, *vy-*, and *pro-*[8].

The right block expresses a more directional motion (can be compared with Pinker's verbs of positioning) and thus is more inclined towards having Natural Perfectives. According to a complete database of aspectual pairs in Russian collected by the CLEAR group at the University of Tromsø (emptyprefixes.uit.no)[9], the verb *pakovat'* 'pack' has two Natural perfectives with the prefixes *za-* and *u-*, whereas the verbs *vešat'* 'hang', *stavit'* 'stand', *klast'* 'lay' are all characterized by one Natural Perfective with the prefix *po-*. The choice of the prefix appears to reflect an overlap between the semantics of the prefix and the semantics of the verb: *po-* 'along' contains a reference to directionality and thus is compatible with verbs of positioning.

The verb *pakovat'* 'pack' is located closer to the central block and can profile both the Theme and the Goal. The Goals of *pakovat'* 'pack' can be both containers and surfaces since in the Theme-Object construction *zapakovat'* 'pack' can refer to situations of placing something inside a container (example 63) as well as to contexts of wrapping something, i.e. covering the surface of an object (example 64)'.

(63) *i my stali sobirat'sja: pakovat' v jaščiki apparaturu, skladyvat' v meški ličnye vešči* [Jurij Senkevič. Putešestvie dlinnoju v žizn' (1999)]
    [and we began to gather: pack in boxes-ACC equipment-ACC, put in sacks-ACC personal things-ACC]

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[8] It appears that in the case of *mazat'* 'smear' the properties of the verbal root are more at stake than the properties of the prefixes since the verbal root itself already contains some information about the theme as a substance (note the null-suffixed deverbal noun *maz'* 'grease'; cf. verbs with incorporated participants like *saxarit'* 'sugar' derived from *saxar* 'sugar' and *musorit'* 'litter' derived from *musor* 'litter', see Jackendoff 1990; Padučeva 2008: 233-234).
[9] This database will be discussed in Chapter 3 where we explain the term "Natural Perfective".

‘And we began to pack: pack equipment into boxes, put personal items into sacks.’

(64) *nebol'šie tovary možno bylo pakovat' v bumagu i nadpisyvat' svertki*
(http://ipicture.ru/Globalthink/2010-05-
30/proshloje_i_nastojashhjeje_podarochnoj_upakovki.html)
[small goods-ACC could be packed in paper-ACC and label wraps-ACC]
‘It was possible to pack small goods into paper and label the wraps.’

In example (64) the Goal (paper) basically forms the shape of a container and thus it is used with the preposition *v* ‘in’. However, sentences like (63) and (64) behave differently if one tries to shift the focus from the Theme to the Goal. The Goal-Object construction with the participants in (63) is possible, whereas it is not common for the participants in (64) (cf. (63)’, (63)’’ and (64)’):

(63)’ *My stali pakovat' jaščiki apparaturoj.*
[We-NOM began pack boxes-ACC equipment-INS]
‘We began to pack boxes with equipment.’

(63)’’ *On uže pakuet veščami svoi 12 samoletov*
(http://www.vfm-estadio.ru/forum/index.php?showtopic=880&st=-20)
[He-NOM already pack things-INS his 12 airplanes-ACC]
‘He already is packing his 12 airplanes with things’

(64)’ ??*Pakovat' bumagu tovarami*
[Pack paper-ACC goods-INS]
‘To pack the paper with goods’

Thus, the wrapping material cannot be profiled when the Goal is a container. Instead, it can be profiled as a Theme that is wrapped around the Goal (in the Goal-Object construction):

(65) ?*Pakovat' tovary bumagoj.*
[Pack goods-ACC paper-INS]
‘To pack the goods with paper’

Examples like (65) with the Theme ‘paper’ are potentially possible but are attested neither in the Russian National Corpus, nor in Internet search engines. They become more probable if the verb *pakovat'* ‘pack’ is prefixed with *za-*:

(66) *Čtoby ne povredilos' soderžimoe, s dvux storon položil gofrirovannyj kar-*
ton dlja amortizacii vozmožnyx udarov, a už posle zapakoval bumagoj i
skotčem
(http://3fallout.ru/forum/index.php?act=Print&client=printer&f=13&t=942)
[In-order-to not damage content, from two sides-GEN put corrugated fiber-
board-ACC for amortization-GEN possible strokes-GEN, and only after
packed paper-INS and scotch-tape-INS]
'In order not to damage the content, I put corrugated fibreboard on both
sides for amortization and only then packed [it] with paper and scotch
tape.'

To sum up, the verb *pakovat'* 'pack' is in several ways similar to the
verbs of the central block: it can alternate between the two constructions, has
several Natural Perfectives that can also alternate (see examples for *zapakovat'*
'pack' in Chapter 7), can take both containers and surfaces as Goals, and re-
quires a Direct Object. However, the cases where we find clear examples of the
alternation between the Theme-Object and the Goal-Object constructions are
very few. They are mostly restricted to sentences like (63), (63)'' and even here
the second participant (the one that is not expressed as a Direct Object) is fre-
quently omitted as in (67) and (68) below:

(67) *Žena so smexom rasskazyvaet, čto kak tol'ko ona govorit mužu, čto u nee*
pojavilas' ideja, on uže znaet, čto nužno pakovat' vešči [Tak vot v čem
sčast'e! // "Znanie – sila", 2003]
[Wife-NOM with laughter-INS tells, that as soon-as she-NOM tells hus-
band-DAT, that by her-GEN appeared idea-NOM, he-NOM already knows,
that need pack things-ACC]
'The wife explains with laughter that as soon as she tells her husband that
she has an idea, he knows right away that they need to start packing things.'

(68) *Vy vybrali mesto otdyxa, nametili maršruty èkskursij, kupili pljažnye*
kostjumy samyx modnyx rascvetok i myslenno uže pakuete čemodany…
[Novosti SBCAGRO (1997) // «Stolica», 1997.06.17]
[You-NOM chose place-ACC vacation-GEN, planned routes-ACC excur-
sions-GEN, bought beach-suits-ACC most-GEN popular-GEN colors-GEN
and imaginatively already are-packing suitcases-ACC]
'You have aready chosen the place for your vacation, have planned the
routes for excursions, have bought swimming suits of the most popular col-
ors and in your head you are already packing the suitcases…'

Such "reduced" versions of the Locative Alternation constructions are more characteristic of the verb *pakovat'* 'pack' than full versions. For this reason we do not include this verb in the central block and leave its detailed analysis outside the scope of our study. Chapter 7, however, considers the prefixed perfective of this verb, *zapakovat'* 'pack', which is more compatible with the Goal-Object construction due to the properties of the prefix *za-*.

No Natural Perfectives are provided for the verb *pixat'* 'stuff', however, in some contexts this verb behaves similar to the verb *pakovat'* 'pack', and its prefixed perfective with *za-* can be treated as a Natural Perfective (see discussion of the *zapakovat'* 'pack' and *zapixat'* 'stuff' in Chapter 7).

Unlike the right periphery block, the left periphery block is also attested in peripheral Locative Alternation constructions, such as, for example, Decausative and Hybrid (see Chapter 4 for further discussion). The left periphery block is for the most part not characterized by Natural Perfectives. The two exceptions are the verb *kapat'* 'drip' and *pryskat'* 'spray'. The database of aspectual prefixes (emptyprefixes.uit.no) lists the verbs *nakapat'* and *napryskat'* (prefixed with *na-*) as Natural Perfectives of the verbs *kapat'* 'drip' and *pryskat'* 'spray'. Both verbs are surface oriented and thus are expected to be compatible with the prefix *na-*.

When used with prefixes, the verbs pertinent to the Locative Alternation listed above can behave in three different ways, discussed in A-C below.

Group A. Some verbs can alternate when unprefixed. For Russian, this is the case with *gruzit'* 'load' and *mazat'* 'daub, smear'. Alternation is also attested for the unprefixed verbs *bryzgat'* 'splatter' and *pakovat'* 'pack'. However, the latter two verbs mostly alternate among elaborated constructions. The Theme-Object construction for *bryzgat'* 'splatter' is very rare: in the Russian National Corpus we found 6 contexts of the Theme-Object construction (see example 69) out of 547 total.

(69) *Vy bryzgaete v svoi potnye podmyški dorogoj parfjum* [Oleg Gladrov. Ljubov' strategičeskogo naznačenija (2000-2003)]
[You-NOM splatter in your armpits-ACC expensive perfume-ACC]
'You spray expensive perfume in your armpits'

The most common construction with *bryzgat'* 'splatter' are intransitive constructions like (70) (Decasative contructions) and "hybrid" constructions like (71) (for a detailed description of Decausative and Hybrid constructons see Chapter 4).

(70) *...kolonny, kak i sam dvorec, byli xozjajstvenno vykrašeny v ... tot svet,*
      kotorym krasjat vo vsej Rossii steny boen, čtoby krov', bryzgajuščaja na
      steny, ne byla zametnoj. [L. S. Sobolev. Kapital'nyj remont (1932)]
      [… columns-NOM like and itself castle-NOM were thriftily painted in .. that
      color-ACC which-INS paint in all Russia-LOC walls-ACC slaughterhouses-
      GEN so-that blood-NOM splattering on walls-ACC not was noticed]
      'The columns, as well as the castle itself, were thriftily painted with … the
      color that is used all over Russia to paint the walls in slaughterhouses, so that
      the blood, splattering on the walls, would not be noticed.'

(71) *Tak vot, - prodolžal on, bryzgaja na sebja duxami.* [Dmitrij Lipskerov. So-
      rok let Čančžoe (1996)]
      [So that, - continued he-NOM, splattering on himself-ACC pefumes-INS]
      'So, he continued, splattering perfume on himself.'

      Group B. Some Russian verbs do not alternate when unprefixed, but can
be used in both constructions with certain prefixes. This is the case of Russian
zalit' 'pour', *zasypat'* 'strew', *zavešat'/zavesit'* 'hang', *založit* 'lay' with the
prefix *za-*.
      Group C. Finally, other verbs do not alternate without a prefix and can
be used either in the Theme-Object or Goal-Object construction depending on
the prefix. For instance, the Russian unprefixed verb *stavit* 'put, place', as well
as its Natural Perfective with *po-* (*postavit'*), are used in Theme-Object con-
struction, while its perfectives with *za-* and *ob-* choose the Goal-Object con-
struction (*zastavit'* 'cover something with standing objects'; *obstavit* 'furnish').
      The last group is not in our focus since it includes Specialized Perfec-
tives, which are semantically distinct from the imperfective base verb. Hence in
this case there is no Locative Alternation as such. In this dissertation we will be
interested in the verbs of the central block that have several Natural Perfectives.
It is also challenging to detect how the various Natural Perfectives of the same
verb are different. In addition, we are interested in the properties of the prefix
za- that drastically change the overall picture of the Locative Alternation when
it is added to the unprefixed verbs from the list.
      The Locative Alternation constructions are another focus of the disserta-
tion. We show that in addition to the basic Locative Alternation constructions
(the Theme-Object and the Goal-Object constructions), the Locative Alternation
verbs are also attested in four other constructions: the Theme-Subject construc-
tion, the Impersonal construction, the Hybrid construction and the Decausative
construction. These are transitional constructions that differ in terms of which
participant is foregrounded/backgrounded (the Theme, the Goal, the Agent). We

present the constructions in terms of a network and show how they are related. Moreover, some constructions represent interactions between several constructions and thus are different from frames that do not show interactions.

Before we introduce our data and methodology (Chapter 5), the next two Chapters discuss the role of prefixes in the Locative Alternation (Chapter 3) and the relation between the Locative Alternation constructions (Chapter 4).

Chapter 3

Main Approaches to Prefixes in Russian

The present research focuses on the prefixes that can form Natural Perfectives with the Locative Alternation verbs in Russian. In our case it is prefixes *na-*, *za-*, *po-*. First, we propose an overview of the Russian aspectual system and discuss the term Natural Perfective (section 3.1). Then we describe the semantics of the prefixes *na-*, *za-* and *po-* as presented in linguistics literature (section 3.2). Finally, we further elaborate on the relation between prefixes and the Locative Alternation (section 3.3).

3.1. An Overview of the Russian Aspectual System

3.1.1. Grammatical Aspect in Russian

The category of aspect is consistently expressed by Russian verbs, which can have two values: imperfective (IPFV) or perfective (PFV). As a rule, perfective verbs refer to accomplished actions (example 1) and imperfective verbs either denote a durative action (example 2) or an iterated action (example 3):

(1) *Ja uže napisal pis'mo v redakciju* [Sergej Štern. Niže urovnja morja // "Zvezda", 2003]
[I-NOM already wrote letter-ACC in editorial-office-ACC]
'I have already written a letter to the editor'

(2) *V nomere on sel za stol i ves' den' … pisal pis'mo redaktory gazety* [Vladimir Dudincev. Ne xlebom edinym (1956)]
[In room he-NOM sat behind table-ACC and all day-ACC … wrote letter-ACC editor-DAT newspaper-GEN]
'In his room he sat down at the table and all day was writing a letter to the editor of the newspaper.'

(3) *Jurka každyj večer pisal pis'ma Linde* [Vasilij Aksenov. Zvezdnyj bilet //
    "Junost'", 6,7, 1961]
    [Jurka-NOM every evening-ACC wrote letters-ACC Linda-DAT]
    'Every evening Jurka wrote letters to Linda.'

Perfective and imperfective verbs are related morphologically: most simplex
unprefixed verbs are imperfective. When combined with a prefix, a simplex im-
perfective verb forms a perfective verb, as in *pisat'*-IPFV 'write' – **na***pisat'*-
PFV. A prefixed perfective verb in its turn can form an imperfective by means
of an imperfectivizing suffix (*-yva-/-iva-, -va-, -a-*), e.g. *pisat'* 'write-IPFV' -
pere*pisat'* 'rewrite-PFV' – *perepisyvat'* 'rewrite-IPFV'. Thus, the Russian as-
pectual system comprises, on the one hand, two types of imperfective verbs –
unprefixed simplex verbs, or "primary imperfectives", and prefixed verbs with
an imperfectivizing suffix, or "secondary imperfectives" (see Janda 2007). On
the other hand, it includes prefixed verbs derived from primary imperfectives,
building the main set of perfective verbs. However, prefixes in perfective verbs
can perform different functions, and we can distinguish between several types
of perfective verbs. In the next section we propose an overview of perfective
verbs in Russian.

3.1.2. Types of Perfective Verbs

Janda (2007) demonstrates that it is useful to distinguish among four types of
perfective verbs in Russian: 1) Natural Perfectives which serve as the aspectual
correlates of imperfective verbs with the same lexical meaning (differing from
the activity expressed by the imperfective verbs only in terms of aspect), as il-
lustrated by **na***pisat'*-PFV [**on**-write-IPFV] 'write-PFV' (as the completion of
pisat'-IPFV 'write-IPFV'); 2) Specialized Perfectives which provide enough
new semantic content to motivate the further derivation of corresponding imper-
fectives, as illustrated by **pere***pisat'*-PFV [**re**-write-IPFV] 'rewrite-PFV' (and
the derived secondary imperfective *perepisyvat'*-IPFV 'rewrite-IPFV'); 3)
Complex Acts, which consist of an activity combined with a limit, forming
verbs that describe temporally limited actions, as in **po***pisat'*-PFV [awhile-
write-IPFV] 'write-PFV (for a while)' (which is a complex of 'write' + an arbi-
trary time limit); and 4) Single Acts, which isolate a single cycle of a repeated
Activity and are usually formed with the help of the suffix *–nu-*, as in the case
of *čixnut'*-PFV [sneeze-IPFV-once] 'sneeze-PFV (once)' from *čixat'*-IPFV
'sneeze-IPFV'. The first three types of perfectives, namely Natural Perfectives,
Specialized Perfectives and Complex Act Perfectives, are pertinent to this work
since one of the puzzles that we will try to solve here is which prefixes and
which verbal roots can form Natural Perfectives in the class of the Locative Al-

ternation verbs. In other words, we will test which combination of a prefix, a verbal root and a construction neutralizes the meaning of the prefix and makes it merely a grammatical marker ("perfective").

The distinction between Natural and Specialized Perfectives can be illustrated with the verb that this study focuses on: *gruzit'* 'load'. *Gruzit'* - *nagruzit'*, *gruzit'* - *zagruzit'* and *gruzit'* - *pogruzit'* form aspectual pairs, where the first member is an imperfective base verb, and the second is its prefixed Natural Perfective. The meanings of both counterparts are traditionally claimed to be the "same", with the only difference being in aspect, and the verbs are listed together in a single dictionary entry (Ožegov and Švedova 2001). Specialized Perfectives to the base verb *gruzit'* like *peregruzit'* 'overload; transport by ship' and *dogruzit'* 'finish loading' involve prefixes that bring new, additional meaning to the imperfective. On the contrary, the Natural Perfectives give an impression that their prefix bears no meaning and thus can be treated as "empty".

As mentioned above, Specialized Perfectives can form their own aspectual correlates by means of the suffixes *–yva-/-iva-*, *-va-* and *–a-* (*peregruzit'* – *peregružat'* 'overload; transport by ship'). Thus, Russian has two major types of aspectual pairs: 1) unprefixed imperfective verbs and their Natural Perfectives, and 2) Specialized perfectives and their suffixal imperfective counterparts. However, this system is further complicated by the fact that many Natural Perfectives can also form suffixal imperfectives, which is also true for the verbs under consideration: *nagruzit'* - *nagružat'*, *zagruzit'* - *zagružat'*, *pogruzit'* - *pogružat'*. Functionally, there is no one-to-one correspondence between primary imperfectives like *gruzit'* and secondary imperfectives like *nagružat'*. The relation between the two types of imperfectives is a separate and complex issue in Russian linguistics and depends on many factors. Secondary imperfectives favor habitual and iterative contexts more than primary imperfectives (see Apresjan 1995, Petruxina 2000), and secondary imperfectives are more strongly associated with praesens historicum (Xrakovskij 2005) and are more often used in metaphorical contexts (Veyrenc 1980). Secondary imperfectives reflect not only the interaction of the verbal stem and the perfectivizing prefix, but also involve one more factor, i.e. the imperfectivizing suffix. In this work we are mostly interested in "empty" prefixes, which leaves secondary imperfectives outside the scope of this study.

The necessity to distinguish between primarily lexical as opposed to primarily grammatical prefix meanings initially motivated linguists to divide prefixes into two groups: primarily grammatical "aspectual prefixes", or "empty prefixes", vs. all other prefixes (Vinogradov 1947). However, many researchers considered prefixes such as *po-* in *poxodit'* 'walk for a while', or *za-* in *zakričat'* 'start crying', or *pro-* in *proždat'* 'wait for a long time' to constitute a separate group since they do not change the meaning of the verb significantly but

only modify it temporaly (Šaxmatov 1925, Maslov 1948, etc.). Thus, traditionally three main types of verbal prefixes were distinguished in the literature: 1) lexical prefixes (forming Specialized Perfectives), creating terms for qualitatively new actions (*nanesti* 'apply' from *nesti* 'carry' and the prefix *na-*, *proguljat'* 'play truant' from *guljat'* 'go for a walk' and the prefix *pro-*, *najti* 'find' from *idti* 'go' and the prefix *na-*); 2) actional prefixes (forming Complex Act Perfectives) (also known as "Aktionsart", or "superlexical"), quantitatively modifying the meaning of a given verb (*zakričat'* 'start crying'); 3) and finally, purely aspectual prefixes (or "purely perfectivizing", forming Natural Perfectives), used to form perfectives in aspectual pairs, like the perfectivizing prefixes *na-* in *napisat'* 'write' and *s-* in *sdelat'* 'do' (See review in Skoumalová 1968: 155, 1983: 224; Janda 1985, Petruxina 2000: 107-108; Krongauz 1998: 79-84, Svenonius 2004a, 2004b).

The above division of prefix types in Russian was shared and is still shared by most linguists, regardless of their approach (cf. Spagis 1969: 8-9 and Durst-Andersen 1992: 67-71). However, the bulk of research through the last 50 years has been done on the semantics of the first two types of prefixes: Roberts 1974, 1981; Flier 1975; Gallant 1979; Veyrenc 1980; Janda 1985, 1986, 2007; Guiraud-Weber 1988, 1991; Paillard 1991, 1995; Keller 1992; Krongauz 1998; Zaliznyak and Šmelev 2000, Romanova 2007; to mention just a few works on the subject. The "mystery" of "purely aspectual" or "empty" prefixes, i.e. the principles determining their distribution, variation and meaning, still remains unsolved. In this work we investigate the relations between "empty" prefixes, verbal semantics and constructions. In the next section we will look at the notion of "empty" prefixes more closely.

3.1.3. "Empty" prefixes and Aspectual Pairs

3.1.3.1. The Notion of "Empty" Prefixes

The term "empty prefix" comes from traditional works on Russian and Slavic aspectology (Vinogradov 1947; Tixonov 1964; Šeljakin 1969, etc.) and refers to a verbal prefix that forms a perfective verb which correlates with the same unprefixed imperfective verb in such a way that the two verbs have no difference in meaning, except for the feature "perfective", thus forming an "aspectual pair". The word "empty" serves to emphasize that the prefix is devoid of semantic content and basically is a grammatical marker, which turns an imperfective verb into a perfective one (cf. *delat'* – *s-delat'* 'do').

The necessity to distinguish between more lexical and more grammatical prefix meanings was already expressed in early 19th century grammars by Greč (1827) and Vostokov (1831). Subsequently it was proposed that prefixes (in

earlier works called "prepositions") can be divided into two major groups, one of which modifies the character of an action (*stroit' – postroit'* 'build') and another which adds a new specific sense to the verb (*bežat'* 'run' – *pobežat'* 'start running') (see Katkov 1845, Ul'janov 1895, Fortunatov, Šaxmatov 1923).

The distinction between lexical and grammatical prefixes was more clearly developed by Vinogradov (1947). In his work "Russkij jazyk", Vinogradov talked about two opposed tendencies in the usage of Russian prefixes: the tendency to differentiate and further develop the lexical meaning of the verb and another tendency - to weaken, and finally to bleach, the meaning of the prefix, thus turning it into an "aspectual" prefix (in cases like *delat' – sdelat'* 'do', *grimirovat' – zagrimirovat'* 'make up', *štrafovat' – oštrafovat'* 'fine').[10] Analyzing the works of his predecessors, Ul'janov and Fortunatov, Vinogradov, on the other hand, emphasized that a prefix could be called an "empty prefix" only if it "correlated", i.e. formed an aspectual pair, with an unprefixed imperfective verb (Vinogradov 1947: 514-516). Thus, the prefix *pri-* in *bežat'* 'run' – *pribežat'* 'arrive by running', offered as an example of perfectivization in (Šaxmatov 1925), cannot be treated as an empty prefix since these verbs posess different meanings and hence do not form an aspectual pair. The main problem then in estimating whether the prefix is empty or not is to identify which verbs form an aspectual pair and which do not.

The list of "purely aspectual" pairs varies in grammars and dictionaries, but, according to the "Exploring Emptiness" database, collected at the University of Tromsø (description of the database is available at emptyprefixes.uit.no and in Janda and Nesset 2010), there are up to two thousand such pairs used in contemporary Russian. The inventory of "empty" prefixes ranges from sixteen (Švedova et al. 1980) to nineteen items (Krongauz 1998). A noticeable fact about "empty" prefixes is that all these units also form Specialized Perfectives. Usually each base verb chooses one "empty" prefix, but many verbs can occur with two or three prefixes (as in case of *gruzit'* 'load' and *mazat'* 'smear'); the maximum appears to be six prefixes (see the description of *mazat'* 'smear' in Chapter 6).

3.1.3.2. Criteria for determining "aspectual pairs"

In order to determine the grammatical status of the prefix we need to look more closely at the notion of an "aspectual pair", which is not "just a central notion in aspectology", but "a unit of measuring aspect in general"[11] since it expresses the

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[10] "In this way along with "full prefixes"', which have a real, lexical meaning, there appear "empty prefixes" with purely aspectual meaning" (Vinogradov 1947: 513).
[11] Russian original: "Vidovaja para javljaetsja ne prosto central'nym ponjatiem v aspektologii, vidovaja para – eto edinica izmerenija vida v celom." (Čertkova 1996: 110)

opposition of grammatical aspectual meanings (Čertkova 1996: 110). Different criteria can be taken into account when recognizing an "aspectual pair" but practically all linguists agree that the most important one is the following functional criterion: if in a given language certain verbs are interchangeable in the transformative diagnostic taxis contexts containing a sequence of several actions, these verbs form an aspectual pair. This means that in order to form an aspectual pair we should be able to replace the perfective verb used in the past tense context by the imperfective verb in the meaning of *praesens historicum*:

(4) Past tense:
   On ot rasterjannosti okamenel, i ona tože zastyla licom (J. Trifonov)
   [He-NOM from perplexity-GEN petrified and she-NOM also froze face-INS]
   'He was petrified with perplexity and her face also froze'

   Praesens historicum:
   – *I vot on ot rasterjannosti kameneet, i ona tože zastyvaet licom*
   [And so he-NOM from perplexity-GEN petrifies and she-NOM also freezes face-INS]
   'And so he is petrified with perplexity and her face also freezes'.

This criterion was proposed by Maslov (1948) and is known as Maslov's criterion.

   Another functional diagnostic context is the imperative: in Russian, perfective imperatives without negation change their aspect to imperfective when negated:

(5) without negation: with negation:
   a. PFV: Pozvoni žene   b. IPFV: Ne zvoni žene
   [Call-PFV wife-DAT]   [Not call-IPFV wife-DAT]
   'Call your wife'   'Don't call your wife'
                                        (Zaliznjak and Šmelev 2000: 44-52)

   In some pairs the perfective counterpart modifies the meaning of the imperfective verb in a certain way, e.g. according to its duration in time. For instance, *pojti* 'go' bears the sense of ingressiveness, i.e. refers to the beginning of an activity. The above transformational analysis serves as evidence that correlations like *idti-pojti* also function as an aspectual pair:

(6) Past tense:
   Ganja s siloj ottolknul Ferdyščenka, povernulsja i pošel k dverjam (F. Dostoevsky)

[Ganja-NOM with force-INS pushed-away Ferdyščenko-ACC, turned-around and went to doors-DAT]
'With force Ganya pushed away Ferdyščenko, turned around and walked to the doors.'

Praesens historicum:
- *Ganja s siloj ottalkivajet Ferdyščenka, povoračivaetsja i idet k dverjam*
[Ganja-NOM with force-INS pushes-away Ferdyščenko-ACC, turns-around and goes to doors-DAT]
'With force Ganya pushes away Ferdyščenko, turns around and walks to the doors.'

Thus, some linguists believe that motion verbs with *po-* lose their ingressive meaning within the text if they have a filled argument position of goal (see Maslov 1948: 309, Lehmann 1986, Čertkova 1996). Lehmann (1988) assigned such a high value to the functional criterion that he even referred to 'aspectual pairs' as "functional aspectual partners".

Other criteria for verifying an aspectual pair are:
a)   constructions like *on delal, delal i nakonec sdelal* 'he was doing, doing and finally did';
b)   contexts which present a story about iterated actions:

(7) Iterated action:
Vstretiv na svoem puti černuju košku, Nikolaj každyj raz pugaetsja, pljuet čerez levoe plečo i na vsjakij slučaj vse-taki povoračivaet obratno. (Zaliznjak and Šmelev 2000: 52)
[Having-met on his way-LOC black cat-ACC, Nikolaj-NOM every time-ACC frightens, spits over left shoulder-ACC and just in case nevertheless turns back]
'Whenever Nikolaj meets a black cat on his way, he gets frightened, spits over his left shoulder and just in case nevertheless turns back.'

Single action in the past:
... Nikolaj ispugals'a, pljunul čerez levoe plečo i na vsjakij slučaj vse-taki povernul obratno. (Zaliznjak and Šmelev 2000: 52)
[Nikolaj-NOM got-frightened, spat over left-ACC shoulder-ACC and just in case nevertheless turned back]
'Nikolaj got frightened, spat over his left shoulder and just in case nevertheless turned back.'

However, these criteria are restricted to a smaller number of verbs than the main functional criterion and cannot always be met for one and the same verb.

Thus, constructions in (a) work mostly for "accomplishments" (if we refer to Vendler's classification of verb classes (Vendler 1967) (ex. 8) and do not go with "non-goal oriented" verbs, like *obeščat'* 'promise' or *videt'* 'see', which refer to an achievement of a result in the sphere of the subject (ex. 9):

(8) *On rešal, rešal zadaču i nakonec rešil*
    [He-NOM solved-IPFV, solved-IPFV and finally solved-PFV]
    'He was solving and solving the problem and finally solved it'.

(9) *Ona obeščala, obeščala, poka ne poobeščala.* (Čertkova 1996: 112)
    [She-NOM promised-IPFV, promised-IPFV until not promised-PFV]
    'She was promising and promising until she promised.'

Note that the verb *obeščat'* satisfies the functional criterion:

(10) Past tense:
    Lika tjaželo vzdoxnula i poobeščala podumat' (D. Doncova)
    [Lika-NOM heavily sighed-PFV and promised-PFV think-PFV]
    'Lika sighed heavily and promised to think it over'

    Praesens historicum:
    - *Lika tjaželo vzdyxajet i obeščajet podumat'*
    [Lika heavily sighs-IPFV and promises-IPFV think-PFV]
    'Lika sighs heavily and promises to think it over'.

The same is true for verbs like *idti-pojti* 'go' while the pair *idti-dojti*, with a specialized perfective *dojti* 'reach a certain point', can be used in constructions like (a) (*šel, šel i nakonec došel* 'he was walking, walking and finally he reached the destination' (Maslov 1948)) but can by no means be considered an aspectual pair due to the change in semantics. *šel, šel i nakonec došel* 'he was walking, walking and finally he reached the destination'.

3.1.3.3. Opponents to the idea of "empty prefixes"

Some scholars have objected to the concept of "empty" prefixes, claiming that the prefix always retains its meaning (Vey 1952, van Schooneveld 1958, Isačenko 1960, Timberlake 2004: 410-411). Most traditional descriptions of Russian grammar do not mention the fact that some imperfectives form Natural Perfectives with more than one prefix. Those that do, note that Natural Perfectives with various prefixes can be slightly differentiated in lexical meaning (Švedova et al. 1980: 588, Čertkova 1996, Glovinskaja 1982), but do not give further information. We join the camp of opponents of the "meaningless" approach and

seek to provide new corpus-based evidence that the prefix of a Natural Perfective has semantic content, and, being compatible with the semantics of the base verb, it enhances or focuses certain portions of the latter.

Janda and Nesset (2010) offer two sets of arguments against the "emptiness" of the prefixes. First we see an uneven distribution of prefixes within the class of Natural Perfectives. If the meanings of the prefixes were really empty, we could expect an arbitrary statistical distribution of verbs to prefixes, which is not the case. Second, there is a remarkable isomorphism between the semantic network of Specialized Perfectives that involve "non-empty" uses of a prefix and the semantic network of Natural Perfectives that use the same prefix in an "empty" mode. This suggests that prefixes always remain connected to their meanings, which overlap with the meanings of the verbs in the Natural Perfectives. The present study provides new evidence against the "empty" prefixes. We demonstrate that the choice of prefix for Natural Perfectives in the Locative Alternation verbs like *gruzit'* (*na-* vs. *za-* vs. *po-*) influences the constructional profile of the verb as attested in corpus data.

Prefixes show different degrees of grammaticalization with different verbs and "empty prefixes" mark the most grammaticalized members of the family. In this study, we put special emphasis on the factors that indicate a higher degree of grammaticalization and thus appear to be relevant for the Natural vs. non-Natural (Specialized, Complex Act) character of prefixed verbs within the Locative Alternation, i.e. in which cases the addition of the prefix forms a Natural Perfective. We will show that it depends on the semantics of the verb and on the preference of the prefix: if the prefix has a stronger preference for one particular construction, which is yet different from the main construction that the unprefixed locative verb takes, the result cannot be a Natural Perfective (cf. the case of *za-* in *lit'* 'pour' (Theme-Object) and *zalit'* (mostly Goal-Object), which do not form a Natural Perfective). We would also like to test Iwata's claim that none of the constructions can be primary or basic for a given Locative Alternation verb. In Chapters 6 and 7 we will show that a basic construction can be singled out for a verb with one of its meanings, i.e. a basic meaning, when the verb is unprefixed, and prefixed with certain prefixes (when a prefix is added, as a rule, the meaning also changes). In order to tell which way the prefix might modify the meaning of a verbal root, we need to determine the semantics of the prefix. The next section provides an overview of the main prefixes that can form Natural Perfectives with Locative Alternation verbs and thus present special interest for this study.

3.2. An Overview of the Prefixes *NA-, ZA-, PO-*

The semantics of prefixes can be described in three different ways: atomistically (via creating detailed lists of all meanings of the verbs with a given prefix); structurally (via positing a single abstract meaning for each prefix, usually defined in terms of the presence or absence of binary semantic features), and within the cognitive approach (via creating a radial network of meanings, with a central meaning (prototype) and other meanings of the prefix that are conceptually related to the central meaning). In this work we will be interested in the prototypical meaning of the prefix and will show what effect it has on the meaning of the verbs within the Locative Alternation.

3.2.1. The Semantics of the Prefix *NA-*

In the atomistic tradition, as in Švedova et al. (1980), the semantics of *na-* is represented via spatial (lexical), resultative (purely aspectual) and cumulative/quantitative (superlexical) meanings:

Spatial:
   a. 'direct an action on the surface of something' (***na**exat'* 'drive on(to)-PFV' from *exat'* 'drive-IPFV', ***na**kleit'* 'stick/attach-PFV' from *kleit'* 'glue-IPFV');
Superlexical:
   b. Accumulation of objects: (***na**lovit' ryby* 'to catch a lot of fish-PFV' from *lovit'* 'catch-IPFV');
   c. Accumulation of events (intensive activity): (***na**grešit'* 'sin a lot' from *grešit'* 'sin-IPFV')
   d. 'learn something via performing the activity of the motivating imperfective verb': ***na**ezdit'* 'make the horse used to the saddle and the rider' (This type appears to be a subtype of (c));
   e. 'slightly perform an activity': (***na**pet'* 'hum a melody, chirp')
Resultative:
   f. ***na**pugat'* 'scare-PFV' from *pugat'* 'scare-IPFV'; ***na**gret'* 'heat-PFV' from *gret'* 'heat-IPFV'.

Russell (1985) proposes an alternative, structural hypothesis, where the prefix *na-* minimally contains two notions: locus and quantity. Where there is a locus for an activity, attention may be focused on the locus (usually a surface, container, or limit) and on the manner in which this locus is affected, rather than on the activity itself (*nalit' vody v stakan* 'pour some water in a/the glass') (Russell 1985: 63-64). When there is no locus, or if the locus is not emphasized, an eval-

uation of the quantity or measure of the verbal activity occurs (*nalit' stakan vody* 'pour a glass of water'). In the case of intransitive verbs, the activity is quantified (*našalit'* 'play a lot of pranks') or else the patient subject is quantified (*gosti naexali* 'a lot of guests arrived'). With transitive verbs, the object of the verb is quantified (*narubit' derev'ev* 'fell a lot of trees'). Under this analysis, locus and quantity are regarded as extremes on a scale. Thus, there can be varying degrees of locative or quantitative meaning present in different verb stems and syntactic combinations.

3.2.2. The Semantics of the Prefix *ZA-*

Za- is the central prefix for this dissertation since it contributes significantly to the Locative Alternation. In the literature this prefix has been called "the most varied" (Keller 1992: 35), "versatile and difficult" (Townsend 2008:124) of the Russian prefixes (see also Sokolova and Endresen 2011).

The majority of works dealing with the semantics of *za-* in Russian follow either a lexicographical, atomist tradition (Golovin 1964, Švedova et al. 1980) or a structuralist approach (Ovčinnikova 1979, Sokolova 1982). The former describe the derivational types of verbs with the prefix *za-*, some of which are somehow related to the other (Golovin 1964). Taking the lexicographical approach as the point of departure, structuralists try to deduce the semantics of the prefix *za-* as such by comparing series of verbs with *za-* with their unprefixed motivating verbs. In this way *za-* is analyzed as a smaller set of different unrelated senses, or distinctive features (Ovčinnikova 1979, Sokolova 1982). All works agree that *za-* either functions as an *Aktionsart* prefix or derives verbs with a new lexical meaning, and the meanings are the following:

a)   Lexical meanings

      moving behind something
          (11) *zabežat'* (za ugol)
              [za-run] (behind corner-ACC)
              'whip round the corner'

      doing something in passing
          (12) *zajti* (k drugu)
              [za-walk] (to friend-DAT)
              'drop by a friend's house'

      covering
          (13) a. *zastroit'*
              [za-build]
              'build up an area with new blocks or flats'
              b. *zakrasit'*

[za-paint]
'cover with paint'

filling
(14). a. *zapolnit'*
[za-fill]
'fill'
b. *zaplombirovat'*
[za-fill a tooth]
'fill a tooth'

b) Aktionsart meanings
inceptive
(15) a. *zapet'*
za-sing
'begin singing'
b. *zacvesti*
za-blossom
'begin blossoming'

excess
(16) a. *zaxvalit'*
za-praise
'overpraise, to lionize'
b. *zagovorit'sja*
[za-talk   Refl]
'get excessively absorbed in talking'

In some examples of 'covering' (13b) and 'filling' (14b) *za-* is often considered a purely perfectivizing marker, as in the cases of its resultative use: *rezat' - zarezat'* 'slaughter, kill someody with a knife' (Ožegov and Švedova 2001). Such ZA-verbs (*zakrasit'* 'cover with paint'*, zaasfaltirovat'* 'asphalt'*, zarezat'* 'kill with a knife') are treated as *natural perfectives* of their unprefixed counterparts (*krasit', asfaltirovat', rezat'*), where the only difference between the two groups is that of perfective vs. imperfective.

The structuralist approach was significantly revised in a more recent work by Zaliznjak (2006), where the prefix *za-* is characterized by a certain set of semantic features (or a *conceptual schema*), such as primary BEHIND, IN, EDGE, UP, DEVIA (deviate), FAR, and derived COVER, HIDE (from BEHIND) and BECOME, BEGIN, FIX (from IN), which in different combinations appear in verbs with ZA- (Zaliznjak 2006: 311). The semantic type of the *za*-verb is calculated on the basis of semantic features of the prefix, the properties of the unprefixed base verb and the argument structure of the unprefixed verb. Importantly, Zaliznjak emphasizes the role of the argument structure in defining the semantic type of the *za*-verb although no point is made of whether *za-* affects the argument structure of the unprefixed verb.

It has been argued that it is impossible to group all the divergent meanings of this prefix under one or two unifying concepts (Townsend 2008: 124). However, in Janda (1985, 1986) it has been persuasively shown that the semantic structure of the prefix *za-* can be described as a radial category which accounts for all the versatile submeanings that appear to be both discrete and united under one node (Janda 1985). Janda points out that although a prefix appears to be semantically fractured, certain submeanings are related to each other and can be presented as a set of configurations (or spatial image-schemas). A configuration consists of a landmark and a trajector that moves in relation to it. According to Janda's model, the meanings (11-16) above derive from this main configuration (Janda 1985: 29-33).

Presenting the semantics of the prefix as a radial network proved to be successful but meets certain problems. One of them is how to determine the prototype of the prefix. Different authors propose different semantic candidates for the prototype of the prefix *za-*: DEVIATION (Janda 1985: 27); BEHIND (Shull 2003); COVER / BEHIND (Baydimirova and Sokolova 2011, Sokolova and Endresen 2011). An overview of such works and the criteria for defining the prototype of *za-* are discussed in Sokolova and Endresen 2011. Without going into detail, below we will outline the main logic that stands behind each proposal and reflects vital properties of *za-*, which are also crucial for the Locative Alternation phenomenon.

Janda 1985

According to Janda (1985, 1986), the central configuration for ZA- can be described in terms of the trajector transgressing the boundary of the landmark and passing into the area outside the landmark: ''The boundaries of the landmark divide cognitive space into two areas. The trajector begins in the domain and then transgresses a boundary of the landmark, passing into the extradomain'' (Janda 1985: 29). This primary configuration is provided in Figure 1 below.
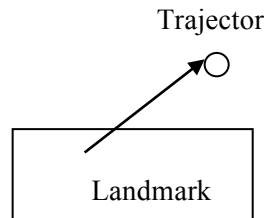
Figure 1. Configuration 1. (Janda 1986: 78)

Janda lists DEVIATION (or "deflection") as the first meaning within Configuration 1, illustrated in (12) above and (17) below:

(17) *Zajti v magazin po puti domoj*
    [za-walk in store-ACC on way-DAT home]
    'Stop by a store on the way home'

Shull 2003

In her analysis of the Russian prefiz *za-*, Shull (2003) proposes a different prototype for this prefix – BEHIND. According to Shull, deviation (or "deviance") together with other meanings of *za-* is "the result of the experiential correlation of objects going behind/beyond landmarks with losing sight of and access to those objects" (Shull 2003:194), see example (11) above and (18) below:

(18) *Mal'čik zašel za dom.*
    [Boy-NOM za-walked behind house-ACC]
    'the boy walked (to) behind the house' (Shull 2003: 194)

The prototype BEHIND can schematically be presented as in Figure 2:

Trajector
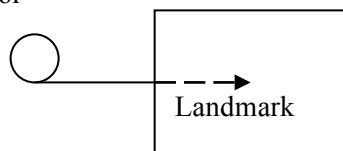
Figure 2. Image schema for BEHIND (Shull 2003: 194)

Endresen (Baydimirova) and Sokolova 2011

Endresen (Baydimirova) and Sokolova (2011) discuss different candidates for the prototype of *za-* by reporting on the analysis of all Russian perfective verbs prefixed in *za-* that are attested in the Russian National Corpus (www.ruscorpora.ru) and are formed via prefixation from an imperfective base verb. As apposed to previous research, Endresen and Sokolova suggest a "double" prototype for *za-*, namely COVER/BEHIND. This double prototype is based on the notion of **construal** (Langacker 1987, Iwata 2008, see also Chapter 1): depending on the semantics of the simplex verbal stem, the prefix *za-* can realize either one or other side of its "double" schema, i.e. COVER or BEHIND. Figures 3 and 4 below make this idea explicit with the word *ščit* 'shield'.

Figure 3. COVER
zakryt'sja ščitom
[cover-self shield-INS]
'cover oneself with a shield'

Figure 4. BEHIND
zaiti za ščit
[za-walk behind shield-ACC]
'walk (to) behind the shield'

Thus, it seems that that the prefix *za-* is related to construal which allows it to provide alternation on those verbs that could not alternate without this prefix. Note also that, according to Zaliznjak (2006), the main primary features of *za-* forming derived features are BEHIND and IN. According to Janda (1985, 1986), the basic extensions of the prototype are related to the character of the trajector, i.e. whether it is treated as a point or a substance that can be applied to the landmark. Thus, it appears that in Russian, *za-* has two communicatively important instantiations -'crossing a boundary' and 'covering', which is also reflected in its productivity (see Sokolova 2009).

In both the traditional approaches (cf. Golovin 1964, Ovčinnikova 1979), as well as (although to a lesser extent) in more recent accounts (Zaliznjak 2006), it is argued that different senses of a given prefix are verb-class specific, i.e. they are compatible with different semantic classes of verbs. Here, it will be shown that the different senses of *za-* are not only verb class-specific, but also construction-specific. In particular, it will be shown that each variant of the Locative Alternation is associated with a different meaning of *za-*[12].

3.2.3. The Semantics of the Prefix *PO-*

Lexicographers and grammarians assigned *po-* between three and nine meanings or even more if you count the sub-contexts. Here is a list of those mean-

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[12] The importance of constructions in the case of *za-* has also been shown in (Sokolova and Lewandowski 2010, Baydimirova and Sokolova 2011).

ings, followed by the number of reference works that mentioned those meanings, collected by LeBlanc (2010: 13-14):

1. Delimitativity: The action is limited in time, without natural endpoint; often the action has short duration. (10)

2. Distributivity: Either the action is performed by a number of subjects, or it is directed towards a number of objects. (10)

3. Completion of an action: The action has reached its (natural/expected) result; simple perfectivity; the resultative meaning (9)

4. Ingressivity: The po-prefixed verb indicates the inception of the action named by the verb. (9)

5. Intermittent-attenuative: The action occurred with interruptions and with weakened intensity. Several works do not include the stipulation ―with weakened intensity. (9)

6. Attenuative: The action occurs with less-than-usual intensity (8)

7. Completion of an action in one attempt/motion; short duration, momentaneousness (3)

8. Change in spatial conditions or characteristics (2)

9. Incrementality: The action is completed gradually, incrementally, not all at once. (1)

10. Directed, goal-oriented motion; specific to verbs denoting some sort of movement (1)

11. Acquisition of a quality, property (1)

12. Specification of the action/emphasis: The prefix *po-* indicates that the action is occurring at that very moment, as opposed to a usual or habitual occurrence. (1)

 According to major semantic accounts of *po-*, this prefix occurs in five Aktionsarten in Contemporary Standard Russian, (Isačenko 1960: 224, Švedova et al. 1980: 366, LeBlanc 2010):

a. resultative (e.g. *postroit'* 'build')
b. delimitative (e.g. *postojat'* 'stand for a while')
c. attenuative (e.g. *poostyt'* 'cool off somewhat')
c. ingressive (e.g. *poletet'* '(begin to) fly')

d. distributive (e.g. *pobrosat'* 'throw (distributively)')

(examples from Nesset et al. 2009: 43)

In addition to the five meanings mentioned, LeBlanc (2010) also distinguishes Intermittent-Attenuative as a basic meaning of *po-*. In this meaning *po-* does not act alone, but is always accompanied by (a variant of) the suffix *-yva-*[13]. Unlike verbs of the other meanings, intermittent-attenuative verbs are always imperfective and mean 'do X a little, with less-than-full intensity, from time to time' (Isačenko 1960: 279-283, Zaliznjak and Šmelev 2000:122-124):

(19) *Tol'ko vot muž vse čašče pogulivali na storone, ne udeljaja žene vnimanie…*
[Only that husband-NOM more often po-cheated-IPFV on side-LOC, not paying wife-DAT attention-ACC]
'It's just that the husband was cheating (a little, from time to time) more and more often, not paying any attention to his wife….'

(example from LeBlanc 2010: 44)

LeBlanc (2010) concludes that the meanings of *po-* can be grouped into two clusters: Cluster one is comprised of the attenuative, delimitative, ingressive, and resultative meanings. Cluster two contains the more peripheral distributive and intermittent-attenuative meanings. He claims that the resultative meaning is prototypical and indicates that the subject has traversed the metaphoric path implied by the base verb in its entirety. The remaining meanings are metaphoric and metonymic extensions of that central meaning. This view of the semantics of *po-* coincides with what is known about the historical development of the prefix.

In his analysis of Old Russian, Dickey (2007: 348) argues that the "IN-GRESSIVE-PARTIAL TRAJECTORY expressed by Old Russian *pojti* ['go'] bears a striking resemblance to the RELATIVE DELIMITATION meaning expressed by delimitative verbs". In other words, Dickey suggests that the delimitative Aktionsart is a metaphorical extension from the ingressive, where both classes of verbs denote the (partial) traversal of a path. If one adopts this analysis for Contemporary Standard Russian, this implies assuming a PATH as part of the meaning of both ingressives and delimitatives.

Yet, it remains unclear whether the PATH is part of the semantics of the prefix. Nesset (2008) shows that the so-called ingressives (motion verbs like *pojti* '(begin to) walk' and *poletet'* '(begin to) fly', which are said to indicate the beginning of an action) represent a more complicated case. Evidence for this account comes from sentences like the following, where *pojti* is used about an action that was interrupted before the intended goal was reached:

(20) *Včera pošla na lekciju; mne po doroge stalo ploxo.*

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[13] Despite its productivity, some recent treatments omit this meaning from semantic investigations of *po-* (see Dickey 2007).

[Yesterday po-went on lecture-ACC, me-DAT along way-DAT became bad]
'Yesterday I started walking to class, but felt sick on the way.'

(Tolskaya 2007: 364)

However, it is well known that verbs like *pojti* can be used in contexts where it is clear that the goal was reached (also cf. the possibility to view such verbs as aspectual counterparts of the unprefixed *idti*, as discussed in the previous subsection):

(21) *Ja poexal v gorod i ostanovilsja tam u znakomyx.*
    [I-NOM po-went in town-ACC and stayed there by friends-GEN]
    'I went to the city and stayed there at my friends' place.'

(22) *Ja pošla v magazin i kupila tam xleba.*
    [I-NOM po-went in store-ACC and bought there bread-GEN]
    'I went to the store and bought some bread there.'

(Švedova et al. 1980: 367)

Nesset (2008) states that it is clear that verbs like *pojti* and *poletet'* involve a PATH but it is not clear whether the PATH comes from the prefix. It seems quite uncontroversial to assume that the meaning of unidirectional motion verbs like *idti* and *letet'* encompasses a PATH, and that this carries over to the prefixed verbs *pojti* and *poletet'*. When the prefix *po-* is added to a non-directional verb, e.g. *xodit'* 'walk', there is no PATH involved; neither the prefix nor the non-directional verb contains information about PATHS. In this situation, the prefix quantifies over the non-completable activity itself, producing perfective complex acts like *poxodit'* 'walk for a while'.

Nesset (2008) proposes an analysis along these lines and points out that this approach facilitates the interpretation that *po-* has the same meaning in all perfective motion verbs including clearly atelic verbs like *poxodit'* 'walk for a while' and *poletat'* 'fly for a while'. While Nesset's monosemy approach facilitates a simple analysis of motion verbs, he points out that there is nothing in the data that forces us to assume one invariant meaning of *po-* for all motion verbs. It may well be the fact that *po-* has different meanings in different types of motion verbs. The problem is that it is difficult to come up with empirical tests that will enable us to choose between monosemy approach and an analysis of *po-* as a polysemous item for motion verbs. In the analysis section we will see what the data from the Locative Alternation suggest in this respect.

The next section brings together the information on the Locative Alternation, presented in Chapter 2, and the basic ideas about Russian prefixes, outlined in this Chapter, discussing possible ways to analyze prefixes within the Locative Alternation.

3.3. The Locative Alternation and Prefixes

The Research on the Locative Alteration was mostly done on English. Works on other languages, such as German, Dutch, Hungarian, Russian, Japanese, point out that the Locative Alternation can also be accompanied by a morphological derivation (See Moravcsik 1978, De Groot 1984, Ackerman 1992, Levin and Rappaport 1995, 1998; Brinkmann 1997; Michaelis and Ruppenhofer 2001; Iwata 2005, 2008). Russian data also introduce one additional factor into the picture, namely verbal prefixes. In respect to the question of what role prefixes play in the Locative Alternation, three possible solutions might be considered: a) prefixes are part of the verbal root; b) prefixes are part of syntax/construction; c) prefixes have their own semantics and interact with certain verbal roots and certain constructions. In this study we are going to test the three hypotheses mentioned above.

3.3.1. Prefixes as Part of the Verbal Root

In a sense, the idea of treating prefixes as a part of verbal root is compatible with what some researchers say about the Locative Alternation in German (Brinkmann 1997; Michaelis and Ruppenhofer 2001). In German, a large number of locative verbs occur in the Theme-Object construction alone, but when prefixed with *be-*, they appear in the Goal-Object construction:

(23) a. *Die Vandalen spritzen Farbe auf das Auto*.
   [The vandals sprayed paint onto the car]
   'The vandals sprayed paint onto the car.'

   b. **Die Vandalen spritzen das Auto mit Farbe*.
   [The vandals sprayed the car with paint]
   'The vandals sprayed the car with paint.'

   c. *Die Vandalen bespritzen das Auto mit Farbe*.
   [The vandals be-sprayed the car with paint]
   'The vandals be-sprayed the car with paint.'

<div align="right">(Brinkmann 1997: 69)</div>

According to Iwata's (2005) analysis, *be-* here attaches to a lexical verb rather than to a VP, hence we can expect to find that the addition of *be-* changes the meaning of a lexical verb, thus forming a new lexical root, and that since the L-Meaning of a resulting verb is compatible with the thematic core associated with the Goal-Object construction, *bespritzen* occurs in this construction. Michaelis and Ruppenhofer (2001) observe that locative *be-*verbs in German can be characterized in terms of covering semantics. Thus, the fact that *be-*verbs occur in the Goal-Object construction is attributed to the fact that by adding *be-* the lexical verb comes to express a scene construable as covering.

Iwata, Fukui, Miyagawa and Tenny observe a similar effect for Japanese. Most of the Japanese counterparts for English Locative Alternation verbs occur only in the Theme-Object construction:

(24) a. *mizu o hodoo ni maku*
    [water-ACC sidewalk on sprinkle]
    'sprinkle water on the sidewalk'

    b. **hodoo o mizu de maku*
    [sidewalk-ACC water with sprinkle]
    'sprinkle the sidewalk with water'

Interestingly, when *maku* 'sprinkle' is accompanied by *tsukusu* 'exhaust', as in (25), it appears in the Goal-Object construction:

(25) *hodoo o mizu de maki tsukusu*
    [sidewalk-ACC water with sprinkle-up]
    'sprinkle up the sidewalk with water'
                        (Fukui, Miyagawa and Tenny 1985: 11–12)

Basically, both German and Japanese examples show a "holistic effect" and thus use the Goal-Object construction associated with complete covering or filling. This is the way Iwata summarizes the idea:

> Thus both Japanese and German cases can be uniformly accounted for by claiming that the morphologically complex verb describes a scene in which force is exerted to a large portion of a location. Furthermore, this line of analysis is expected to explain comparable phenomena in other languages as well (e.g., Hungarian, Russian), although detailed analyses of individual verbs and prefixes (or suffixes, as the case may be) are necessary to prove this point (Iwata 2005: 400).

As our analysis will show, this is not always the case in Russian. Prefixed locative verbs can be used in both constructions; some of them alternate and some of them do not. For instance, the prefix *za-* often bears the meaning of complete covering, as in (26):

(26) *… a kraskoj zamaž'te nadpisi na stenax pod''ezdov*
    [and paint-INS za-smear-IMP inscriptions-ACC on walls-LOC entrances-GEN
    '…and use the paint to cover up the messages on the walls in the entrances.'

However, if the prefix *za-* were always to attribute the meaning of complete covering to whichever locative verbal root it was applied to, it would always convert verbs that are used only in the Theme-Object construction be used in the Goal-Object construction. Russian data shows that this conversion is possible in the case of 'strew' (27) but not in the case of 'stuff' (28):

(27) Theme-Object:

a. *Četyre goda nazad na dorogi sypali sol' s peskom.*
(http://www.stolitsa.org/91-prosto-dobav-vody.html)
[Four years-ACC ago on roads-ACC they-strewed salt-ACC with sand-INS]
'Four years ado they strewed salt and sand on the roads'

Goal-Object:
b. ?*Četyre goda nazad dorogi sypali sol'ju s peskom.*
[Four years-ACC ago roads-ACC they-strewed salt-INS with sand-INS]
'Four years ago they strewed roads with salt and sand.'

c. *Kogda vse rastenija budut vysaženy, zasyp'te ploščadku graviem.*
(http://www.landshaft.ru/pub.php?id=525)
[When all-NOM plants-NOM will-be planted, za-strew ground-ACC gravel-INS]
'After all the plants are planted out, strew the ground with gravel.'

(28) Theme-Object:
a. *Ded uspeval prosledit', skol'ko šokoladnyx konfet … zapixali sebe v rot deti.* [Aleksej Varlamov. Kupavna. // "Novyj mir", 2000]
[Grandfather managed trace, how-many chocolate sweets-GEN za-stuffed refl-DAT in mouth-ACC children-NOM]
'Grandfather was able to keep track of how many chocolates the children stuffed into their mouths.'

Goal-Object:
b. ?*Deti zapixali rot konfetami*
[Children stuffed mouth-ACC chocolates-INS]
'The children stuffed their mouths with chocolates'

To sum up, it is not always the case that a prefixed location verb describes a scene in which force is exerted to a large portion of a location. Another problem with treating prefixes simply as a part of verbal root is that along with lexical prefixes that significantly modify the meaning of the verb (as in *zavesit'* 'cover by hanging'), there are prefixes that are considered to be purely aspectual, forming a perfective verb from an imperfective unprefixed verb (as in *zagruzit'* 'load'). In the latter case prefixes are claimed not to contribute any additional meanings, and yet, as our analysis will show, they can change the preference for a particular construction. Can they be treated as a part of construction?

3.3.2. Prefixes as Part of Construction

Given some of the problems discussed in the previous subsection, a more probable solution would be to treat prefixes as part of syntax. In this subsection we will briefly outline two major instances of such analysis as presented in the literature.

Dudchuk and Pshehotskaya (2006). Analyzing the role of prefixes in the Locative Alternation, Dudchuk and Pshehotskaya (2006) suggest that the prefix introduces a "structural argument" (Dudchuk and Pshehotskaya 2006: 3). Their terminology stems from the approach by Levin and Rappaport (1996, 1998, 2003) discussed in Chapter 2, who distinguish two kinds of lexical information: a) "event structure", which is relevant for argument realization and provides information about the class of events; and b) "root" or encyclopedic information, i.e. syntactically irrelevant idiosyncratic information, which distinguishes single verbs. Relying on Levin and Rappaport (2003), Dudchuk and Pshehotskaya (2006) call arguments coming with encyclopedic information "root arguments", and those coming with lexical information "structural arguments". In Chapter 2, we saw that the relations between Encyclopedia, Lexicon ("event structure") and Syntax partially resemble the relations between Verbal semantics and Constructions within Construction Grammar. Dudchuk and Pshehotskaya (2006) suggest treating Lexicon as a part of Syntax.

First, Dudchuk and Pshehotskaya (2006) analyze the unprefixed verb *gruzit'* 'load'. Following Hale and Kayser (2002) and Basilico (1998), they assume that both arguments (Theme and Goal) are within the same lexical projection and thus present internal structural arguments. The alternative pattern of argument expression evolves due to the fact that the verb *gruzit'* 'load' inherently enforces a special R head, which assigns the property x[**with**(x)(*a*)] to the location argument (Goal). When the prefix is added, it contributes nothing to the argument structure in case of the Theme-Object construction (it only influences the choice of a spatial preposition: *na* in case of *na-* and *v* in case of *za-*) but introduces a structural argument (Goal) in case of the Goal-Object construction. This means that the Goal argument in the with-variant involving a prefixed verb is treated as external with respect to VP and is introduced in the same way as the external argument.

However, there are certain problems with this analysis. The nature of the Locative Alternation in the case of prefixed verbs, according to Dudchuk and Pshehotskaya (2006), should result in the following asymmetry of expressions of arguments of nominalizations (Dudchuk and Pshehotskaya 2006: 8)

(29) a. *Pogruzka arbuzov na baržu zanjala 2 časa*.
    [po-loading-NOM water.melons-GEN into barge-ACC took two hours]
    'Loading water-melons into the barge took two hours'

   b. *Pogruzka barži arbuzami zanjala 2 časa*.
    [po-loading-NOM barge-GEN wate.melons-GEN took two hours]
    'Loading the barge with water-melons took two hours'

(30) a. *Zalivka topliva v bak zanjala 2 časa*.
    [za-pouring-NOM fuel-GEN into tank-ACC took two hours]
    'Pouring fuel into the tank took two hours'

   b. **Zalivka baka benzinom zanjala 2 časa*.

[za-pouring-NOM tank-GEN fuel-INSTR took two hours]
'Filling the tank with fuel took two hours'

However, on the Internet we find many examples like 30(b):

(31) *Ne proizvoditsja dopolnitel'naja zalivka baka vodoj*
(http://www.elremont.ru/stirm/st_rus/strus_rem5.php)
[Not carried-out additional za-pouring-NOM tank-GEN water-INS]
'Additional refill of the tank with water is not carried out'

(32) *diagnoz – lečenie, snjatie fil'tra, otogrevanie ego do isxoda paraf-ina,opustošenie baka, zalivka baka normal'noj zimnej soljaroj*
(http://community.livejournal.com/ru_auto/26759426.html)
[diagnosis-NOM: treatment-NOM, extraction-NOM filter-GEN, heating-NOM it-GEN until exit-GEN paraffin-GEN, emptying-NOM tank-GEN, za-pouring-NOM tank-GEN normal winter diesel-INS]
'diagnosis: treatment and extraction of the filter, its heating to the condition of paraffin loss, emptying the tank, filling the tank with normal winter diesel'

(33) *Dlja transformatorov klassa naprjaženija 110 kV proizvoditsja bezva-kuumnaja zalivka baka maslom*
(http://www.complexdoc.ru/ntdtext/539678/13)
[For transformators-GEN class-GEN voltage-GEN 110 kVA carries-out vacuum-free za-pouring-NOM tank-GEN oil-INS]
'For transformators with voltage 110 kVA it is necessary to perform the filling of the tank with oil'

Olbishevska (2004). Most scholars claim that some prefixes, like the prefix ZA-, "trigger" one particular frame, the Goal-Object frame (Olbishevska 2004, Pshehotskaya 2007). When added to content-oriented non-alternating verbs (used solely in the Theme-Object construction), *za-* makes them alternate. Thus, it is assumed that "the semantic template imposed by the prefix requires that the argument that occupies the direct object position be a Location/Ground argument" (Olbishevska 2004: 5).

According to Olbishevska (2004), Theme-oriented verbs ("Figure verbs" in Olbishevska's terminology, which roughly correspond to Pinker's "content-oriented" verbs) can enter into the Goal-Object construction and realize ther location as the direct object when prefixed with *ob-* or *za-*, while the prefixes *na-* and *po-* do not have this effect on simple Theme-oriented verbs:

(34) a. *On bryzgal vodu na cvety.*
[He-NOM splashed water-ACC on flowers-INS]
'He splashed/was splashing water on the flowers.'

b. **On bryzgal cvety vodoj.*
[He-NOM splashed flowers-ACC water-INS]

'He splashed the flowers with water.'

(35) a. *Mašyny na/po/razbryzgali grjaz' na stenu.*
[Cars-NOM splash mud-ACC on wall-INS]
'Cars splashed mud on the wall.'

b. *Mašyny za/obryzgali stenu grjaz'ju.*
[Cars-NOM za/o-splashed wall-ACC mud-INS]
'Cars splashed the wall with mud.'

(36) a. *On lil moloko v stakan.*
[He-NOM poured milk-ACC in glass-ACC]
'He was pouring milk into the glass.'

b. **On lil stakan molokom.*
[He-NOM poured glass-ACC milk-INS]
'He filled the glass with milk'

(37) a. *On nalil moloka v stakan.*
[He na-poured milk-ACC in glass-ACC]
'He poured the milk into the glass.'

b. *On ob/zalil stol molokom.*
[He-NOM ob/za-poured table-ACC milk-INS]
'He covered the table with milk.'

The problem with this analysis is that the author uses a very limited number of examples. Olbishevska mentions that only *za-* and *ob-* trigger the Goal-Object construction. What about other prefixes? How can we account for their usage? In addition, corpus data indicates that *za-* or *ob-* do not necessarily "trigger" the Goal-Object construction, also some of the examples which are claimed to be ungrammatical are better represented in the corpus than the so-called grammatical ones (in the Russian National Corpus, we are more likely to see examples like 34b than 34a).

In our analysis, we argue that whichever construction the prefixed location verb takes depends on the semantics of the prefix (based on its prototype) and the semantics of the verb, which should be classified somewhat differently than in Pinker's approach. Prefixes are neither simply part of the verbal root nor simply part of the construction. Instead they should be treated as a separate factor. The semantics of *za-* is determined by its prototype 'crossing a boundary' and its major extension 'cover', for which reason *za-* does not necessarily trigger the Goal-Object construction. Whichever construction is used with *za-* depends on the interaction of three major factors in the verbal root: directed vs. non-directed motion; the type of Goal (container vs. surface); the type of Theme (count vs. mass).

Chapter 4

Constructions

4.1. Typology of the Locative Alternation constructions

This section provides a general overview of the relevant constructions. In addition to *gruzit'* 'load' and its prefixed perfectives, there are other verbs that can alternate in the relevant constructions and will appear here. A full inventory of the verbs is given in Chapter 5.

As can be seen from Figure 1, in addition to the basic Locative Alternation construction (the Theme-Object and the Goal-Object constructions), the Locative Alternation verbs with the prefix *za-* are also attested in four additional constructions: the Theme-Subject construction, the Impersonal construction, the Hybrid construction and the Decausative construction. The relation between the constructions relevant for the Locative Alternation is given in Figure 1.
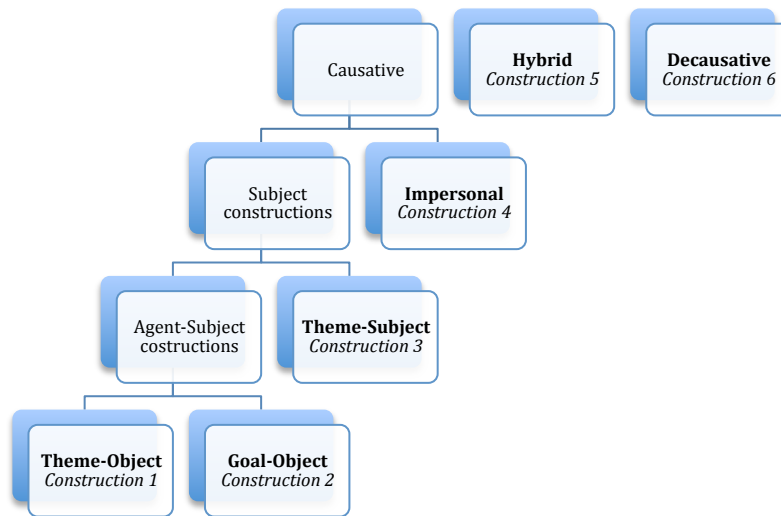
Figure 1. The network of the Locative Alternation Constructions.

The two constructions that usually form the focus of the research on the Locative Alternation are the Theme-Object construction and the Goal-Object construction presented at the bottom of the diagram in Figure 1. However, the Russian data suggests that in addition to these basic causative constructions, the Locative Alternation verbs can appear in other transitional constructions that differ in terms of which participant is foregrounded/backgrounded (the Theme, the Goal, the Agent). The semantic characteristics in relation to the way the Theme, the Goal and the Agent are represented in each construction are summarized in Table 1 below.

	Construction	Theme	Goal	Agent	Example
1	Theme-Object	Direct Object	Prepositional phrase with Accusative	Subject	*... predpolagalos' gruzit' brevna na baržu.* 'we were supposed to load the logs onto the barge'
2	Goal-Object	Instrumental	Direct Object	Subject	*... gruzili vagony detskimi trupami.* 'they loaded wagons with childrens' corpses'
3	Theme-Subject	Subject	Direct Object	-	*Grad oskolkov vmeste s iskrami zasypal okopy* 'A hail of shrapnel and sparks filled the trenches.'
4	Impersonal	Instrumental	Direct Object	-	*...nas ... zasypalo zemlej i kamnjami* 'We... were covered with earth and stones'
5	Hybrid	Instrumental	Prepositional phrase with Accusative	Subject	*... zakapav krov'ju na steklo* 'having dripped blood on the glass'
6	Decausative	Subject	Prepositional phrase with Accusative	-	*Sneg sypet besprestanno* 'The snow pours constantly'

Table 1. Description of the Locative Alternation constructions.

As follows from Table 1, in the two prototypical constructions (Theme-Object and Goal-Object) the Agent is expressed overtly by the noun in the Subject position, and the focus is either on the Theme (Theme-Object) or on the Goal (Goal-Object). The next two causative constructions (Theme-Subject and Impersonal) retain the focus on the Goal but background or even reduce the Agent. The Theme-Subject construction presents the Theme as the Agent whereas the Impersonal construction reduces the Agent completely, focusing only on the change of the state of the Goal. Finally, the Hybrid construction represents a transitional type between the Causative and Decausative constructions since it is

a transitive construction, which focuses on the Subject (Agent) to a greater extent than on the Object.

4.1.1. Constructions 1 and 2: Theme-Object Construction vs. Goal-Object Construction

The Locative Alternation is represented by two constructions: Theme-Object and Goal-Object. These are both Causative constructions. As noted above, the two constructions differ in which of the participants is marked as the direct object: the Theme (i.e. elements like *hay*), or the Goal (i.e. elements like *truck*). In both constructions in Russian the direct object is consistently coded with the bare Accusative case, while the second participant can be expressed via different forms. The Theme-Object construction encodes the Goal via a prepositional phrase (usually with prepositions *v* 'into' and *na* 'onto') with a noun in the Accusative case, as illustrated in examples (1-3).

The Theme-Object construction:

(1) *Potom s pomošč'ju avtokrana predpolagalos' gruzit' <u>brevna</u> <u>na baržu</u>.*
    [Grigorij Dementjev, Aleksandr Tkačev. Munozero // "Junist'", 1972]
    [Then with help-INST crane-GEN was-supposed load-INF logs-ACC on barge-ACC.]
    'Then, with the help of the crane, we were supposed to load the logs onto the barge.'

(2) *Gruzi vse v mašinu i vezi sjuda.* [Lev Dvoreckij. Šakaly (2000)]
    [Load-IMP everything-ACC into car-ACC and bring-IMP here.]
    'Load everything into the car and bring [it] over here.'

(3) *Voditel' zagruzil paket v bagažnik.* [Andrej Žitkov. Supermarket (2000)]
    [Driver-NOM loaded bag-ACC in trunk-ACC]
    'The driver loaded the bag into the trunk'

In the Goal-Object construction the Theme participant is coded by the Instrumental case without a preposition (examples 4-5):
The Goal-Object construction:

(4) *On sodrogalsja, slušaja o tom, kak gruzili vagony detskimi trupami.* [Zoja Maslennikova. Žizn' otca Aleksandra Menja (1992)]
    [He shuddered hearing about how they loaded wagons-ACC childrens'-INST corpses-INST]
    'He shuddered hearing about how they loaded wagons with childrens' corpses.'

(5) *Tam krasnoarmejcy zagruzili kuzov jaščikami.* [Boris Vasil'ev. Ogljanis' na
    seredine // "Oktjabr'", 2003]
    [There Red-Army-soldiers-NOM za-loaded truck-bed-ACC boxes-INS]
    'There the Red Army soldiers loaded the truck bed with boxes'

4.1.2 Construction 3: Theme-Subject construction

In the Theme-Subject construction, the Theme occupies the Subject position
(see example 1 below).

(6) *Grad oskolkov vmeste s iskrami zasypal okopy.* [Vladimir Bogomolov. Mo-
    ment istiny (V avguste sorok četvertogo...) (1973)]
    [Hail-NOM shrapnel-GEN together with sparks-INST filled trenches-ACC]
    'A hail of shrapnel and sparks filled the trenches.'

In example (6), the hail of the shrapnel represents the Theme and fills the sub-
ject position in the sentence. The Goal (*okopy* 'trenches') appears as the Direct
object in the Accusative case.
In a sense, the Theme-Subject construction is opposed to the Causative con-
structions (constructions 1 and 2), where the Subject position is filled by the
Agent (see example 7). The Causative constructions could thus be referred to as
Agent-Subject constructions.

(7) *Kogda zasypal jamu zemlej, otdyxajuščie... snova potjanulis' v les...* [G. Ja.
    Baklanov. Duren' // «Znamja», 2002]
    [When filled hole-ACC dirt-INST, vacationers... again took-off into forest-
    ACC...]
    'When he had filled the hole with dirt, the vacationers... took off again into
    the forest...'

The Theme-Subject construction is mainly attested for the verbs like *zabryzgat'*
'splatter', *zasypat'* 'strew', *zalit'* 'pour'. In these cases the Theme is always a
substance that can be represented as a force acting on its own.

4.1.3 Construction 4: Impersonal construction

The impersonal construction is also known in the literature as the "natural force
construction" ("stixijnaja konstrukcija", see Šeljakin 2001, Mustajoki and
Kopotev 2005). Such constructions do not have a Subject in the Nominative
case:

(8) *My sošli s lošadej, nas sbilo s nog vzryvnoj volnoj i zasypalo zemlej i
    kamnjami* [E. M. Meletinskij. Moja vojna (1971-1975)]
    [We-NOM got off horses-GEN, we-ACC knocked-down from legs-GEN
    burst wave-INST and strewed earth-INS and stones-INS]

'We got off the horses, were knocked off our feet and were covered with earth and stones by the blast'

In example (8), the people (Goal) were strewed with the earth (Theme), where the earth can also be presented as the force acting on its own: cf. examples (9) and (10):

(9) *Nas zasypalo zemlej*
     [We-ACC strewed-IMPERS earth-INS]
     'We were covered by the earth'

(10) *Nas zasypala zemlja*
     [We-ACC strewed earth-NOM]
     'The earth covered us'

Sentences like (9) on the surface look like the Goal-Object construction, with the only difference that the sentence bears no Subject. The Theme of such sentences can be placed in the subject position (example 10), which makes it an instance of the Theme-Subject construction. In example (10) the earth is both the Theme and the Subject in the Nominative case.

As can be seen from example (9), the agent in the Impersonal construction is usually absent and unnamed (Smith 1994, Divjak and Janda 2008, Zorin 2011). As shown in literature, the Impersonal construction sets restrictions on naming the agent. Human agents in this construction would be ungrammatical:

(11) a. **Čeloveka ubilo soldatom* (Divjak and Janda 2008: 23).
     [Person-ACC killed soldier-INS]
     'A person was killed by a soldier'

     Cf. the transitive personal construction with the same participants:

     b. *Soldat ubil čeloveka*
     Soldier-NOM killed person-ACC
     'A soldier killed a person'

The non-agentive character of the Impersonal construction leads to two types of restrictions imposed on this construction. The first restriction concerns the nouns that can fill the agent position in the Instrumental case and usually represent the Theme or the natural causer acting on the Goal. There are five major semantic classes of nouns that are attested in this position: substances (*Perčatki raz"elo kislotoj* 'The gloves were dissolved by acid'), objects (mostly missiles or weapons; *Stenu doma razvorotilo bomboj* 'The wall of the house was torn up by a bomb'), acts of nature (*Gorod razrušilo zemletrjaseniem* 'The city was de-

stroyed by an earthquake'), physical events like *požar* 'fire', *vzryv* 'explosion' which might cause a negative effect on the object (*Sudno razneslo vzryvom* 'The ship was rocked by an explosion'), and situations that presuppose the use of weapons (*Oboronu protivnika uničtožilo udarom artillerii* 'The enemy's defense was destroyed by the artillery strike').

The closer the noun is to representing the natural force acting on its own, the more probable the use of the Impersonal construction. Cf. The use of two similar nouns *stixija* 'elements of nature' and *nepogoda* 'bad weather' that differ in the strength of their forces in examples (12a) and (12b):

(12) a. *Sel'skie doma uničtožilo stixiej.* (Zorin 2011: 19)
     [Village houses-ACC destroyed element-INS]
     'Forces of nature destroyed the houses of the village.'

     b. **Ukrainskie vinogradniki uničtožilo nepogodoj.* (Zorin 2011: 19)
     [Ukrainian vineyards-ACC destroyed bad-weather-INS]
     'The Ukrainian vineyards were destroyed by bad weather.'

The word *stixija* is a more powerful natural force, hence it is more natural to appear in the Impersonal construction than the noun *nepogoda* (cf. also the name for the construction – "stixijnaja konstrukcija").
        The second type of restriction is on the semantics of the verb that can occur in this construction. Cf. examples (13a) and (13b):

(13) a. *Dorogi razmylo vodoj.* (Zorin 2011: 8)
     [Roads-ACC washed-away water-INS]
     'The roads were washed away by the water.'

     b. *?Dorogi isportilo vodoj.* (Zorin 2011: 8)
     [Roads-ACC damaged water-INS]
     'The roads were damaged by the water.'

As pointed out by Zorin (2011), the restrictions on the verb are often connected with its agentive character. Typical agentive verbs (like the verb *istrebit'* 'destroy, exterminate' in example 14 and the verb *zatoptat'* 'trample' in example 15) are not compatible with the Impersonal construction:

(14) a. *Posevy zernovyx istrebil ogon'.* (Zorin 2011: 10)
     [Seed grain-ACC destroyed fire-NOM]
     'Fire destroyed the seed grain.'

     b. **Posevy zernovyx istrebilo ognem.* (Zorin 2011: 10)
     [Seed grain-ACC destroyed fire-INS]
     'The seed grain was destroyed by fire.'

(15) a. *Ego zatoptala beguščaja tolpa*. (Zorin 2011: 12)
[Him-ACC trampled running crowd-NOM]
'The running crowd trampled him.'

b. **Ego zatoptalo beguščej tolpoj.* (Zorin 2011: 12)
[Him-ACC trampled running crowd-INS]
'He was trampled by the running crowd.'

c. *Ego zadavilo beguščej tolpoj*. (Zorin 2011: 12)
[Him-ACC crushed running crowd-INST]
'He was crushed by the running crowd.'

The noun that fills the agent position in the Instrumental case and stands for Theme or the Causer is usually a substance or a device that act on their own, not a device that transmits the substance. Cf. examples (16a-b) where the noun in the Instrumental case refers to military machines emitting missiles and (16c-d) where the noun in the Instrumental is the missile itself:

(16) a. **Naš štab uničtožilo vražeskim tankom.* (Zorin 2011: 17)
[Our headquarters-NOM destroyed enemy tank-INS]
'Our headquarters was destroyed by an enemy tank.'

b. **Neskol'ko domov razrušilo bombardirovščikom.* (Zorin 2011: 17)
[Several-ACC houses-GEN destroyed bomber-INS]
'Several houses were destroyed by the bomber.'

c. *Štab uničtožilo snarjadom*. (Zorin 2011: 17)
[Headquarters-ACC destroyed shell-INS]
'Headquarters was destroyed by a shell.'

d. *Dom razrušilo bomboj*. (Zorin 2011: 17)
[House-ACC destroyed bomb-INS]
'The house was destroyed by a bomb.'

Summing up, the Impersonal construction is highly restricted in terms of the type of verbs and nouns that it is compatible with. In our case these are verbs where Themes are represented as substances. It is important however that the Impersonal construction closely interacts with the Locative Alternation constructions even though it is not a central construction in the network of the Locative Alternation constructions. Such categories as the Theme, the Agent and the Cause are closely related and depend on linguistic construal[14]. As pointed out by Divjak and Janda (2008: 5), "Russian offers numerous variations on the

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[14] Taylor (2002: 415-426) admits that it is often hard to distinguish between participants and circumstances, that construal plays a role and that participants can sometimes be omitted from the construction.

personal transitive construction by adding, replacing and deleting items (including the subject participant)". The same can be applied to the description of the Locative Alternation Constructions. Thus, "the recognition of networks with a center-periphery structure can be as insightful for the investigation of syntax as it is for the analysis of semantics" (Divjak and Janda 2008: 3).

4.1.4 Construction 5: Hybrid construction

A Hybrid construction is the Locative construction without a Direct Object. The Theme is represented by the Instrumental case (as in the Goal-Object construction) while the Goal stands in the Accusative case with a preposition (as in the Theme-Object construction):

(17) *No on (golub') čudom uderžalsja na framuge, **zakapav** krov'ju na steklo.*
[Dmitrij Lipskerov. Poslednij son razuma (1999)]
[But it (pigeon)-NOM miracle-INS clung on windowsill-LOC, dripped blood-INS on glass-ACC]
'But by some miracle he (the pigeon) clung to the windowsill, having dripped blook on the glass.'

A characteristic feature of the Hybrid construction is that when prefixed in *za-*, the verb bears an ingressive meaning (cf. example 17). The pigeon got crushed against the window frame and started dripping blood on the glass. The Theme here is *krov'* 'blood' which appears in the Instrumental case and the Goal is expressed by the prepositional phrase *na steklo* 'on the glass'.

However, whenever we are dealing with a prefixed verb, it is more common to encounter cases with reduced Goal, as in examples (18-20) below:

(18) *Pal'cy skrjučatsja. Zaryčit, sljunoj **zabryzžet**. Ešče mgnovenie i nabrosit-sja, razorvet.* [Poxoždenija bednogo pediatra (2003) // "Kriminal'naja xro-nika", 2003.07.08]
[Fingers-NOM curl up. Roars, saliva-INS spatters. Still moment-ACC and throws-self, explodes.]
'His fingers will curl up. He will roar, start to spatter saliva. One moment later he will cast himself about, explode.'

(19) *Utrom "Junkersy-88" **zasypali** bombami, na brejuščem proneslis' "messe-ra" i polezli na nas tanki.* [Viktor Nekrasov. Čerez sorok let... (Nečto vmesto posleslovija) (1981)]
[Morning-INS Junkers-88-NOM strewed bombs-INS, on approach-LOC rushed "monsieurs"-NOM and crawled on us-ACC tanks-NOM]
'In the morning the Junkers-88s started strewing bombs, the "monsieurs" rushed at low altitude and tanks came crawling at us.'

(20) *Poluèktova axnula, zaorala nekrasivym golosom, **zasypala** glupoj skor-
oreč'ju:* [Ljudmila Ulickaja. Putešestvie v sed'muju storonu sveta // Novyj
Mir, № 8-9, 2000]
[Poluèktova-NOM moaned, yelled unpleasant voice-INS, strewed stupid
cliché-INS]
'Poluèktova moaned, started yelling in an unpleasant voice, and began to
strew a stupid cliché:'

The Goal in example (18) is the abstract interlocutor of the Subject towards
whom the saliva might be addressed. The focus is put on the condition of the
Agent for which reason the Goal (the addressee) is entirely omitted. However,
in all of these examples (18-20) the verb bears an ingressive meaning, which is
characteristic of the Hybrid construction with the reduced Goal.

Hybrid constructions are more common for the unprefixed verbs. The prefix is
Object oriented whereas the Hybrid construction places the focus on the Subject
as an experiencer. For instance, the Russian National Corpus does not provide
any examples of the full Hybrid construction for the verb *zabryzgat'* 'spatter'.
On the Internet we do find a few instances of the full Hybrid constructions, as in
examples (21-23) below:

(21) *Vardan mgnovenno razvernulsja i **zabryzgal** sljunoj na kapjušon palača: --
Ja skazal -- povesit', značit, povesit'!*
(http://samlib.ru/g/garr_g/3inch.shtml)
[Vardan-NOM instantly turned and spattered saliva-INS on hood-ACC
hangman-GEN: --I-NOM said -- hang, means hang]
'Vardan instantly turned around and started to spatter saliva on the hang-
man's hood: I said to hang him, so hang him!'

(22) *Ja dernulsja bylo tuda, no Ljupus vcepilsja mne v plečo zdorovoj levoj ru-
koj i **zabryzgal** sljunoj na uxo: - Stoj, idiot!*
(http://www.stephenking.ru/fanfics/kozha_cveta_izmeny/2.html)
[I-NOM rushed was there, but Ljupus-NOM attached me-DAT in shoulder-
ACC healthy left hand-INS and spattered saliva-INS on ear-ACC: --Stand,
idiot-NOM]
'I was going to rush over there, but Ljupus grabbed me by the shoulder
with his mighty left hand and started spattering saliva on my ear: Stop, you
idiot!'

(23) *--Ax, ty stručok, --**zabryzgal** on sljunoj na lysinu Ivana Moiseeviča, nikuda
ty ne pojdeš'.* (http://www.proza.ru/2009/12/26/67)
[Oh, you jerk-NOM, --spattered he-NOM saliva-INS on bald-spot-ACC
Ivan Moiseevič-GEN, nowhere you-NOM not go.]

'Oh, you jerk, --he started spattering saliva on Ivan Moiseevič's bald spot, you're not going anywhere.'

It is remarkable though that all such examples introduce direct speech, so the verb *zabryzgat'* 'spatter' behaves similar to the shouting verbs: cf. *zabryzgal sljunoj na uxo* 'he started spattering saliva in my ear' vs. *zakričal na uxo* 'he started screaming in my ear'. The verb *zabryzgat'* 'spatter' focuses not as much on the event of spattering or the change of the state of the Goal (the ear) but rather represents an act of communication in an expressive way.

4.1.5. Construction 6: Decausative construction

The Subject of the Decausative construction is a Theme that is acting on its own. However, what makes it different from the Theme-Subject construction is the absence of the Direct Object:

(24) *Sneg sypet besprestanno*
     [Snow-NOM strews constantly]
     'The snow pours constantly.'

Prefixed verbs in the Theme-Subject construction are always resultative (see example 1), whereas prefixed verbs in the Decausative construction are always ingressive.

(25) *Zima. **Zasypal** sneg.* [Vladimir Makanin. Andegraund, ili geroj našego vremeni (1996-1997)]
     [Winter-NOM. Strewed snow-NOM.]
     'It was winter. Snow had begun to pour down.'

Summary. As follows from this overview, the Locative Alternation constructions are not limited to just the two traditionally described as the Theme-Object and the Goal-Object constructions. The verbs that introduce substance-like Themes involve Hybrid, Decausative, Impersonal and Theme-Subject constructions. The more likely the Theme can be represented as a force acting on its own, the more variation of constructions is possible. The prefix, however, limits the capacity of the verb to appear in the "non-traditional" Locative constructions and often is supported by reduction.

4.2. Modifications of Constructions

Most of the constructions mentioned in the previous section can also be modified in three different ways. The most common modification is metaphorical extension, because it is applicable to almost any verb. Two other ways to modify a locative construction are reduction (when one of the participants is missing) and elaboration (where we see an interaction between two different constructions). The passages that follow will take up each of these modifications in turn.

4.2.2. Metaphorical extensions

Within contemporary theory of metaphor, the term "metaphor" has come to mean "a cross-domain mapping in the conceptual system" (Lakoff 1993: 203). The mapping in this case is a set of correspondences. For instance, a love relationship is often described in terms of a journey:

(26) a. *Look how far we have come.*
    b. *Our relationship has hit a dead-end street.*
    c. *We may have to go our separate ways.*
                    (Lakoff 1993: 206).

The mapping that metaphor performs is usually highly selective. It is by no means a one-to-one mapping of all the information from a source domain to a target domain. For example, the fact that in English we use fire as a source domain for understanding anger (cf. Lakoff 1987: 3 80-415; His temper is like a powder-keg, She's white-hot with rage, I'm fuming, doing a slow burn, etc.) does not mean we expect anger to be something we can light with a match, use for cooking, or that we will have to clean up ashes afterward. Like the prototype, metaphor is motivated by relevant information that is salient in human experience; it highlights some facts about the target domain, but hides others. The behavior of metaphor is likewise well-motivated but not entirely predictable.

To sum up, traditional metaphor theory involves three major elements: a source domain (such as journey), a target domain (love) and mapping relations across domains. Metaphors link two conceptual domains, the source domain and the target domain. Furthermore, metaphorical mappings preserve the cognitive topology (i.e. the image-schema structure) of the source domain, consistent with the inherent structure of the target domain. This observation, referred to as "the Invariance Principle" (Lakoff 1993: 215), guarantees that the sources from

the source domain will be mapped onto target domain sources, goals will be mapped onto goals, trajectories onto trajectories, and so forth. Furthermore, it is known that metaphorical mapping tends to be selective; rather than mapping all features of the source domain, only relevant features are mapped (Janda 2010: 15).

Some recent studies on metaphor acknowledge that conceptual products are never the result of a single mapping (Fauconnier and Turner 2002, Fauconnier and Turner 2008). What we have come to call "conceptual metaphors", like TIME IS SPACE, turn out to be mental constructions, involving many spaces and many mappings in elaborate integration networks, or blends. In a sense, blending can be regarded as an elaborated version of conceptual metaphor theory.

As we will point out in Chapter 6, linguistic representations of target domains in metaphorical uses of the Locative Alternation verbs are not absolutely parallel to their source domains. Yet, one of the major questions that remains is how metaphor reveals itself in metaphorical expressions. The fundamental tenet of Conceptual Metaphor Theory is that metaphor operates at the level of cognition, language being secondary to conceptual mappings[15]. Taking the contributions of metaphor theory as a starting point, we will draw the attention from cognition back to linguistic expressions, showing that linguistic representations of metaphor are more structured than previously believed.

In recent years metaphor researchers have begun to analyze naturally occurring language data (Deignan 2005, Stefanowitsch 2006, Steen 2007, Steen et al. 2010). Some collective research has been done on developing a method for linguistic metaphor identification (Steen et al. 2010). According to the findings of the Pragglejaz Group (Steen 2007: 3), an important characteristic of a metaphorical sense as opposed to a basic sense is that this "contextual meaning contrasts with the basic meaning but can be understood in comparison with it". The Metaphor Identification Procedure, introduced by the Pragglejaz Group, helps to discover active and dead metaphors.

Some recent corpus studies investigate formal differences between metaphorical and literal uses of the same words, showing that the grammatical forms of metaphors are fairly restricted. Deignan (2005) presents a corpus study of nouns denoting animals and their mappings onto human characteristics (*dog, fox, lion*, etc.). Her study shows that the grammatical behavior of metaphors is

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[15] "What constitutes the LOVE AS A JOURNEY metaphor is not any particular word or expression. It is the ontological mapping across conceptual domains, from the source domain of journeys to the target domain of love. The metaphor is not just a matter of language, but of thought and reason. The language is secondary" (Lakoff 1993: 208).

different from that of the target domain (cf. grammatical number, derived forms *foxy*, *kittenish*, commonly not attested for the source domain units, etc.).

The metaphor identification procedure introduced in corpus studies undoubtedly helps us in solving certain applied tasks (lexicographic and corpus-driven) but leaves several important questions open. First of all, this approach is driven by lexical units: researchers look at literal and metaphorical uses of certain words, which leaves some of the information out of the picture. Second, this procedure is mostly interested in factors that could be easily formalized, such as grammatical forms and morphology, but overlooks constructions since they often require manual tagging. Finally, this approach is interested in linguistic expressions only and does not discuss how these expressions are related to cognition.

The hypothesis that we entertain here is that in order to get a metaphorical extension, we do not simply fill the argument roles of a construction with linguistic units describing another domain (as, for instance, suggested in Marantz (1984), cf. *kill a man* (literal use) vs. *kill a bottle*, *kill an hour* (figurative use)), but often also perform some structural changes. Although this issue is not the major focus of the dissertation, in Chapter 6, we show that constructions in metaphorical and non-metaphorical uses behave differently, which can shed additional light on some mismatches observed between the source and the target domains (cf. Fauconnier and Turner 2008). Although we side with Lakoff in that "the locus of metaphor is not in language at all, but in the way we conceptualize one mental domain in terms of another" (Lakoff 1993: 203), we will try to illustrate that metaphorical expressions in themselves require further investigation.

Metaphorical extensions are widely discussed in the literature in connection with the question of what kind of relationships (or links) exist among constructions (Lakoff 1987, Goldberg1995, Croft and Cruse 2004). According to Goldberg (1995), metaphorical extensions typically motivate the links found in polysemy. The Locative constructions can be modified in three different ways: metaphor, reduction, and elaboration. Both the Theme-Object and the Goal-Object construction can have metaphorical extensions, i.e. they can be instantiated as metaphorical contexts where the semantic class of the participants is modified from more concrete to more abstract. For instance, human beings can serve as the metaphorical CONTAINERS (Goal) for information that represents metaphorical CONTENTS (Theme), as in this example:

(27) *Ax, vam interesny podrobnosti iz žizni zvezd? Radi boga, Andrej Maksimov*
     "zagruzit" vas ètoj informaciej. [Julija Junina. Moskvič – sostojanie duši
     (2001) // "Argumenty i fakty", 2001.02.14]
     [Oh, you-DAT interested-NOM details-NOM from life-GEN stars-GEN?
     Sake god-GEN, Andrej Maksimov-NOM **loads** you-ACC this information-
     INS]
     'Oh, you are interested in the details of the life of our pop stars? No prob-
     lem, Andrej Maksimov will **provide** you with this information.'

Both metaphorical and non-metaphorical representations can be structurally
modified in two different ways: via reduction and via elaboration. These two
phenomena have not yet been given proper consideration in the literature. Our
data indirectly suggests that both mechanisms, reduction and elaboration, are
related to metaphor (these observations will be discussed in Chapters 6 and 7).
When a construction is marked by elaboration or reduction, it does not neces-
sarily mean that we deal with a metaphorical extension. But it appears that met-
aphorical extensions are likely to be marked by structural changes, such as re-
duction or elaboration.

4.2.3 Reduced constructions

The two constructions of the Locative Alternation can be represented via full
constructions where both participants (Theme and Goal) are overtly expressed,
as well as via "reduced constructions", where one of the participants is missing.
Most cases with an omitted Theme or Goal argument are instances of ellipsis
since the missing participant is perceived from the context. Examples (28) and
(29) below illustrate a Theme-Object construction with a missing Goal and a
Goal-Object construction with a missing Theme:

Theme-Object construction with a missing Goal:

(28) *No uže v bližajšee vremja ožidaetsja podxod* <u>sudov</u> *obščim tonnažem 780*
     *tys. tonn. Tol'ko **zagruzit'** <u>ugol'</u> budet problematično, poskol'ku iz-za*
     moroza on prevratilsja v glyby. [Timur Xikmatov. Parovozy prosjat kora-
     blej (2003) // "Izvestija", 2003.01.15]
     [But already in nearest time-LOC is-expected arrival-NOM <u>vessels-GEN</u>
     (Goal that is omitted in the following sentence) with total tonnage 780

thousand tons. Just **load** <u>coal</u>-ACC will-be problematic, since due-to frost-GEN it-NOM turned-into into blocks-ACC.]

'But already in the nearest future we expect the arrival of vessels with total tonnage of 780 thousand tons. Just **getting** <u>the coal</u> **loaded** will be problematic since due to the cold it has turned into blocks.'

Goal-Object construction with a missing Theme:

(29) *Nikolaj … očen' skoro upravilsja s <u>pokupkami</u>, **nagruzil** <u>podvody</u> i, poka mužiki kormili lošadej, otpravilsja slonjat'sja po rjadam.* [A. I. Èrtel'. Gardeniny, ix dvornja, priveržency i vragi (1889)]

[Nikolaj-NOM … very soon finished with <u>purchases</u>-INS, **loaded** <u>wagon</u>-ACC and while men-NOM fed horses-ACC went slouch along rows-DAT]

'Nikolaj … was very soon done with the <u>purchases</u> (Theme that is omitted in the following phrase), **loaded** <u>the wagon</u> and while the men were feeding the horses he went slouching about the rows.'

There are also cases of interaction between reduction and metaphor as presented in example (30):

Metaphorical Goal-Object construction with a missing Theme:

(30) *A ty, Volodin, nas togda **nagruzil** pro vnutrennego prokurora.* [Viktor Pelevin. Čapaev i pustota (1996)]

[And you-NOM, Volodin-NOM, us-ACC then loaded about internal prosecutor-ACC.]

'And you, Volodin, completely confused us then (Theme omitted) concerning the internal prosecutor.'

Examples like (30) should be distinguished from pure cases of ellipsis since the omission of the second participant is almost conventionalized (see Section 6.2.2 for more details).

4.2.4. Elaboration and Hybrid constructions

Besides regular omission of one participant we also encounter contexts where an additional participant can be introduced, forming an "elaboration" of the construction, as in example (31) below:

(31) *Gibkij umom Konstantin sumel počti ne zapjatnat' sebja krov'ju mučeni-*
    kov-inovercev; ne ottogo li on upustil slučaj **pomazat'** *sebja na carstvo*
    krov'ju svoego nedruga Galerija? [Sergej Smirnov. Bylo pervoe leto Gos-
    podne… // "Znanie – sila", 2003]
    [Nimble-NOM mind-INS, Constantine-INS almost managed not stain self-
    ACC blood-INS non-Christian martyrs-GEN; not from-that whether he-
    NOM missed chance-ACC anoint self-ACC on kingship-ACC blood-INS
    own rival Galerius-GEN]
    'Nimble of mind, Constantine managed to keep himself almost entirely free
    of stain from the non-Christian martyrs; wasn't it for this reason that he
    missed the chance to anoint himself to be king with the blood of his rival
    Galerius?'

The verb *pomazat'* 'smear' already has a Goal (*sebja* 'himself') and a Theme
(*krov'ju* 'with blood') which are overtly expressed in the sentence, yet one more
Goal is introduced (*na carstvo* '(on)to the kingship'). It appears that in this case
we have an interaction of the Goal-Object construction (*pomazat' sebja krov'ju*
'smear oneself with blood') and the Theme-Object construction (*pomazat' na
carstvo* 'anoint to be king' as in *posadit' na tron* 'put on the throne'). In this
way, the Goal of the first construction serves as the Theme for the second con-
struction. However, in this elaborated Goal-Theme-Object construction, the first
part (the Goal-Object construction) is usually reduced: the Theme (when it re-
fers to the balm) is omitted:

(32) *… prorok Samuil vtajne* **pomazal** *ego na carstvo v odnom iz izrail'skix*
    plemen. [Aleksandr Fadin. Solomon – praščur ljubvi (2002) // "Domovoj",
    2002.01.04]
    [prophet Samuel-NOM secretly annointed him-ACC on kingship-ACC in
    one-LOC from Jewish tribes-GEN]
    '...the prophet Samuel secretly annointed him to be king of one of the Jew-
    ish tribes.'

Apart from example (31), the full version of this elaborated construction is not
attested in our database but can be found on the Internet:

(33) *Carej takže* **pomazyvali** *na carstvo eleem.*
    (http://www.evangelie.ru/forum/t39668.html)
    [Kings-ACC also annointed on kingship-ACC oil-INS]

'They also annointed kings to their kingship with oil.'

It appears that since the elaborated construction has three profiled participants, one of them tends to be omitted, as illustrated by example (34):

(34) ***Pomazanie*** *na carstvo -- èto **pomazanie** eleem.*
    (http://www.evangelie.ru/forum/t39668.html)
    [Annointing on kingship-ACC -- that-NOM annointing-NOM oil-INS]
    'Annointing to be king -- that is annointing with oil.'

This complies with Goldberg's Correspondence Principle, which states that profiled participant roles of the verb must be encoded by profiled argument roles of the construction, with the exception that if a verb has three profiled roles, one can be represented by an unprofiled argument role (and realized as an oblique argument) (Goldberg 2006: 40).

    Thus, elaboration is the result of an interaction between the Locative Alternation constructions and other constructions. The most common interaction of this type involves "hybrid" constructions (ex. 35), where the Theme-Object construction interacts with the Decausative construction (ex. 36):

(35) *...veter ... **syplet** snegom v okna.*
    [wind-NOM strews snow-INS into windows-ACC]
    '...the wind … strews snow into the windows.'

(36) *Sneg sypet besprestanno.*
    [Snow-NOM strews constantly]
    'The snow pours constantly.'

The Hybrid construction is an instance of an interaction among the Locative Alternation constructions. However, we can also get interactions between more distantly related constructions. In our case, it is important to observe the interaction between the passive construction and the Locative Alternation constructions. As we will see in Chapters 6 and 7, the passive forms of the Locative Alternation verbs show a different distribution in terms of the Locative Alternation as compared to the non-passive forms. The reasons for this relationship are discussed in Chapter 6.

4.3. Summary

This chapter has provided an overview of the family of Locative Alternation constructions and how they are related to each other. In addition to the prototypical Theme-Object and Goal-Object constructions, we find the Theme-Subject construction, the Impersonal construction, and the Hybrid and Decausative constructions. These constructions differ in terms of how the Agent, the Theme and the Goal are expressed. In the network of these constructions we start with the prototypical causative constructions where the Agent is overtly expressed and the emphasis is on the Theme or the Goal. The Theme-Subject and Impersonal constructions form a transition in the direction of the Decausative constructions where the Agent is missing.

The following two sets of examples illustrate the relationships among the Locative Alternation constructions in a concise manner that highlights the role of the prefix:

(37) a. 1. Theme-Object:
Veter syplet/zasyplet sneg v okna
[Wind-NOM strews snow-ACC in windows-ACC]
'The wind strews/will (begin to) strew snow onto the windows'

b. 2. Goal-Object:
Veter zasyplet okna snegom
[Wind-NOM strews windows snow-INS]
'The wind will cover the windows with snow'

c. 3. Theme-Subject:
Sneg zasyplet okna
[Snow-NOM strews windows-ACC]
'The snow covers the windows'

d. 4. Impersonal:
Okna zasyplet snegom
[Windows-ACC strews snow-INS]
'The windows will be covered with snow'

e. 5. Hybrid:
Veter syplet/zasyplet snegom v okna
[Wind-NOM strews snow-INS in windows-ACC]
'The wind covers/will (begin to) cover the windows with snow'

f. 6. Decausative:
Sneg syplet/zasyplet v okna

[Snow-NOM strews in windows-ACC]
'The snow covers/will (begin to) cover the windows.'

(38) a. 1. Theme-Object:
On bryzgaet/zabryzgaet vodu na pol
[He-NOM spatters water-ACC on floor-ACC]
'He spatters/will (begin to) spatter water on the floor'

b. 2. Goal-Object:
On bryzgaet/zabryzgaet pol vodoj
[He-NOM spatters floor-ACC water-INS]
'He spatters/will spatter the floor with water'

c. 3. Theme-Subject:
Voda zabryzgaet pol
[Water-NOM spatters floor-ACC]
'Water will spatter the floor'

d. 4. Impersonal:
Pol zabryzgaet vodoj
[Floor-ACC spatters water-INS]
'The floor will be spattered with water'

e. 5. Hybrid:
On bryzgaet/zabryzgaet na pol vodoj
[He-NOM spatters on floor-ACC water-INS]
'He spatters/will (begin to) spatter water on the floor'

f. 6. Decausative:
Voda bryzgaet/zabryzgaet na pol
[Water-NOM spatters on floor-ACC]
'Water spatters/will (begin to) spatter on the floor'

As seen in the examples, some of the constructions trigger the prefixed forms of the verb, whereas others are more natural without the prefix. More precisely, constructions that trigger the prefix are the 2. Goal-Object construction, 3. Theme-Subject construction, and 4. Impersonal construction. These three constructions share the Goal as the Direct Object (see Table 1) and are limited to a resultative reading. In a sense, constructions 3 and 4 are extensions of the Goal-Object construction, for they maintain focus on the Goal and differ only in the way that the Agent is expressed. The other three constructions, 1.

Theme-Object, 5. Hybrid, 6. Decausative, are more compatible with unprefixed verbs. All these three constructions can give an ingressive effect with the prefix *za-*, and with the Theme-Object construction, both resultative and ingressive readings are possible. The Hybrid construction, as mentioned earlier, represents an interaction between the Theme-Object construction and the Decausative construction in that the Hybrid construction still bears the Agent from the Theme-Object construction, but it lacks the Direct Object, and thus is similar to the Decausative.

Another notable factor is the status of the Theme vis-a-vis the Agent. In the Theme-Object construction, the Theme is usually independent of the Agent. In the Hybrid construction, we can have independent Themes, but more often the Theme is a part of the Agent (blood, saliva, and metaphorically utterances; see Chapter 8). This is not a factor for the Goal-Object construction and its close relatives, the Theme-Subject and Impersonal constructions. These three constructions are all Goal-oriented and this explains why they require the prefix, which has a transitivizing effect (see Chapter 3).

In addition, we have presented the various ways by which the Locative Alternation constructions can be modified. The three possible modifications are: metaphorical extension, reduction, and elaboration. As we will show in the analysis (Chapters 6, 7, 8), the degree to which the modifications are manifested and in which combinations depends on the verb and the prefix.

II. Constructional Analysis of the Russian Locative Alternation verbs with the prefixes *NA-, ZA-* and *PO-*

Chapter 5

Methodology

> "We seem to be witnessing as well a shift in the way some linguists find and utilize data – many papers now use corpora as their primary data, and many use internet data."
>
> (Joseph 2004: 382).

Our empirical study examines the constructional profiles of the Russian Locative Alternation verbs as evidenced by data from the Russian National Corpus. Although we have collected and worked on data for all of the relevant verbs, the most important studies in the dissertation are the ones of *gruzit'* 'load' and *mazat'* 'daub, smear' and their Natural Perfectives. These verbs serve as the center of gravity for the category and are the only Locative Alternation verbs that have Natural Perfectives. In this Chapter we first describe how the data was extracted and coded and then define the methods used in this study, which involve constructional profiling and logistic regression modeling in order to probe for a significant relationship between prefixes and grammatical constructions.

5.1. Database Description

The database includes all the verbs mentioned in Chapter 2 (*bryzgat'* 'splatter', *pryskat'* 'spray', *mazat'* 'daub, smear', *klast'* 'lay', *vešat'/vesit'* 'hang', *stavit'* 'stand', *gruzit'* 'load', *pakovat'* 'pack', *pixat'* 'stuff', *lit'* 'pour', *sypat'* 'strew') as well as their prefixed counterparts with the prefixes *na-, za-* and *po-*. We are

particularly interested in those verbs where the prefixes form Natural Perfectives that engage in the Locative Alternation, which is the case with *gruzit'* 'load', and *mazat'* 'smear, daub'.

According to two dictionaries (Evgen'eva 1999 and Ožegov and Švedova 2001) and a list (Cubberly 1982), the Natural Perfectives of *gruzit'* 'load' include the three prefixed verbs *nagruzit', zagruzit'* and *pogruzit',* formed with help of the prefixes *na-*, *za-* and *po-*. The same prefixes form the Natural Perfectives of the verb *mazat'* 'smear, daub': *namazat', zamazat', pomazat'*. Accordning to the Exploring Emptiness database (http://emptyprefixes.uit.no/index.php), the verb *mazat'* 'smear, daub' is characterized by the largest number of Natural perfectives, i.e. 6. In addition to the three prefixes mentioned above, the same grammatical function is performed by the prefixes *vy-*, *iz-* and *pro-*. The last three prefixes are excluded from the present study since they show no Locative Alternation with any of the 11 verbal stems mentioned at the beginning of the section.

For the purpose of this study, I constructed a database based on the Modern subcorpus (1950-2009) of the RNC, which contains 98 million words. I extracted examples from this subcorpus for each of the verbs (the base verb and its Natural Perfectives).[16] The same procedure was performed for all verb forms and in addition passive participles received a separate mark. A sample entry of the database is offered in Table 1 below.

Passive participles represent an interaction between the Locative Alternation constructions and the passive construction (on the special properties of the passive construction as part of "agent back-grounding" see Fried 2004a[17]), and this interaction has a significant impact on the distribution of the Locative Alternation constructions. The Locative Alternation involves two objects, Theme and Goal, both of which can be in focus. The passive construction restricts the focus to just one participant, which serves as the grammatical Subject, cf. examples (1-2)[18]:

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[16] To exclude the author as one more relevant factor, the database was cleaned so that there is only one example for each verb from any single author.

[17] "…what may resemble passive in superficial formal features (patient-subject, optional agent-oblique) amounts to distinct, albeit partially overlapping, communicative patterns, not all of which are truly passive. Rather, they occupy different parts of the agent backgrounding functional space and must be represented as such: as conventionalized associations between particular formal, semantic, and pragmatic features, i.e., as 'constructions' in the sense of construction grammar". (Fried 2004a: 85).

[18] Note that here we consider only the *be*-passive (like *byli pogruženy* 'were loaded' in example 1 above) as opposed to the passive reflexive, more characteristic of the unprefixed forms:

Kazdyj dom stroitsja po individual'nomu proektu. [Mixail Pesin. Počti narodnaja strojka (2002) // "Birža plus svoj dom", 2002.11.18]
[Every house-NOM builds-sja.PASS on individual design-DAT]
'Every house is built according to an individual design.'

	EXAMPLE	AUTHOR	YEAR	GRAM FROM	VOICE	CONSTRUCTION	EXTENSION	THEME CLASS	THEME LEXEME	GOAL CLASS	GOAL LEXEME	PREPOSITION
1	Кусочек хлеба можно **намазать** маслом, …	Протокол	1999	намазать		GOAL		spread	масло	bread	кусочек хлеба	
2	…прикоснулся губами к губам любимой, **намазанным** жирным кремом. …	Адамацкий. Утешитель	2001	намазанные	pass part	GOAL		lotion	крем	body part	губы	
3	Казалось бы, идея гармоническая — **намазать** советским мармеладом мелодическим приторных певцов 90-х…	Арутюнова. Новый стиль телевизионных программ	1996	намазать		GOAL	METAPHOR	spread	мармелад	human	певцов	
4	По моему, она даже разорилась на некоторую косметику — одна бровь была **намазана** гораздо гуще другой…	Белянин. Свирепый ландграф	1999	намазана	pass part	GOAL		make up	0	body part	бровь	
5	Танька вытащила из холодильника коричневую банку, подумала, отрезала еще один ломоть хлеба, **намазала** на него горчицу и стала есть…	Устинова. Подруга особого назначения	2003	намазала		THEME		spread	горчица	bread	ломоть хлеба	на

Row 1 (example *Kusoček xleba možno namazat' maslom* [A piece of bread can be smeared with butter']) introduces a full instance of the Goal-Object construction, indicated by GOAL in the column **CONSTRUCTION**. The columns theme class and goal class show which noun class stands fro the Theme and the Goal.

Row 3 (*namazat' sovetskim melodičeskim marmeladom pritornyx pevcov* [smear mawky singers with the Soviet melodious marmelade]) lists a metaphorical extension of the Goal-Object construction, hence it is tagged as METAPHOR in the **EXTENSION** column.

Row 4 (*odna brov' byla namazana gorazdo gušče drugoj* [one eyebrow was smeared thicker than the other]) introduces a passive sentence with the Goal-Object construction, thus the **VOICE** column is marked as pass part. The Theme is omitted, for which reason we have a zero in the **THEME LEXEME** column.

Table 1. Excerpt from the database of the Locative Alternation within the verb *namazat'* 'smear, daub'

(1) *K dvum časam <u>vse vešči</u> byli vyneseny na ulicu i pogruženy <u>v avtomobil'</u>.*
[Proisšestvija (2003) // "Vstreča" (Dubna), 2003.06.04]
[Toward two hours-DAT <u>all things-NOM</u> were carried onto street-ACC and loaded <u>into automobile-ACC</u>.]

'Towards two o'clock <u>all the things</u> were carried out into the street and load-
ed <u>into the automobile</u>.'

(2) *Pervyj tanker byl zagružen v prisutstvii prezidentov Putina i Nazarbaeva.*
     [Andrej Dernjatin. Neft' pošla po trubam (2001) // "Izvestija". 2001.10.09]
     [<u>First tanker-NOM</u> was loaded in presence-LOC presidents Putin and Nazar-
     baev-GEN.]
     '<u>The first tanker</u> was loaded in the presence of presidents Putin and Nazar-
     baev.'

Where non-passive forms show a preference for one construction over the
other, this preference is further exaggerated in the presence of passive forms.
For instance, the propotion of Theme-Object vs. Goal-Object construction for
non-passive forms of the verb *zagruzit'* 'load' is 9:11, while in the passive
forms it reaches 1:24. Thus, for the purpose of this study I have treated passive
participles as a separate factor. This yields 895 non-passive forms and 1025
passive forms, for a grand total of 1920 examples for *gruzit'* 'load', and 525
non-passive forms and 540 passive forms (1065 total) for *mazat'* 'smear, daub'.
Tables 2 and 3 show the frequencies of these examples broken down according
to verbs.

All non-passive forms	raw frequency	Passive participles	raw frequency
gruzit'	286	*gružen*[19]	107
nagruzit'	147	*nagružen*	221
zagruzit'	208	*zagružen*	248
pogruzit'	254	*pogružen*	449

Table 2. Raw frequencies for the forms of the verb *gruzit'* 'load' and its Natural
Perfectives.

All non-passive forms	raw frequency	Passive participles	raw frequency
mazat'	214	*mazan*	107
namazat'	124	*namazan*	203
zamazat'	113	*zamazan*	175
pomazat'	74	*pomazan*	55

Table 3. Raw frequencies for the forms of the verb *mazat'* 'smear, daub' and its
Natural Perfectives.

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[19] The passive participles in Russian are characterized by a large number of forms. They
are marked for 1) gender (appear as masculine, feminine, or neuter); 2) number (singu-
lar or plural); 3) case. In addition, they can appear as full or short forms. Short forms are
used only as predicates, whereas full forms can also be used as modifiers. In this study
we use the short form Masc Sg to represent all forms of passive participles for conven-
ience.

The examples thus accumulated were manually coded for the Locative Alternation constructions as Theme-Object vs. Goal-Object. The breakdown and analysis of these data are presented in Chapter 6.

In addition to analyzing the interaction between prefixes and constructions within non-passive and passive forms of the four 'load' verbs, we are also taking into account the subtype of the construction, namely whether the construction is represented by its "full" or "reduced" version. In full constructions, both participants (Theme and Goal) are overtly expressed, while in "reduced" constructions, one of the participants is missing. "Reduction" here refers to the omission of one of the arguments, which is not profiled as a direct object. For the Theme-Object construction this is the case when the Goal is omitted, whereas the Goal-Object construction leaves out the Theme. In most cases with an omitted Theme or Goal argument, the missing participant is perceived from the context, as in examples (3) and (4) given below:

(3) *No uže v bližajšee vremja ožidaetsja podxod <u>sudov</u> obščim tonnažem 780 tys. tonn. Tol'ko zagruzit' <u>ugol'</u> budet problematično, poskol'ku iz-za moroza on prevratilsja v glyby*. [Timur Xikmatov. Parovozy prosjat korablej (2003) // "Izvestija", 2003.01.15]
[But already in nearest time is-expected arrival of <u>vessels</u> (Goal that is omitted in the following sentence) with total tonnage 780 thousand tonnes. Just load <u>coal</u>-ACC will-be problematic, since due-to frost-GEN it-NOM turned-into into blocks-ACC.]
'But already very soon we expect the arrival of vessels with total tonnage of 780 thousand tons. Just getting <u>the coal</u> loaded will be problematic since due to the cold it has turned into blocks.'

(4) *Nikolaj ... očen' skoro upravilsja s <u>pokupkami</u>, nagruzil <u>podvody</u> i, poka mužiki kormili lošadej, otpravilsja slonjat'sja po rjadam*. [A. I. Èrtel'. Gardeniny, ix dvornja, priveržency i vragi (1889)]
[Nikolaj ... was very soon done with <u>purchases</u> (Theme that is omitted in the following phrase), loaded <u>wagon</u>-ACC and while men were feeding horses he went slouching about rows]
'Nikolaj ... was very soon done with the <u>purchases</u>, loaded <u>the wagon</u> and while the men were feeding the horses he went slouching about the rows.'

Example (3) illustrates a Theme-Object construction with a missing Goal (the vessels that are mentioned in the previous sentence, where the coal will be loaded), and example (4) illustrates a Goal-Object construction with a missing Theme (the purchases that the wagon is loaded with).[20]

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[20] There were five examples where both the theme and goal were missing, and since in such examples it is not always possible to determine which construction is present, these examples were eliminated from further analysis and do not figure in our database. All five examples involved the unprefixed *gruzit'* 'load'.

5.2. Methods

The present study addresses the Locative Alternation data by means of quantitative analysis. The use of quantitative data is two-fold: first, I take a close look at the way prefixes interact with constructions, using the methodology known as constructional profiling (see Section 5.2.1. below); second, I collect information on other factors that might influence the choice of the construction, presenting it in a statistical model. The model which enables us to take all factors into account is a logistic regression model, described in Subsection 5.2.2.

5.2.1. Constructional Profiling

Constructional profiles have proven to be an effective method for investigating the synonymy of words, as Janda and Solovyev (2009: 367) demonstrate in their study of Russian words for 'happiness' and 'sadness'. Janda and Solovyev define "constructional profile" as: "the relative frequency distribution of constructions that a given word appears in" (Janda and Solovyev 2009: 367). This means that if the word LEXEME can appear in constructions C1…Cn, in order to arrive at LEXEME's constructional profile, it is necessary to collect data on the frequency of LEXEME's occurrence in each of the constructions C1…Cn and to compare those frequencies as percentages of LEXEME's overall occurrence (a.k.a. the "reliance" metric, cf. Schmid 2000: 54). Thus, LEXEME's constructional profile can be presented as a chart showing that LEXEME occurs X% of the time in construction C1, Y% of the time in construction C2, Z% of the time in construction C3, etc. through Cn. The percentages indicate how frequent the given construction is for the given word in a particular corpus, and the aggregate of percentages indicates the degree to which that noun is associated with that particular pattern. Janda and Solovyev emphasize that a given word is often associated with many constructions but most occur at very low frequencies. Their study tackles about 6-10 constructions that suffice to accurately represent the constructional profile of a word. In the case of the Locative Alternation, as shown in Chapter 3, we reach a similar number, since in order to distinguish different synonymous lexemes with different prefixes, we need to consider not just the two Locative Alternation constructions (Theme-Object vs. Goal-Object) but also their extensions and elaborations. Thus, we deal with 8 possible combinations: two basic constructions, their reduced versions, metaphorical extensions, and reduced versions of metaphorical extensions.

The constructional profile methodology has grown directly out of the cognitive linguistics tradition, more specifically construction grammar, and has close relatives both within that tradition and beyond it. In keeping with construction grammar, constructional profiling recognizes the construction as the relevant unit of linguistic analysis (Goldberg 1995, 2006) and presumes that speakers are sensitive to the frequency of words in constructions (Goldberg 2006: 46, 62). Both Geeraerts (1988) and Divjak and Gries (Divjak 2006, Divjak and Gries 2006 and Gries and Divjak 2009) have used corpus data to investigate synonymy, using a wide range of factors (collocational, morphosyn-

tactic, syntactic, and semantic) in order to establish behavioral profiles of verbs. Constructional profiles utilize only the complementation patterning aspect of behavioral profiles, specifically targeting the range of constructions a word appears in. Since the constructional profile methodology takes the word as the point of departure, it is in a sense the inverse of the collostructional methodology (Stefanowitsch and Gries 2003, 2005), which takes the construction as the point of the departure and asks what words occur in the construction. Beyond the immediate family of methodologies within cognitive linguistics, constructional profiles are also related to techniques such as syntactic bootstrapping (Gleitman and Gillette 1995, Lidz et al. 2001) and the use of syntactic range information (Atkins et al. 2003).

To a certain extent, our study is parallel to Colleman and Bernolet (forthcoming). Accepting the claim that the difference between two abstract constructions grants their occurrence with different kinds of verbs, Colleman and Bernolet show that such a split in distribution should be evident not only at the level of *ranges* of verbs that can fill the argument roles of the constructions but also at the level of relative *frequency* with which this occurs. This means that different verbs, as well as different meanings of the same verb, can show different relative frequency distribution across the two constructions.

The four Russian 'load' verbs are united in a single dictionary entry. In other words, if one looks up *gruzit'* 'load' in Ožegov and Švedova (2001) one finds *nagruzit'*, *zagruzit'*, and *pogruzit'* all listed as its perfective counterpart. The way it is presented in the dictionary would lead one to think that these are not even separate words at all but rather forms of a single polysemous lexeme.[21] Our analysis shows that constructional profiles can distinguish even among these verbs.

Janda and Solovyev avoid any claims concerning a connection between constructional profiles and entrenchment. In recent research there were claims about increases in neural connections as a function of frequency (Langacker 1987: 59-60, 100, 380; Langacker 1991: 45, Bybee and Hopper 2001: 9; Taylor 2002: 276; Dąbrowska 2004: 213, 223; Feldman 2006: 105), expressed most explicitly in Schmid's (2000: 39) From-Corpus-To-Cognition Principle: "Frequency in text instantiates entrenchment in the cognitive system". Additionally remarks have been made that corpus frequency may be an imperfect measure of

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[21] In a sense, in Ožegov and Švedova (2001), there is an attempt to distinguish the three Natural Perfectives of the unprefixed verb *gruzit'* 'load' via constructions, which are yet presented as different "senses" of the verb *gruzit'*: 1) 'to fill something with freight' and 2) 'to place the load somewhere'. *Nagruzit'* and *zagruzit'* are united under the first meaning, while *pogruzit'* is attributed to the second meaning. The problem with this approach is that, on the one hand, the dictionary assumes that these distinctions are unilateral, which is not the case since potentially all three verbs can be used in both contexts; on the other hand, it does not give us information on how *nagruzit'* is different from *zagruzit'*. Moreover, we find that *pogruzit'* can also be attributed to meaning 1), namely 'to fill something with freight', as presented in the dictionaries by Ušakov (2009: 704) and Efremova (2006: 772). Thus, a more solid ground for distinguishing among these verbs is required, where a corpus study can be of great importance.

entrenchment (Schmid 2007, Schmid 2010, Gilquin 2007a and b). As pointed out in Chapter 2, we will try to address the connection between the frequency of constructions and entrenchment, showing where this claim is supported and which factors might interfere.

5.2.2. Statistical Analysis

Constructional profiles are a convenient tool to show the interaction between various factors and constructions. The goal of the analysis is to determine what factors are associated with the Theme-object construction as opposed to the Goal-object construction. For the purposes of statistical analysis, it is necessary to distinguish between independent factors and dependent factors. The independent factors are the ones that are probed for their association with the dependent factor. In this case, the dependent factor is the construction, defined as Theme-Object or Goal-Object. There are several independent factors: the choice of prefix, which can be null (unprefixed), *na-*, *za-*, or *po-*; the number of arguments in the clause, which can constitute a full clause (naming both Theme and Goal) or a reduced clause (with only Theme or only Goal); and the voice of the verb, which can be active or passive.

The dependent factor, the construction, has two possible values: Theme-Object and Goal-Object. For this reason, it makes sense to use a logistic regression model to study the effects of the independent factors on the dependent factor. A logistic regression model is designed for predicting which option is most likely when the choice is between two options. For example, logistic regression is often used in medical studies where the probability that a person gets a certain illness (the two options being getting an illness or not getting it) might be predicted from knowledge of the person's age, sex, body mass index and other factors. This statistical test is also applicable for analysis within social sciences and marketing, for instance, to predict a customer's propensity to purchase a product or cease a subscription. Logistic regression can probe the contribution of each of the independent factors individually and can also look for interactions between the independent factors. For us, it is important to test which factors are responsible for the choice of the construction.

To sum up, constructional profiles are a convenient tool to show the interaction between two factors, for instance prefixes and constructions. Yet, when there are two or more predictors, a more elaborate statistical test, like a logistic regression, should be performed in addition. Analyzing the data on the Locative Alternation, we used a logistic regression model in order to probe for a significant relationship between prefixes, grammatical constructions, passive vs. non-passive forms, and reduced vs. full clauses. Our hypothesis that underlies the model is that three factors, namely (1) prefixes (unprefixed verb, or the verb prefixed with *na-*, *za-*, or *po-*), (2) the number of participants in a frame (full vs. reduced constructions), (3) the finite vs. passive participle form of a verb (as well as their interactions) contribute to the choice of either the Theme-Object or the Goal-Object construction. The results of the logistic regression for the 'load' verbs will be presented in Chapter 6.

Chapter 6

Alternating verbs with NPs

> "Diversity can be found at almost every level of lin-
> guistic organization."
>
> (Evans and Levinson 2009: 429)

The present Chapter focuses on the two verbs from the central block, namely *gruzit'* 'load' and *mazat'* 'daub, smear'. The Chapter is divided into four major parts and a summary. First, for both 'load' (section 6.1) and 'smear' (section 6.2) verbs, we look at the relationship between unprefixed base verbs and their Natural Perfectives, considering passivazation and reduction as additional factors. In section 6.3 we provide analysis of metaphorical extensions for both 'groups of verbs. Section 6.4 zooms in on variation within the Theme-Object construction, revealing the interaction of prefixes and prepositions. The data show that the prefix *na-* targets the preposition *na* 'onto' while other prefixes favor the preposition *v* 'into'. This part is relevant only for the'load' verbs since the 'smear' verbs can take only surfaces as their Goals and thus are compatible only with the preposition *na* 'on'. In section 6.5 we offer a summary of the main ideas proposed in this Chapter.

6.1. The verb GRUZIT' 'load'

The 'load' verb are central for our analysis. They appear to be most problematic for our discussion of asymmetries since initially the verb gruzit' 'load' has a lower degree of descriptivty and is compatible with different types of Themes and Goals. In order to consider all the relevant factors we sort the 'load' data via

a binary regression model. As indocated in Chapter 5, the factors considered in the model are prefixes, constructions, grammatical forms (passive vs. non-passive) and reduction. After presenting our model in 6.1.1, we discuss each factor separately in more detail. We look at the relationship between the unprefixed base verb *gruzit'* 'load' and its prefixed perfective counterparts (*nagruzit', zagruzit', pogruzit'*) to see what the prefixes contribute to the properties of the verbal root (6.1.2). Furthermore, we address an issue which so far has not received proper attention in scholarly works on the Locative Alternation, i.e. the situation with passive participles which change the focus of the locative construction by placing one of the participants (the agent) off-stage (6.1.3). We show that the distribution of the passive participles between the two constructions represents an interaction between the Locative Alternation constructions and the passive construction. Another issue in focus are reduced constructions, where one of the participants is missing. We show that the two constructions behave differently in terms of reduction (6.1.4).

6.1.1. Binary regression model

The data on the Locative Alternation was analyzed using a logistic regression model in order to probe for a significant relationship between prefixes and grammatical constructions[22]. All calculations were carried out using the "R" software package (http://cran.at.r-project.org), glm, lrm and anova functions (this strategy is modeled after Baayen 2008, Gries 2009).

Our hypothesis that underlies the model is that three factors, namely (1) prefixes, (2) the number of participants in a frame and (3) the finite/participle form of a verb (as well as their interaction) contribute to the choice of either the Theme-Object or the Goal-Object construction. Thus, there are three independent nominal variables in the model:

(1) VERB, having four levels: "Ø" ("zero" for *gruzit'*), "na" (for *nagruzit'*), "za" (for *zaruzit'*) and "po" (for *pogruzit'*);

(2) REDUCED, having two levels: "yes" (for the reduced constructions, where one of the participants is missing) and "no";

(3) PARTICIPLE, also having two levels: "yes" and "no".

One dependent nominal variable CONSTRUCTION has two levels: "theme" and "goal". The null hypothesis, H_0, suggests that the frequencies of the Theme-Object or the Goal-Object constructions are independent of the VERB, REDUCED, PARTICIPLE variables and their pairwise interactions. The formula for interactions is given in (1) below.

---

(1) `glm(formula = CONSTRUCTION ~ VERB * REDUCED * PARTICIPLE,`
    `family = binomial, data = load)`

```
Coefficients:
                               Estimate Std. Error  z value Pr(>|z|)
(Intercept)                      1.4542     0.1963    7.407 1.29e-13***
VERBna                          -2.4069     0.2998   -8.029 9.85e-16***
VERBpo                          18.1118   747.4556    0.024 0.980668
VERBza                          -1.4225     0.2651   -5.365 8.10e-08***
REDUCEDyes                      -1.0202     0.2727   -3.741 0.000183***
PARTICIPLEyes                   -5.9541     1.0245   -5.812 6.19e-09***
VERBna:REDUCEDyes                0.1576     0.5402    0.292 0.770515
VERBpo:REDUCEDyes              -14.7172   747.4563   -0.020 0.984291
VERBza:REDUCEDyes                0.4384     0.3984    1.101 0.271097
VERBna:PARTICIPLEyes             2.0089     1.4520    1.383 0.166519
VERBpo:PARTICIPLEyes             5.9541   910.7860    0.007 0.994784
VERBza:PARTICIPLEyes             3.1602     1.1219    2.817 0.004849**
REDUCEDyes:PARTICIPLEyes       -14.0461  2688.5035   -0.005 0.995831
VERBna:REDUCEDyes:PARTICIPLEyes  0.2405  2927.9354 8.21e-05 0.999934
VERBpo:REDUCEDyes:PARTICIPLEyes 12.5200  2838.5882    0.004 0.996481
VERBza:REDUCEDyes:PARTICIPLEyes 14.0436  2688.5036    0.005 0.995832
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

(1) indicates that we are looking at the relationship of the dependent variable CONSTRUCTION with the three independent variables VERB (unprefixed, *na*-perfective, *za*-perfective, or *po*-perfective), REDUCED (full clause or a clause with a missing participant), PARTICIPLE (passive participles vs. other grammatical forms) and all their possible interactions VERB:REDUCED, VERB:PARTICIPLE, REDUCED:PARTICIPLE, VERB:REDUCED:PARTICIPLE. The type of the distribution is binominal since the variable CONSTRUCTION has two possible values.

The minimal adequate model retains all the independent variables as main effects, plus the interaction between VERB and PARTICIPLE (see Table 2 below). This means that there is a statistically significant relationship between the grammatical construction (Theme-object vs. Goal-object) and each of the following factors: 1) the shape of the verb (unprefixed, prefixed with *na-*, *za-*, *po-*), 2) the voice of the verb (active or passive), and the realization of the construction (full or reduced). In addition there is an interaction between the shape of the verb and voice in relation to the construction. Thus, each prefix behaves in a statistically different way in relation to the Locative Alternation, even when we take into account other factors. As shown below, the unprefixed verb *gruzit'* and its Natural perfective *pogruzit'* favor the Theme-Object construction, while *nagruzit'* and *zagruzit'* prefer the Goal-Object construction. The statistical test also detected that passive participles contribute to the choice of the construction. Finally, reduced frames favor the Goal-Object construction while full frames are used mainly in the Theme-Object construction.

Logistic regression shows that there is a highly significant correlation between the factors mentioned above and the choice of construction: LL-ratio χ^2 (the difference between the two deviance values, with and without predictors) is 1738.47, Nagelkerke's *R2* (correlational strength) is 0.796, *C* value (the coeffi-

cient of concordance which according to Gries (2009) should ideally be .8 or higher) is 0.964, Somer's D_{xy} (rank correlation between predicted and observed responses) is 0.928, $df = 8$, overall p is 0. The optimal model has high classificatory power: 88.5 % constructions are predicted correctly. The odds ratio, 95%-CI and p for the significant predictors VERB, REDUCED, PARTICIPLE, and VERB:PARTICIPLE are shown in Table 1:

Variable	Odds ratio	95%-Confidence Interval		p-value	
VERBna	0.097	5.928746e-02	1.549363e-01	< 2e-16	***
VERBpo	79.888	1.744470e+01	1.416632e+03	1.49e-05	***
VERBza	0.289	1.951300e-01	4.245384e-01	3.68e-10	***
REDUCEDyes	0.411	2.907612e-01	5.773928e-01	3.67e-07	***
PARTICIPLEyes	0.003	1.450705e-04	1.203072e-02	4.66e-09	***
VERB na:PARTICIPLEyes	5.881	2.244183e-01	1.541567e+02	0.219043	ns
VERB po:PARTICIPLEyes	289.170	9.203405e+00	9.763774e+03	0.000373	***
VERB za:PARTICIPLEyes	24.057	4.314377e+00	4.521877e+02	0.003034	**

Table 1. Statistical significance of the independent variables and their interactions.

In the next few sections we discuss each factor in more detail.

6.1.2. Non-passive forms of gruzit' 'load' and its Natural Perfectives

Table 2 shows the distribution of the non-passive forms of *gruzit'* 'load' and its Natural Perfectives across the two constructions of the Locative Alternation. Figure 1 presents the same distribution graphically in terms of relative frequency.

	Theme-Object constructions		Goal-Object constructions		Total
	raw frequency	relative frequency	raw frequency	relative frequency	
gruzit'	208	72.73%	78	27.27%	286
nagruzit'	34	23.13%	113	76.87%	147
zagruzit'	94	45.19%	114	54.81%	208
pogruzit'	253	99.61%	1	0.39%	254

Table 2. Locative Alternation among non-passive forms of *gruzit'* 'load' and its Natural Perfectives
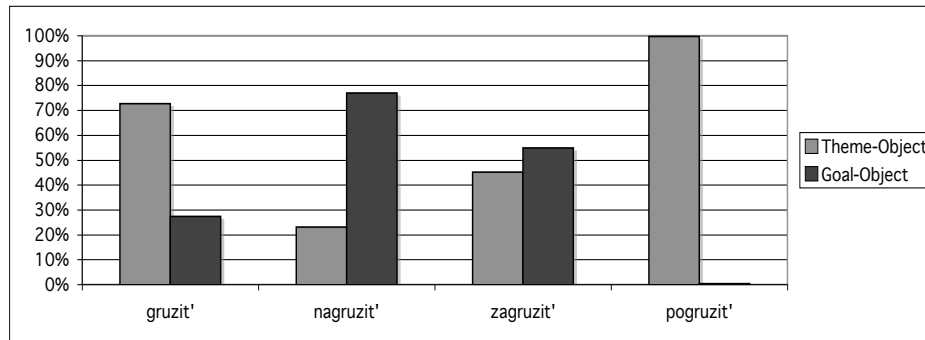
Figure 1: Locative Alternation among non-passive forms of *gruzit'* 'load' and its Natural Perfectives

According to our model, the variable VERB has a strong effect ($\chi^2 = 341.52$, $p < 2.2e\text{-}1$). On Figure 1, we see clear differences among the four 'load' verbs. The base imperfective *gruzit'* strongly prefers the Theme-Object construction. The *na-* prefixed perfective is nearly the mirror image, preferring the Goal-Object construction. This preference of *nagruzit'* for focusing on the goal may have to do with the SURFACE meaning of *na-*, which corresponds to the meaning of the corresponding preposition *na* 'onto' (which this verb also shows a strong predilection for). *Zagruzit'* shows an almost even distribution across the two constructions, whereas *pogruzit'* is almost exclusively restricted to the Theme-Object construction, suggesting a focus on the Theme that is loaded rather than the place where the load ends up.

Given that the perfective verb *pogruzit'* shows the same focus (i.e. on the Theme) as the unprefixed verb *gruzit'*, *pogruzit'* might seem to be the most natural perfective counterpart of *gruzit'*. However, the fact that the Goal-Object construction constitutes 27% of the total number of uses of *gruzit'* prevents us from making such conclusions. *Pogruzit'* is a natural perfective counterpart of *gruzit'* but only for the Theme-Object construction. Moreover, *gruzit'* and *pogruzit'* behave differently in terms of grammatical forms and reduction (see sections 4.3 and 4.4).

This finding is striking given that all three perfectives are traditionally considered to bear semantically "empty" prefixes. If the three prefixes were indeed empty, we would expect no effect, or at the very least, an identical effect across the three perfectives, i.e. a random distribution. Here, instead, we find that the three prefixed verbs behave very differently both from the unprefixed imperfective and from each other. We take this as strong evidence against the traditional "empty" prefix hypothesis, since a zero should have no effect, and we cannot countenance three "different" zeroes. As we see below in 4.3, the trends that are evident in the prefixed non-passive forms are even more pronounced in the passive forms.

6.1.3. Passive forms of gruzit' 'load' and its Natural Perfectives

Passive participles are used in passive constructions, and here we see an interaction between the two Locative Alternation constructions and the passive construction, as illustrated in examples (2) and (3). The Theme-Object construction has the Theme as the grammatical subject (2), whereas the Goal-Object construction has the Goal as the grammatical subject (3). Whichever item is the grammatical subject is thus strongly profiled, and the agent can be omitted altogether, as we see in both examples.

(2) *K dvum časam <u>vse vešči</u> byli vyneseny na ulicu i pogruženy <u>v avtomobil'</u>.*
[Proisšestvija (2003) // "Vstreča" (Dubna), 2003.06.04]
[Toward two hours-DAT <u>all things-NOM</u> were carried onto street-ACC and loaded <u>into automobile-ACC</u>.]
'Towards two o'clock <u>all the things</u> were carried out into the street and loaded <u>into the automobile</u>.'

(3) *<u>Pervyj tanker</u> byl zagružen v prisutstvii prezidentov Putina i Nazarbaeva.*
[Andrej Dernjatin. Neft' pošla po trubam (2001) // "Izvestija". 2001.10.09]
[<u>First tanker-NOM</u> was loaded in presence-LOC presidents Putin and Nazarbaev-GEN.]
'<u>The first tanker</u> was loaded in the presence of presidents Putin and Nazarbaev.'

Table 3 provides the Locative Alternation data for the passive participles of the 'load' verbs. Figure 2 visually presents the same data together with the relative frequencies of non-passive forms for comparison.

	Theme-Object constructions		Goal-Object constructions		Total
	raw frequency	relative frequency	raw frequency	relative frequency	
gružen	1	0.93%	106	99.07%	107
nagružen	1	0.45%	220	99.55%	221
zagružen	11	4.44%	237	95.56%	248
pogružen	447	99.55%	2	0.45%	449

Table 3. Locative Alternation among passive forms of *gruzit'* 'load' and its Natural Perfectives.
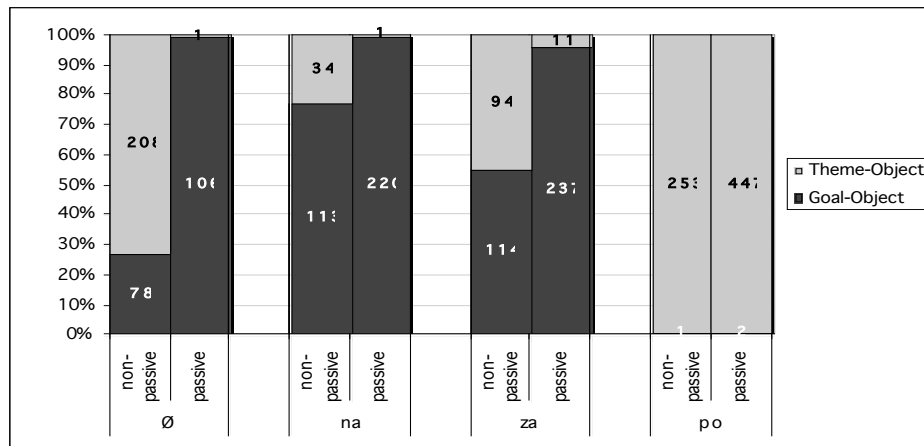
Figure 2: Locative Alternation among non-passive and passive forms of *gruzit'* 'load' and its Natural Perfectives.

Whereas *pogružen* retains its nearly exclusive preference for the Theme-Object construction, all other passive participles have a nearly exclusive preference for the Goal-Object construction. If we look at Figure 2, it may appear that the participles *gružen*, *nagružen*, *zagružen* behave virtually identically. However, they take different objects for the Theme and the Goal and also show different metaphorical representations. For instance, if we compare the metaphorical use of the participles *gružen*, *nagružen*, *zagružen* we find that *gružen* is hardly ever used metaphorically (2 examples out of 107, about 2%), for *nagružen* metaphorical contexts constitute about 22% (48 out of 221 total), while *zagružen* is characterized by almost 80% metaphorical contexts (176 out of 248).

Not only do participles with different prefixes show different distribution of metaphorical expressions but also the Theme and the Goal in those expressions are represented diffently. One of the most frequent Theme+Goal combinations for *zagružen* is WORK+HUMAN, where the human being serves as a metaphorical CONTAINER for work that represents metaphorical CONTENTS (example 4):

(4) *Vsju nedelju Ilja byl zagružen delami.* [Elena Belkina. Ot ljubvi do nenavisti (2002)]
    [All week Ilja-NOM was loaded works-INS]
    'The whole week Ilja was overloaded with work'

Such contexts exclude the use of *nagružen* (no such examples were attested in the corpus). On the other hand, only the participle *nagružen* can refer to WORDS as a metaphorical CONTAINER and MEANING as their metaphorical CONTENTS (example 5).

(5) *V russkom jazyke nekotorye slova nagruženy negativnym smyslom.* [Sergej
    Černyšev. Upravlenie sobstvennost'ju: russkij standart (2004) // "Èkspert",
    2004.12.20]
    [In Russian language <u>some words-NOM</u> are loaded <u>negative meaning-INS</u>]
    'In Russian <u>some words</u> are loaded <u>with negative meaning</u>'

The PARTICIPLE variable demonstrates a significant effect ($\chi^2 = 217.58$, *p*
< 2.2e-1) and at least part of the interaction between VERB and PARTICIPLE (for
prefixes *po-* and *za-*) is significant as well ($\chi^2 = 21.5$, p = 8.284e-05, see also
Table 2). Our analysis shows that the overall distribution of various construc-
tions within each verb is also dependent on the distribution of grammatical
forms within this verb. The frequency of the grammatical form (in our case of
the passive participles) is dependent on the verb (for more details see Janda and
Lyashevskaya 2011). Some of our verbs show a higher relative frequency of
passive participles: for instance, the proportion of non-passive forms to passive
forms for the unprefixed verb *gruzit'* is almost 3:1 (286 vs. 107 examples); the
verbs *nagruzit'* and *zagruzit'* show an almost even distribution of non-passive
and passive forms (1:1.5 and 1:1.2 respectively), while the proportion of the
same forms for the verb *pogruzit'* is 1:2 (254 vs. 449 examples).

As can be seen from Figure 2, passive participles have the effect of in-
creasing the relative frequency of the construction that is associated with a giv-
en verb. For instance, the distribution of the Theme-Object and Goal-Object
constructions with non-passive forms of the verb *nagruzit'* is 23% vs. 77%. For
passive forms, the same proportion is 0.5% to 99.5%, significantly increasing
the number of examples with the Goal-Object construction. The same effect is
attested for the verb *zagruzit'*: the non-passive and passive forms are character-
ized by a relatively even distribution between the constructions (45% of the
Theme-Object constructions vs. 55% of the Goal-Object constructions), while
4.4% passive forms take the Theme-Object constructions and 95.6% take the
Goal-Object constructions.

Since passive forms contribute significantly to the overall distribution of
the two constructions, the interaction between VERB and PARTICIPLE becomes
significant for *pogruzit'* (*p* = 0.000373) and *zagruzit'* (*p* = 0.003034). As a main
effect, PARTICIPLE overestimates the probability of the Goal-Object construction
because the two other verbs, *gruzit'* and *nagruzit'*, have only one case of the
Theme-Object construction with passive forms each. The inclusion of the inter-
action between VERB and PARTICIPLE more accurately represents this effect in
the model.

Thus the passive participles boost the frequency of the construction that is
more frequent for non-passive forms. The only exception is the unprefixed verb
gruzit', where passive participles change the preference for the construction
from the Theme-Object to the Goal-Object. This distribution is the result of
general tendencies within the Russian grammatical system, where passive parti-
ciples are usually formed exclusively from perfective verbs. In those cases

where imperfective verbs are characterized by a high frequency of passive participles, they basically perform the function of adjectives: cf. *kopčenyj* 'smoked' as in *kopčenaja ryba* 'smoked fish', *solenyj* 'salted' (*solenye ogurcy* 'pickles', literally 'salted cucumbers'), *žarenyj* 'fried' (*žarenoe mjaso* 'fried meat'). Passive forms of the verb *gruzit'* constitute only ¼ of the data and in the majority of cases characterize the state of the Goal, as in example 6):

(6) *My vozvraščalis'. Navstreču dvigalis' tjaželo gružennye <u>mašiny</u>.* [V. Ščerban'. Svalka // "Rabotnica", 1989]
    [We were-going-back. Towards were-moving heavily loaded <u>cars</u>-NOM]
    'We were going back. Heavily loaded <u>cars</u> were moving towards us'

In example (6), the participle basically loses its connection with the loading event and mainly refers to the state of the cars, i.e. being heavy.
Thus, the distribution of constructions appears to depend on grammatical forms. Furthermore, as we illustrate in the following section, constructions are sensitive to reduction.

6.1.4. Reduction

"Reduced constructions" overtly express the participant profiled as the direct object, while omitting the other participant. The tables below provide the frequencies for the reduced structures with non-passive (Table 4) and passive forms (Table 5) of the verb *gruzit'* 'load' and its Natural Perfectives. The same data is made more explicit in Figures 3 and 4.

All non-passive forms	Full constructions					Reduced constructions				
	Theme-Object construction		Goal-Object construction		total	Theme-Object construction		Goal-Object construction		total
	raw fr.	relative fr.	raw fr.	relative fr.		raw fr.	relative fr.	raw fr.	relative fr.	
gruzit'	137	81%	32	19%	169	71	61%	46	39%	117
nagruzit'	27	28%	70	72%	97	7	14%	43	86%	50
zagruzit'	64	51%	62	49%	126	30	37%	52	63%	82
pogruzit'[23]	207	100%	0	0%	207	46	98%	1	2%	47

Table 4. The distribution of reduced structures with non-passive forms of the verb *gruzit'* 'load' and its Natural Perfectives.

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[23] The diagram does not include the verb *pogruzit'* since it is almost never attested in the Goal-Object construction and the interaction between reduction and the construction does not seem to be relevant.

Passive forms	Full constructions					Reduced constructions				
	Theme-Object construction		Goal-Object construction		total	Theme-Object construction		Goal-Object construction		total
	raw fr.	relative fr.	raw fr.	relative fr.		raw fr.	relative fr.	raw fr.	relative fr.	
gružen	1	1%	90	99%	91	0	0%	16	100%	16
nagružen	1	0.7%	134	99.3%	135	0	0%	86	100%	86
zagružen	6	6%	95	94%	101	5	3.4%	142	96.6%	147
pogružen	427	100%	0	0%	427	20	91%	2	9%	22

Table 5. The distribution of reduced structures with passive forms of the verb *gruzit'* 'load' and its Natural Perfectives.
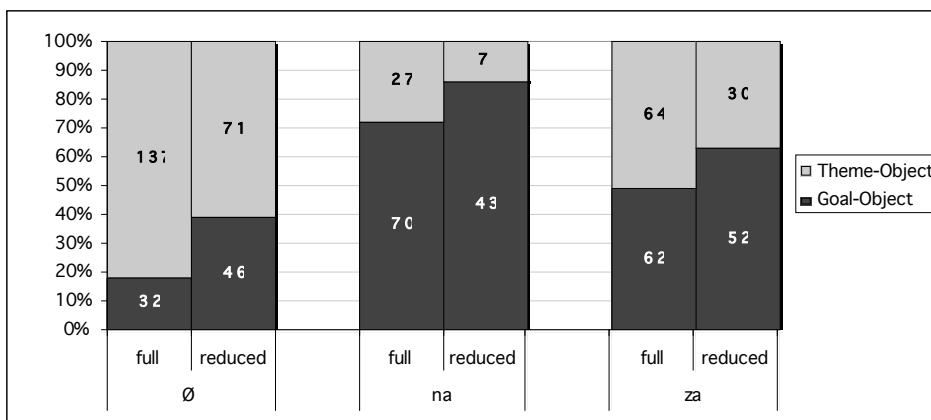

Figure 3. The distribution of reduced structures with non-passive forms of the verb *gruzit'* 'load' and its Natural Perfectives.
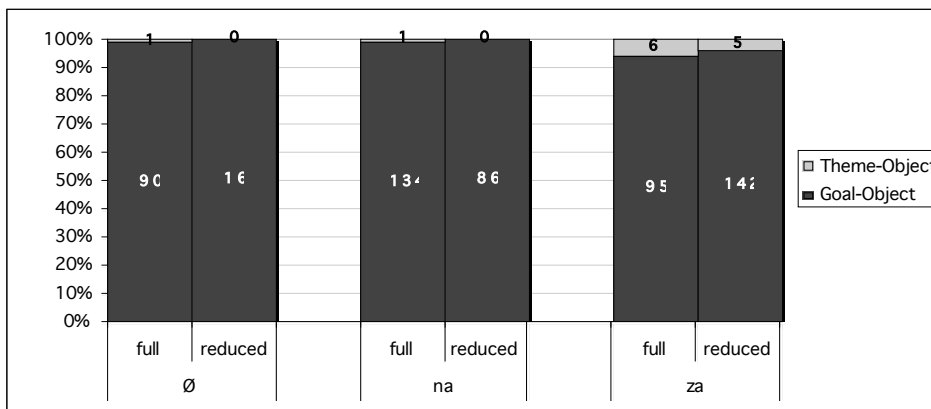

Figure 4. The distribution of reduced structures with passive forms of the verb *gruzit'* 'load' and its Natural Perfectives.

The REDUCED variable has a significant correlation with the choice of the construction ($\chi^2 = 26.8$, $p = 2.257\text{e-}07$). As can be seen from Figure 3, the Goal-Object construction shows a higher frequency with reduced constructions: about 20% higher for *gruzit'* and *nagruzit'* and 14% higher for *zagruzit'*. This proportion illustrates that the two constructions behave differently in terms of reduction. Furthermore, the only contexts where the verb *pogruzit'* is attested in the Goal-Object construction are reduced structures, as illustrated by example 7):

(7) …<u>mašinu</u> uže pogruzili… značit ona… s instrumentom/ da? [Vospominanie o prošlom N. Ušakovoj // M. V. Kitajgorodskaja, N. N. Rozanova. Reč' moskvičej. M., 1999, 1991]
[<u>Car-ACC</u> already they-loaded… so it-NOM … with tools-INS/ yes?]
'<u>The car</u> has already been loaded… So, the tools are already there, right?'

The car, represented as a direct object, is the Goal in the construction since the following context specifies that the car contains the tools, which are the Theme.
One more important difference between the Theme-Object and the Goal-Object constructions in terms of their relation to reduction is that the quality of reduced structures in the two constructions appears to be different. In examples (8) and (9), the missing component is mentioned in the previous context and thus can be treated as an instance of ellipsis:

(8) *No uže v bližajšee vremja ožidaetsja podxod <u>sudov</u> obščim tonnažem 780 tys. tonn. Tol'ko zagruzit' <u>ugol'</u> budet problematično, poskol'ku iz-za moroza on prevratilsja v glyby*. [Timur Xikmatov. Parovozy prosjat korablej (2003) // "Izvestija", 2003.01.15]
[But already in nearest time is-expected arrival of <u>vessels</u> (Goal that is omitted in the following sentence) with total tonnage 780 thousand tonnes. Just load <u>coal</u>-ACC will-be problematic, since due-to frost-GEN it-NOM turned-into into blocks-ACC.]
'But already very soon we expect the arrival of vessels with total tonnage of 780 thousand tons. Just getting <u>the coal</u> loaded will be problematic since due to the cold it has turned into blocks.'

(9) *Nikolaj … očen' skoro upravilsja s <u>pokupkami</u>, nagruzil <u>podvody</u> i, poka mužiki kormili lošadej, otpravilsja slonjat'sja po rjadam*. [A. I. Èrtel'. Gardeniny, ix dvornja, priveržency i vragi (1889)]
[Nikolaj … was very soon done with <u>purchases</u> (Theme that is omitted in the following phrase), loaded <u>wagon</u>-ACC and while men were feeding horses he went slouching about rows]
'Nikolaj … was very soon done with the <u>purchases</u>, loaded <u>the wagon</u> and while the men were feeding the horses he went slouching about the rows.'

Such cases are attested for both the Theme-Object and the Goal-Object construction. Yet, the Goal-Object construction is also characterized by cases where reduction interacts with metaphor. The major metaphorical extensions involve a "person" (Goal), who serves as the metaphorical CONTAINER, and "information"

or "work" (Theme), which represent metaphorical CONTENTS, as shown in examples (10-11) below:

(10) *On čto-to vdrug zagruzilsja i rešil zagruzit' svoego predannogo slušatelja*.
[Igor' Mal'cev. Muzyka (2002) // "Avtopilot", 2002.12.15]
[He-NOM somehow suddenly loaded-REFL and decided to-load his-ACC devoted-ACC listener-ACC]
'For some reason he suddenly got confused and decided to confuse his devoted listener.'

(11) *Koroče, on nagruzil artistov tak, čto v itoge my snjali xorošee kino*. [Kto ètot gospodin? (2004) // "Teatral'naja žizn'", 2004.06.28]
[In-short, he-NOM loaded artists-ACC so, that in end we shot good-ACC film-ACC]
'In short, he stressed the artists so much that we ended up shooting a good film.'

In example (10), a human being (the listener) serves as the metaphorical CONTAINER for information that represents metaphorical CONTENTS. Analogously, in (11), the human beings (the artists) are loaded with work.[24]

The Theme-Object constructions can also involve both metaphor and reduction, but such structures are less frequent than the Goal-Object construction and the missing component is usually present in the previous context:

(12) *Ja begom kinulsja domoj i, ne razdevajas', vključil kompjuter* (the Goal that is further omitted)*, zagruzil èlektronnuju kartu goroda*. [Nadežda Trofimova. Tret'je želanie // "Zvezda", 2003]
[I-NOM run-INS threw-self home and, not having-undressed, turned-on computer-ACC, loaded electronic map-ACC town-GEN.]
'I raced home and turned on my computer without even taking my coat off and downloaded the electronic map of the town.'

Example (12) involves the frame of computer use, where the computer is the CONTAINER, and electronic data are the metaphorical CONTENTS that are loaded into the computer.

In addition to the three correlations discussed above (between the construction and such factors as the verb, the grammatical form and reduction), our data also shows a correlation between the prefix and prepositions. This correlation can be attested only in the full version of the Theme-Object construction, for which reason we did not include it into our regression model. The next subsection examines the role of prepositions in more detail.

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[24] Such contexts should be distinguished from cases of ellipsis since the omission of the second participant is almost conventionalized. In Fillmore's terminology, sentences like (10) and (11) can be treated as "definite null instantiations" of the Theme, when a participant is consistently omitted, is not mentioned in the preceding context but yet is known to the speaker and the hearer (Fillmore 2008).

6.2. The verb MAZAT' 'daub, smear'

6.2.1. Non-passive forms of mazat' 'daub, smear' and its Natural Perfectives

The 'smear' verbs that we will consider in this section are the unprefixed base verb *mazat'* and its three perfective counterparts *namazat', zamazat', pomazat',* with the prefixes *na-*, *za-*, and *po-*. In Chapter 5 we pointed out that the verb *mazat'* 'daub, smear' has six Natural Perfectives, which in addition to the three prefixes mentioned above can also be formed with the prefixes *vy-*, *iz-*, *pro-*. The latter, however, are left outside the scope of our analysis since their semantics is more transparent and they limit the use of the prefixed verbs to only one construction, namely the Goal-Object.

The uses of the unprefixed *mazat'* 'daub, smear' are compatible with both the Theme-Object (see example 13 below) and the Goal-Object constructions (example 14):

(13) *I vručil mne obeščannuju kupjuru, kotoraja pozvolila nam vsju nedelju mazat' maslo na xleb*. [Nina Voronel'. Bez prikras. Vospominanija (1975-2003)]
[And handed me-DAT promised banknote-ACC, which-NOM allowed us-DAT all week-AC smear butter-ACC on bread-ACC]
'And he handed to me the promised banknote, which allowed us to have butter on our bread for the whole week'

(14) *Xleb maslom ne mažem: èto dopolnitel'nyj xolesterin i žiry*. [Garri Voskanjan i dr. Novosti (2000) // "Kar'era", 2000.02.01]
[Bread-ACC butter-INS not smear: this additional cholesterol-NOM and fat-NOM]
'We do not smear our bread with butter: that is additional cholesterol and fat'

In addition, this verb is also attested in a number of elaborated constructions. As shown in Chapter 4, elaborations represent interactions between two different constructions, causing a major restructuring. One of such elaborations is the Hybrid construction, where none of the participants is expressed as a direct object:

(15) *...xudožniku nado umet' risovat', mazat' kraskoj po xolstu...* [Pavel Mejlaxs. Izbrannik (1996) // "Zvezda", 2001]
[artist-DAT need know draw, smear paint-INS along canvas-DAT]
'...an artist needs to know how to draw, how to smear paint on canvas...'

(16) *Ona opustila na trotuar vedro, vynula iz nego kist' i stala mazat' kleem po stene rjadom s Ukazom Verxnogo Soveta.* [Aleksandr Čakovskij. Blokada (1968)]
[She-NOM let-go on sidewalk-ACC bucket-ACC, took-out from it-GEN brush-ACC and started smear glue-INS along wall-DAT row-INS with Directorate-INS Supreme Soviet-GEN]
'She put the bucket down on the sidewalk, took a brush out of it and started smearing glue on the wall right next to the Directorate of the Supreme Soviet.'

(17) *Ja duxami pod nosom namazala i ležu - ničego.* [Marina Višneveckaja. Vyšel mesjac iz tumana (1997)]
[I-NOM perfume-INS under nose-INS smeared and lie -- nothing-GEN]
'I smeared perfume under my nose and am lying down -- it's ok.'

The Theme-Object construction focuses on the Theme, showing how its location has been changed. The Goal-Object construction profiles the Goal and its change of state. However, in Hybrid constructions, the focus is not on the participants but on the action in general. For instance, in example (15), the verb *mazat'* 'daub, smear' paraphrases the verb *risovat'* 'draw, paint' by presenting painting in terms of smearing paint on canvas. Both participants, paint and canvas, are non-specific. Hence the Hybrid construction is chosen.

It has been pointed out earlier that the Hybrid construction is compatible with those verbs that take substances as their Themes. For this reason the Hybrid construction is not typical with the 'load' verbs (where the Theme stands for independent solid objects) but can be used with some 'smear' verbs (where the Theme represents a substance). More precisely, this construction is rather salient for the unprefixed verb *mazat'* 'daub, smear' and its Natural Perfective with *po- pomazat'* (the frequencies are provided in Table 1 which comes further down in this subsection after all the examples have been presented).

In the Hybrid construction both participants are usually overtly expressed. The typical instances of the Hybrid construction with the verb *mazat'* 'daub, smear' refer to contexts of applying paint onto flat surfaces like walls or canvases (see examples 15-16). Further elaboration of the Hybrid construction can lead to the omission of the Theme, as in example (18):

(18) *A potom mažu po bumage suxoj kistočkoj, i pod nej načinajut projavljat'sja kraski...* [Val'ter Zapašnyj. Risk. Bor'ba. Ljubov' (1998-2004)]
[And then smear along paper-DAT dry brush-INS, and under it-INS begin appear paints-NOM]
'And then I rub the paper with a dry brush, and beneath it colors start to appear...'

The Theme can also be replaced by the Instrument with which it is applied, cf. (19):

(19) *I on tak že strogaet, stučit molotkom, mažet kist'ju, učitsja, izobretaet...* [L. K. Čukovskaja. Dekabristy (1950-1951)]
[And he-NOM thus EMPH planes, bangs hammer-INS, smears brush-INS, learns, invents]
'And all the same he shaves wood, bangs with a hammer, smears with a brush, learns, invents...'

In examples like (19) the verb *mazat'* 'daub, smear' and the Instrument *kist'ju* 'with the brush' form a conventional collocation which refers to painting in a derogative sense. Furthermore, the verb *mazat'* 'daub, smear' can introduce situations with incremental movement, where no Theme is applied:

(20) *... gospodin Sverbeev trjaset zlopolučnyj frak... i mažet po nemu ščetkoj...* [Bulat Okudžava. Putešestvie diletantov (Iz zapisok ostavnogo poručika Amirana Amilaxvari) (1971-1977)]
[mister Sverbeev-NOM shakes unlucky tail-coat-ACC and smears along it-DAT brush-INS]
'...mister Sverbeev shakes the unlucky tail-coat... and rubs it with a brush...'

Contexts like (20) give rise to metaphorical extensions like (21) where the speakers refer to missing balls in a sports game:

(21) *Šajbovcy, lišivšiesja v rezul'tate istorii s dvadcat'ju dvumja mjačami vernogo gola, nervničali, často "mazali".* [Lazar' Lagin. Starik Xottabyč (1955)]
[Hockey-players-NOM, lost in result-LOC incident-GEN with twenty two balls-INS certain goal-GEN, were-nervous, often smeared]
'The hockey players, who had lost a certain goal because of the incident with the twenty-two balls, were nervous and often missed.'

The full structure will be *mazat' mjačem po vorotam* [smear ball-INS over the gate-DAT], however in the examples extracted from the corpus all the arguments in this structure are omitted except the Agent. The contexts of missing balls resemble the contexts that refer to missing in shooting, the only difference being that whenever the Theme is a bullet it is always reduced. Viz. it is possible to say *mazat' po mišeni* [smear over the target-DAT] but not **mazat' pulej po mišeni* [smear bullet-INS over the target-DAT]:

(22) *Streljaem, vernee, mažem po celjam ne my, a upravlenie kul'tury.* [Georgij Burkov. Xronika serdca (1953-1990)]

[Shoot, truer, smear along goals-DAT not we-NOM, but administration-NOM culture-GEN]
'We're not the ones who are shooting, or to be more accurate, missing the marks, but the Culture Administration.'

As can be seen, the elaborated contexts with *mazat'* 'smear' form a continuum which presents different stages of elaboration of the Hybrid construction. The relation between the examples described above is given in (23):

(23) *mazat' kraskoj po xolstu* (example 15) > *mazat' kist'ju* (example 19) > *mazat' ščetkoj* (example 20) > *mazat' mjačem po vorotam* (example 21) > *mazat' po mišeni* (example 22)

(15), (19) and (20) are Hybrid constructions whereas (21) and (22) are not. The first three examples do not have Natural Perfectives, which is an important characteristic of the Hybrid construction, and the verbs in the last two examples do. The borderline between (20) and (21) also separates the literal uses from metaphorical ones (examples (21) and (22) represent metaphorical extensions).

In the case of examples (15), (19), (20) the verb *mazat'* 'daub, smear' does not have a Natural Perfective. The Hybrid constructions are not resultative (see Chapter 4 for details) and hence they cannot combine with the prefixes *na-* and *za-* to create a resultative effect with *mazat'*. The only possible combination here is the one with the prefix *po-*, which in such contexts provides a delimitative effect:

(24) *...nater pastel', mjagkoj kist'ju pomazal po koške*
    (http://scalemodels.ru/modules/forum/viewtopic_t_2907_start_20.html)
    [rubbed-on pastel-ACC, soft brush-INS smeared along cat-DAT]
    '...he rubbed on pastel, smeared across the cat with a soft brush'

Examples like (24) are potentially possible within the system, but their attestations are very rare even on the Internet. Thus, examples (15), (19), and (20) can be treated as instances of the Hybrid construction. In general, the Hybrid construction is not compatible with prefixed verbs. The only exceptions are the prefix *po-* as shown above for the verb *mazat'* and the prefix *za-* for verbs like 'strew', which will be discussed in detail in Chapter 7.

In the case of examples (21) and (22) we find a Natural Perfectives for the verb *mazat'* the prefix *pro-*, illustrated in examples (25) and (26):

(25) *Velikij Bèkxem promazal po vorotam*
    (http://www.ochevidets.ru/rolik/1517/)
    [Great Beckham-NOM smeared along goal-posts-DAT]
    'The great Beckham missed the goal'

(26) *ja ne tol'ko promazal po mišeni, no popal daže ne v divan, a v stenku nad nim*
(http://anekdotov.net/story/all/jkomnatevshkafunaoskolkikotoryejaizzasvoe
jlenitakinevybrosil.htm)
[I-NOM no only smeared along target-DAT, but hit even not in sofa-ACC, but in wall-ACC above it-INS]
'I not only missed the target, but didn't even hit the sofa, I hit instead the wall above it'

Thus, examples like (21) and (22) represent a different elaboration and are not attributed to the Hybrid construction in our database. Other elaborations with the 'smear' verbs include examples like (27-29) below.

(27) *Medom po gubam ne mazal, ugovarivat' da l'stit' ne master, treboval surovo*. [I. A. Efremov. Lezvie britvy (1959-1963)]
[Honey-INS along lips-DAT no smeared, convince and flatter not master-NOM, demanded sternly]
'He didn't try to sweeten the deal, he has no talent for conning and flattery, he made a stern demand.'

The expression *mazat' medom po gubam* [smear honey-INS along lips-DAT] refers to a situation of teasing someone (in this sense *pomazat'* behaves similar to *pomanit'* 'beckon'). Such contexts can also take the Direct Object and have a Natural Perfective with the prefix *po-*, illustrated by (28):

(28) *Po gubam menja pomažet Pustota, Strogij kukiš mne pokažet Niščeta.* [Jurij Bezeljanskij. V sadax ljubvi (1993)]
[Along lips-DAT me-ACC smears emptiness-NOM, stern gesture me-DAT shows poverty-NOM]
'Emptiness will lure me on, Poverty will show me a stern gesture'

Whereas the unprefixed verb *mazat'* profiles all the arguments in this context, the prefixed verb *pomazat'* can reduce the Theme (as follows from example (28) above).

A salient elaboration with *pomazat'* involves contexts with anointing someone to be king (see example (29) below).

(29) … *prorok Samuil vtajne **pomazal** ego na carstvo v odnom iz izrail'skix plemen.* [Aleksandr Fadin. Solomon – praščur ljubvi (2002) // "Domovoj", 2002.01.04]
[prophet Samuel-NOM secretly annointed him-ACC on kingship-ACC in one-LOC from Jewish tribes-GEN]
'...the prophet Samuel secretly anointed him to be king of one of the Jewish tribes.'

The Theme in such contexts is usually omitted since as a rule it always refers to the balm[25] but there is an additional Goal argument *na carstvo* 'on kingdom-ACC' that is always profiled. The profiled Goal argument can also be replaced by the infinitive as in (30):

(30) *Avessalom, kotorogo my pomazali pravit' nami, pogib v boju* (http://bible-desktop.com/Bible/Вторая_книга_царств/19/NRT)
[Avessalom-NOM, who-ACC we smeared rule us-INS, perished in battle-LOC]
'Avessalom, who we annointed our ruler, perished in battle'

Another type of elaboration with the 'smear' verbs involves idioms that are related to drinking and gambling. These contexts require the prefix *za-*. In addition to the 109 examples of the Goal-Object construction attested for the verb *zamazat'*, we found 4 examples that represent elaborations referring to drinking and gambling like (31) and (32) below:

(31) - *Sadis'. Zamaž' stopku, skazal Salaxov.* [Oleg Kuvaev. Territorija (1970-1975)]
[Sit-down. Smear shot-glass-ACC, said Salaxov-NOM]
'Sit down. Drink a shot, said Salaxov'

(32) - *Net, nu davaj zamažem, čto ja reku pereplyvu!* [Proisšestvija (1997) // "Stolica", 1997.10.13]
[No, well give smear, that I-NOM river-ACC swim-across]
'No, well let's bet that I can swim across the river!'

Both sentences are highly idiomatic. In example (31) *zamazat'* 'smear' can be compared to *zalit'* 'pour', in which case it could be treated as a metaphorical extension of the reduced Theme-Object construction. The missing Goal here would be the throat. However, this relation appears to be very speculative from the perspective of the modern Russian. Example (32) always comes with a

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[25] An overt expression of the Theme is still possible when the Theme is not the balm, as example (31) from Chapter 4 illustrates:

(31) *Gibkij umom Konstantin sumel počti ne zapjatnat' sebja krov'ju mučenikov-inovercev; ne ottogo li on upustil slučaj* **pomazat'** *sebja na carstvo krov'ju svoego nedruga Galerija?* [Sergej Smirnov. Bylo pervoe leto Gospodne… // "Znanie – sila", 2003]
[Nimble-NOM mind-INS, Constantine-INS almost managed not stain self-ACC blood-INS non-Christian martyrs-GEN; not from-that whether he-NOM missed chance-ACC anoint self-ACC on kingship-ACC blood-INS own rival Galerius-GEN]
'Nimble of mind, Constantine managed to keep himself almost entirely free of stain from the non-Christian martyrs; wasn't it for this reason that he missed the chance to anoint himself to be king with the blood of his rival Galerius?'

clause and can be interpreted as "let's agree, let's bet". The verb in this case is analogous to Russian *posporit'* 'agree, bet'. It seems that in both cases we are dealing with situations where the verb *zamazat'* 'smear' is used in constructions that are not typical for this verb.

As we have shown, the 'smear' verbs show an extensive pattern of elaborations. This characteristic of the 'smear' verbs distinguishes them significantly from the 'load' verbs that are used only in the Theme-Object and the Goal-Object constructions.

Table 6 shows the distribution of the non-passive forms of *mazat'* 'smear' and its perfective counterparts with the Locative Alternation constructions. We show frequencies with the two prototypical constructions (the Theme-Object and the Goal-Object) and the frequencies with elaborations. The numbers for the elaborations also include the Hybrid construction. Figure 5 presents the same distribution graphically in terms of relative frequency.

All non-passive forms	Theme-Object construction		Goal-Object construction		Elaborated (including Hybrid)		Total
	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	
mazat'	8	4%	174	81%	30 (10 Hybrid)	15%	212
namazat'	19	15%	103	83%	2 (1 Hybrid)	2%	124
zamazat'	0	0%	109	96%	4 (0 Hybrid)	4%	113
pomazat'	0	0%	63	85%	11 (1 Hybrid)	15%	74

Table 6. Locative Alternation within the non-passive forms of the Russian 'smear' verbs.
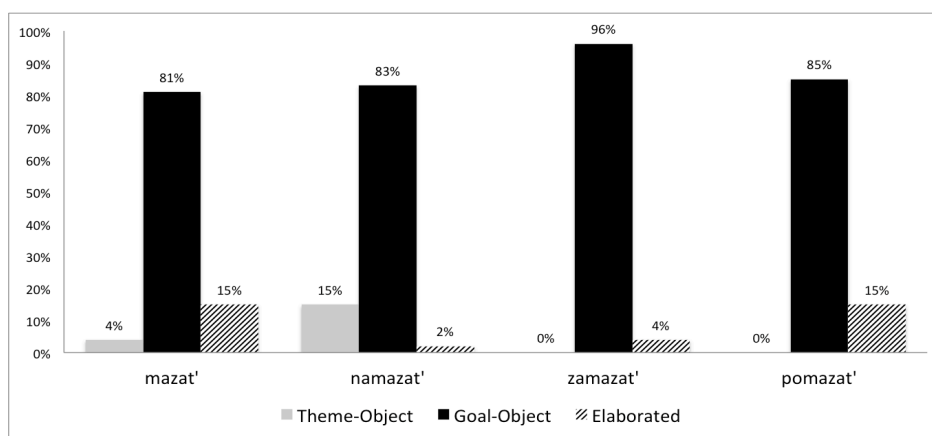

Figure 5. Locative Alternation within the non-passive forms of the Russian 'smear' verbs.

As can be seen from both Table 6 and Figure 5, all 'smear' verbs strongly prefer the Goal-Object construction. Two of them, *zamazat'* and *pomazat'*, are

not attested in the Theme-Object construction at all. The reason for this is the specificity of 'smear' verbs in general. Although we are dealing with a situation of applying something somewhere, both participants are relatively specific, since the Theme is always a substance (butter, grease, paint, lotion, etc.) and the Goal is always a surface. Moreover, since the number of substances that we are applying is rather limited, the Goals are often predictable: as a rule, it is bread, a human body or flat surfaces like walls. Conceptually, it is more important for humans to mark what changes are caused to parts of their body or to the walls that they are painting, rather than how the location of lotion or paint is changed. This peculiarity of 'smear' verbs results in the observed asymmetry. With verbs like *mazat'* and *namazat'* we can have both interpretations, but a more natural (default) way of construing the situation of smearing by means of the Goal-Object construction.

The four 'smear' verbs show similar behavior in the choice of the construction but differ in respect to the Themes and Goals that they select. Roughly summarizing, *namazat'* chooses words like 'bread' (example 33-34), *zamazat'* goes with walls and holes (example 35), and *pomazat'* specializes on human body parts (example 36):

(33) *Otrezal ogromnyj lomot' xleba, namazal ego maslom* [Svetlana Vasilenko. Duročka (1998)]
[Cut huge slice-ACC bread-GEN, na-smeared it-ACC butter-INS]
'He cut a big slice of bread and smeared it with butter'

(34) *On otrezal sebe serogo xleba i namazal na nego sloj varen'ja.* [A. I. Cvetaeva. Skaz o zvonare Moskovskom (1976)]
[He-NOM cut himself-DAT grey bread-GEN and na-smeared on it-ACC layer-ACC jam-GEN]
'He cut a piece of grey bread for himself and smeared it with a layer of jam'

(35) *I vot kto-to noč'ju nasverlil vo dne lodki massu otverstij i zamazal ix glinoj…* [Vladimir Timakov. Vysokopreosvjaščennyj Kirill, arxiepiskop Penzenskij i Saranskij (1998) // "Al'fa i Omega", 2000-2001]
[And here someone-NOM night-INS drilled in bottom-LOC boat-GEN mass-ACC holes-GEN and za-smeared them-ACC clay-INS]
'And at night someone made many holes in the bottom of the boat and filled them with clay'

(36) *Pust' tvoi rodstvenniki prinesut obezbolivajuščuju maz', pomažeš' spinu.* [Diskriminacija po priznaku mesta žitel'stva i ètniceskomu priznaku v Moskve i Moskovskoj oblasti. Avgust-dekabr' 1999 (1999)]
[Let your relatives-NOM bring analgesic ointment, po-smear back-ACC]

'Your relatives should bring you analgesic ointment so that you could smear your back (with it)'

Interestingly, of all the prefixed perfective counterparts of *mazat'*, only *namazat'* can alternate between the two constructions. The prefix *na-*, which has the meaning of 'on', is perfectly compatible with Goals as surfaces. The meaning of the prefix *na-* corresponds to the meaning of the corresponding preposition *na* 'onto' (which this verb also shows a strong predilection for). Thus, in the case of *namazat'* we deal with an overlap between the semantics of the verbal root and the semantics of the prefix, which creates more possibilities for alternation. Since *namazat'* usually marks bread as the Goal and spread (butter, jam, caviar, etc.) that is put on the bread as the Theme, both participants can be easily profiled by the speaker (the spread and the bread are equally important in our meal, although more often we put the focus on the bread).

Summarizing our observations concerning the 'smear' verbs we can say that the verb *mazat'* 'daub, smear' is rather central for the Locative Alternation verbs since it can alternate between the two prototypical Locative Alternation constructions similar to the verb 'load'. Moreover, the verbs *mazat'* and *gruzit'* are the only two verbs that have Natural Perfectives (that can also show alternation). For these reasons the verbs are located in the central section of the diagram presenting the relation between the Locative Alternation verbs given in Chapter 2.

However, the verb *mazat'* 'daub, smear' also differs from the verb *gruzit'* 'load' in several important ways. First, the distribution with *mazat'* is strongly in favor of the Goal-Object construction. Moreover, only one of the prefixed counterparts, namely the one with the prefix *na-*, shows alternation among the Natural Perfectives of *mazat'*. Second, in addition to the Theme-Object and the Goal-Object constructions, the verb *mazat'* 'daub, smear' is characterized by a large number of elaborations which can be explained by the fact that the verb *mazat'* takes substances and not solid objects as Themes.

6.2.2. Passive forms of mazat' 'daub, smear' and its Natural Perfectives

As has been pointed out in section 6.1, passive forms show a slightly different distribution among the Locative Alternation constructions. For the 'load' verbs we have marked that, first, passive participles are mostly derived from perfective verbs and hence they are not common for the unprefixed verb *gruzit'* 'load'. Second, passive participles boost the effect attested in the non-passive forms: whichever construction is more frequent with the non-passive forms shows an even higher frequency with the passives.

Both observations are also true for the 'smear' verbs. Table 7 below provides frequencies for the passive forms of the four 'smear' verbs with the Theme-Object and the Goal-Object constructions and their elaborations. The frequencies are compared to those of the non-passive forms discussed in the previous subsection.

All passive forms	Theme-Object construction		Goal-Object construction		Elaborated		Total
	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	
mazan	0	0%	22	100%	0	0%	22
namazan	6	5.3%	81	88%	4	6.7%	91
zamazan	0	0%	75	100%	0	0%	75
pomazan	0	0%	5	55.6%	4	44.4%	9

Table 7. Locative Alternation among passive forms of *mazat'* 'daub, smear' and its Natural Perfectives.
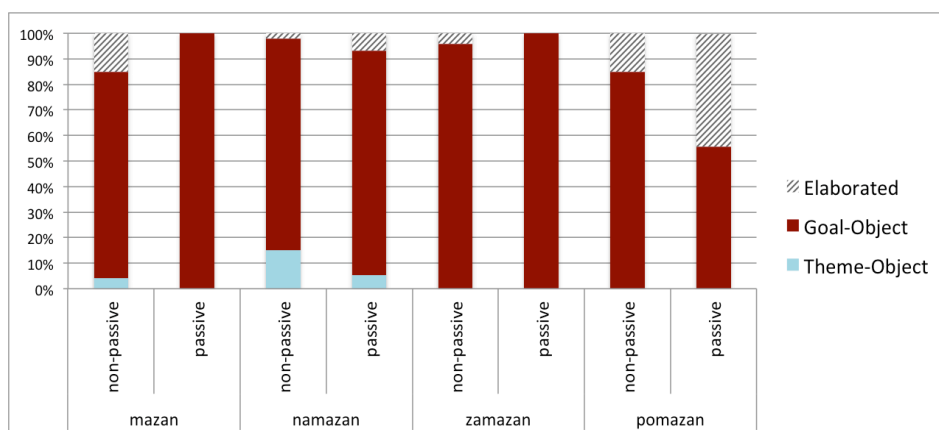
Figure 6. Locative Alternation among passive and non-passive forms of *mazat'* 'daub, smear' and its Natural Perfectives.

The dominant construction for all the passive forms of the 'smear' verbs is the Goal-Object construction. The effect is expected given that the Goal-Object construction is a prevailing construction for the non-passive forms.

Another effect concerns the Theme-Object construction that is attested only for the unprefixed verb *mazat'* 'daub, smear' and its Natural Perfective with the prefix *na-*. The Theme-Object construction is less common for the 'smear' verbs for the reason discussed in the previous subsection (i.e. less focus on the Theme since the Theme is necessarily a substance and because its nature

is known it is often omitted), thus the frequencies for the Theme-Object construction are even lower with the passive participles.

We find a similar effect for the elaborated constructions. Passive forms set restrictions on the use of the Hybrid construction since it does not contain a Direct Object. The passive construction selects one of the arguments (the one expressed as a Direct Object in the Theme-Object and the Goal-Object constructions) and places it in the Subject position. Interestingly, we do find the Hybrid construction in the passive forms of the verb *namazat'* 'daub, smear', as in examples (37) and (38) below:

(37) *Naprimer, ogromnyj nomer, namazannyj zelenkoj na bedre, ves'ma effektno, nado skazat'.* [Jurij Azarov. Podozrevaemyj (2002)]
[For-example, huge number-NOM, smeared brilliant-green-INS on hip-LOC, very effective, must say]
'For example, one must admit that the huge number painted in brilliant green on the hip is very effective.'

(38) *Strašnaja to li koška, to li kurica, jarkimi cvetami namazannaja na xolste skoree vsego nogoj.* [Aleksandr Vjal'cev. Putešestvija v odnu storonu (1985-2000) // "Zvezda", 2001]
[Terrible-NOM that whether cat-NOM that whether chicken-NOM bright colors-INS smeared on canvas-LOC sooner all-GEN foot-INS]
'A terrible thing, which was either a cat or a chicken, was smeared on the canvas in bright colors, mostly likely applied with the foot.'

In the case of *namazat'* we deal with a special situation where the Theme-Object construction also contains an additional Theme in the Instrumental case. On the one hand, contexts like (38) are similar to the passive version of the Theme-Object construction, where an image of a cat (the Theme) is applied, i.e. 'smeared', on the canvas (the Goal). The Goal in such structures is expressed by the Locative case instead of the prepositional phrase with Accusative. On the other hand, elaborated examples like (38) are also similar to the Hybrid construction since we have both a Theme in the Instrumental case (colors) and the Goal (the canvas). The first Theme (the image of the cat) and the second Theme (the colors), which can also be interpreted as an Instrument, are in a metonymical relation since the first is the container for the second. Examples like (37) and (38) are tagged as elaborations and not the Theme-Object construction with an additional argument, namely the Instrument, since the structure of the Theme-Object construction is also altered: the Goal is expressed by the Locative case. All four elaborations with the passive forms of the verb *namazat'* 'daub, smear' involve examples of applying images on a surface.

The Natural Perfective with the prefix *po-* shows a low frequency with the passive participles. Examples with the passive forms of the verb *pomazat'*

'daub, smear' refer to literal uses like (39) or elaborated constructions as in (40):

(39) *Na Pasxu prodajutsja vsjudu kuliči, pomazannye beloj pomadkoj, posy-
pannye raznocvetnoj kroškoj.* [Tat'jana Nabatnikova. Den' roždenija koški (2001)]
[On Easter-ACC be-sold everywhere Easter-breads-NOM, smeared white cream-INS, strewed multicolored sprinkles-INS]
'At Easter time they sell everywhere Easter-breads smeared with white cream and strewn with multicolored sprinkles.'

(40) *Ja, bratiki, na sii otvety pred gospodom pomazan konstantinopol'skom pat-
riarxom.* [Ju. P. German. Rossija molodaja. Čast' vtoraja (1952)]
[I-NOM, brothers-NOM, on these answers-ACC before lord-INS smeared Constantinople patriarch-INS]
'Dear brothers, I have been annointed by the patriarch of Constantinople to give these answers.'

Elaborated examples represent 4 out of the 9 total contexts with the passive participles of the verb *pomazat'*.

Similar to the situation with the unprefixed *gruzit'* 'load', we also find passive forms for the unprefixed verb *mazat'* 'daub, smear', see example (41):

(41) *Ja podbrosil srazu drov, otkryl tušenku, mazannuju solidolom, narezal
xleb, nalil spirtu...* [Mit'ki. Zimnjaja muxa (1992)]
[I-NOM threw immediately wood-GEN, opened canned-meat-ACC, smea-
red ???-INS, cut bread-ACC, poured alcohol-GEN]
'I immediately threw some wood on the fire, opened the canned meat smea-
red with ???, cut the bread, poured out alcohol...'

However, there are only 22 examples of such contexts, which is a relatively low number given that *mazat'* has 212 examples in the non-passive forms (note that with the verb *gruzit'* 'load' the same frequencies are 286 non-passive forms vs. 107 passive forms).

Moreover, the most common context with the passive forms of the unpre-
fixed verb *mazat'* 'daub, smear' is *odnim mirom mazany* [one-INS balm-INS smeared-PL] which literally means 'all people are the same/ no one is perfect'. From the 22 examples attested for the passive participles of the unprefixed verb *mazat'*, 19 examples contain this expression, as in example (42) below:

(42) *Vse my odnim mirom mazany, daže protivno stalo posle takix razmyšlenij!*
[Gennadij Nikolaev. Veščie sny tixogo psixa // "Zvezda", 2002]
[All we-NOM one balm-INS smeared, even disgusting became after such thoughts-GEN]

'We are all the same, it is even disgusting to have had such thoughts!'

To summarize for the verb *mazat'*, The Goal-Object construction is even more dominant in the passive forms than in the non-passive forms. The Hybrid construction in general is not compatible with the passive forms. There is a special situation with *namazat'* where the Theme-Object construction also contains an additional Theme in the Instrumental case and there are metonymical relations between the image and the substance with which it is painted. *Namazat'* is the only 'smear' verb where the Theme-Object construction is attested with passive forms. Note that the frequency for the Theme-Object construction is the highest for the same verb with the non-passive forms. *Pomazat'* shows a low frequency with the passive forms. This is because the prefix *po-* has a very defused semantics and thus is not able to focus the emphasis on one of the participants. The frequency of the passive participles with the unprefixed verb *mazat'* 'daub, smear' is relatively high due to a single conventional expression *odnim mirom mazany* 'all people are the same/ no one is perfect'.

6.2.3. Reduction

The present subsection observes the relation between prefixes, constructions and reduction. Reduced constructions represent structures where the participant profiled as a direct object is expressed overtly and the second participant is omitted. For the verb *gruzit'* 'load' it has been pointed out that the Goal-Object construction shows a higher frequency with reduced constructions. A similar correlation is also attested in the case of the 'smear' verbs. The tables below provide the frequencies for the reduced constructions with non-passive (Table 8) and passive forms (Table 9) of the verb *mazat'* 'daub, smear' and its Natural Perfectives.

All non-passive forms	Theme-Object construction			Goal-Object construction			Hybrid		
	Reduced		Total	Reduced		Total	Reduced		Total
	raw fr.	relative fr.		raw fr.	relative fr.		raw fr.	relative fr.	
mazat'	4	50%	8	49	28%	174	3	30%	10
namazat'	7	33%	19	13	13%	103	0	0	1
zamazat'	0	0%	0	80	74%	109	0	0	0
pomazat'	0	0%	0	5	8.5%	63	0	0	1

Table 8. Reduction with non-passive forms of *mazat'* and its counterparts.

All passive forms	Theme-Object construction			Goal-Object construction		
	Reduced		Total	Reduced		Total
	raw fr.	relative fr.		raw fr.	relative fr.	
mazan	0	0%	0	1	4.5%	22
namazan	2	33%	6	21	33%	81
zamazan	0	0%	0	33	44%	75
pomazan	0	0%	0	0	0%	5

Table 9. Reduction with passive forms of *mazat'* and its counterparts.

The tables first present raw frequencies for the reduced structures with each given construction and then provide the same numbers in terms of relative frequencies. A total number for each construction is given in the column "Total". The quantity of reduced structures as the percentage of the total number of a given construction is listed in the column "Relative frequency".

Table 8 provides frequencies for the reduced structures in the non-passive forms with the Theme-Object (example 43), the Goal-Object (example 44), and the Hybrid constructions (examples 45-46):

(43) *...ona...zaderžalas' v prixožej u zerkala, na tumbočke pod kotorym deržala raznuju kosmetiku, pričesalas' i daže pomadu namazala...* [Goar Markosjan-Kasper. Kariatidy // "Zvezda", 2003]
[she-NOM stayed in hall-LOC by mirror-GEN, on stand-LOC under which-INS kept various cosmetics-ACC, did-hair and even lipstick-ACC smeared]
'...she...stayed behind in the hall by the mirror beneath which she kept various cosmetics in a stand, she did her hair and even put on lipstick...'

(44) *Namazav buterbrody, akkuratno, kak èto obyčno delajut xolostjaki, razloži-li ix na tarelke.* [Vitalij Kržtalovič. Osada // "Zvezda", 2002]
[Having-smeared sandwiches-ACC, carefully, like it-ACC usually do bachelors-NOM, spread them-ACC on plate-LOC]
'After they made sandwiches, they set them on the plate in the careful way that bachelors often do.'

In reduced Theme-Object constructions the Goal is omitted, whereas the Theme is profiled as a direct object. For instance, in example (43), the omitted Goal refers to 'lips' on which the Theme, namely 'lipstick', is applied. Similarly, reduced Goal-Object constructions lack overt expression of the Theme. Example (44) profiles the Goal (sandwiches) as a direct object but omits the Theme, which would refer to a spread applied on the Goal.

Note that the Hybrid construction is only attested for the non-passive forms of the unprefixed verb *mazat'* 'daub, smear'. Reduction in this case usu-

ally involves the omission of the Theme, as in examples (45-47) below (these are all the examples of this type):

(45) *A potom mažu po bumage suxoj kistočkoj, i pod nej načinajut projavljat'sja kraski...* [Val'ter Zapašnyj. Risk. Bor'ba. Ljubov' (1998-2004)]
[And then smear along paper-DAT dry brush-INS, and under it-INS begin appear paints-NOM]
'And then I rub the paper with a dry brush, and beneath it colors start to appear...'

(46) *I on tak že strogaet, stučit molotkom, mažet kist'ju, učitsja, izobretaet...* [L. K. Čukovskaja. Dekabristy (1950-1951)]
[And he-NOM thus EMPH planes, bangs hammer-INS, smears brush-INS, learns, invents]
'And all the same he shaves wood, bangs with a hammer, smears with a brush, learns, invents...'

(47) *Lučše už vovse ne pit', čem po gubam-to mazat'.* [Vasilij Šukšin. Nakaz (1972-1973)]
[Better already altogether not drink, than along lips-DAT smear]
'It is better not to drink at all than to be teased.'

Examples (45-46) omit 'paint' as the Theme, and in the same way example (47) reduces the Theme argument which refers to 'alcohol'. Both cases can be treated as instances of definite null instantiation.

Passive forms do not have Hybrid constructions since the Hybrid construction is incompatible with passives (see discussion in the precious subsection). Moreover, the passive forms of the 'smear' verbs have a strong preference for the Goal-Object construction. The only 'smear' verb where reduction is attested in both the Theme-Object (example 48) and the Goal-Object (example 49) constructions is the Natural Perfective with the prefix *na-*.

(48) *Marina i sonnaja Ljudočka, navjazannaja ej v naparnicy, často ne ponimali, na čto oni lepjat ob"javlenija, norovivšie zavernut'sja i liznut' namazannym kleem zamerzšuju ruku.* [Ol'ga Slavnikova. Bessmertnyj. Povest' o nastojaščem čeloveke. (2000-2001) // "Oktjabr'", 2001]
[Marina-NOM and sleepy Ljudočka-NOM, joined her-DAT in fellow-workers-ACC, often not understood, on what-ACC they-NOM paste announcements-ACC, tried curl-up and lick smeared glue-INS frozen hand-ACC]
'Marina and sleepy Ljudočka, who had joined her as a helper, often did not understand what was the point of the announcements they pasted up, which tried to curl up and lick their frozen hands with the glue that was smeared on them.'

(49) *Možno vozrazit' Gofmanu, čto buterbrod vsegda padaet namazannoj sto-*
ronoj. [Ju. K. Oleša. Kniga proščanija (1930-1959)]
[Possible protest Gofman-DAT, that sandwich-NOM always falls smeared
side-INS]
'One can protest to Gofman that the toast always falls jelly side down.'

This result is consistent with the fact that *namazat'* 'daub, smear' has the high-
est frequency of the Theme-Object construction among all 'smear' verbs. We
observe an overlap between the semantics of the prefix *na-* (which bears a ref-
erence to a surface) and the semantics of the verb (the Goal of which is always
specified as a surface).

The figures below summarize the data given in Tables 8 and 9 and show
the preferences for each construction in relation to reduction, i.e. which con-
struction has a higher and lower percentage of reduced structures.
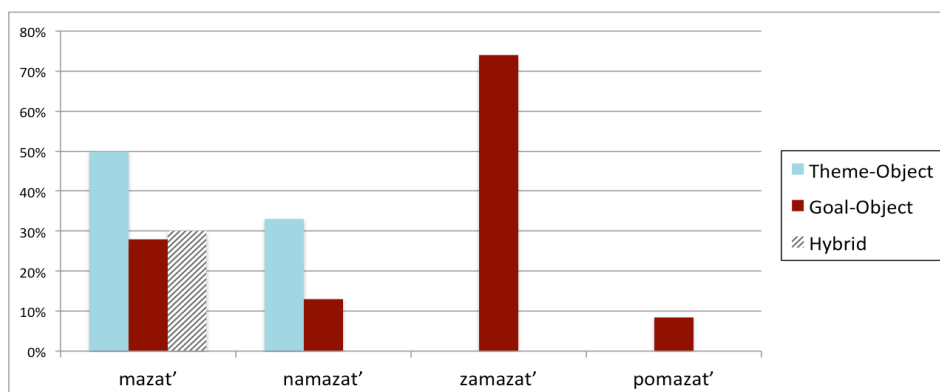

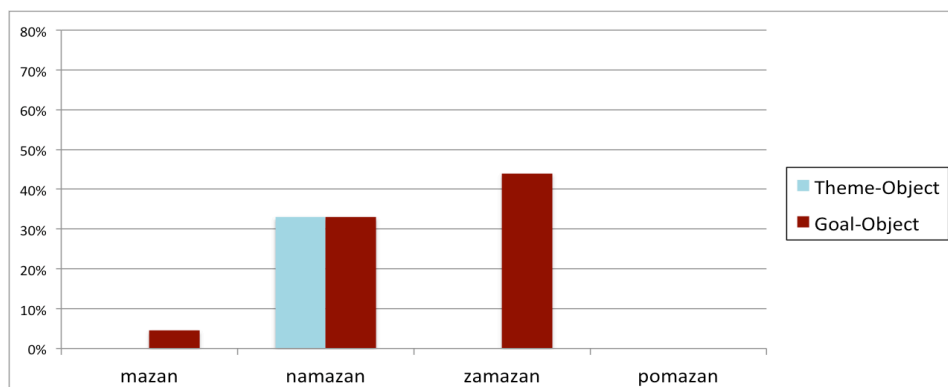Figure 7. Reduction with non-passive forms of *mazat'* and its counterparts.

Figure 8. Reduction with non-passive forms of *mazat'* and its counterparts.

As follows from Figures 7 and 8, reduction in general is more associated with the Goal-Object construction, which is parallel to the effect attested for the 'load' verbs. The similarities also concern the prefix that most triggers reduction. With both the 'load' and 'smear' verbs it is the prefix *za-*, as in example (50):

(50) *A očeredi vse rosli i s každym dnem šumeli gromče. Šum pronikal daže skvoz' zamazannye okna...* [I. Grekova. Fazan (1984)]
[But lines-NOM all grew and with every day-INS sounded louder. Noise-NOM penetrated even through smeared windows-ACC]
'But the lines kept growing and every day they were noisier. The noise even penetrated through the windows that had been painted over.'

The prefix *po-* is less common with reduction due its less specified semantics and tends to express both participants overtly.

Unlike *gruzit'* 'load' (with 107 passive examples), *mazat'* 'daub, smear' is attested only in one passive context:

(51) *Oni čadili, kolesa delali vos'merki i vizžali, ottogo čto osi ix byli, navernoe, godami ne mazany.* [Efim Čepoveckij. Neposeda, Mjakiš i Netak (1989)]
[They-NOM smoked, wheels-NOM made eights-ACC and squeaked, from that axles-NOM their were, probably, years-INS not smeared]
'They smoked, the wheels wobbled in figure eights and squeaked since their axles probably hadn't been greased for years.'

As has been pointed out in subsection 6.1.3, the passive particples with *gruzit'* 'load' basically perform the function of adjectives (*tjažėlo gružennye mašiny* 'heavily loaded cars'). We do not find such effects with *mazat'* 'daub, smear', hence the frequency with passive particples is very low.

Finally, *mazat'* 'daub, smear' is characterized by omissions in the elaborated constructions. However, such omissions should be treated as instances of restructuring rather than reduction. Reduction refers only to modifications of a single construction. However, elaboration presupposes an interaction between two or more constructions, some of which are ommitted in order to accommodate the multiplicity of constructions in a single clause.

6.3 Constructions and Metaphorical Extensions

In the present section we will look at the metaphorical extensions of the Russian 'load' and 'daub, smear' verbs. In particular, we will be interested in the way metaphor interacts with prefixes (6.3.1), constructions (6.3.2), reduction (6.3.3), and grammatical forms (i.e. in the distribution of metaphorical extensions with passive participles (6.3.5)). In addition, in order to illustrate the differences attested for different prefixes, we will analyze the major metaphorical patterns (combinations of Themes and Goals, see 6.3.4).

6.3.1. Metaphor and prefixes

The verb GRUZIT' 'load'

In Section 6.1, we saw clear differences among the four 'load' verbs in the distribution of the prefixes and the two locative constructions. *Pogruzit'* is almost exclusively restricted to the Theme-Object construction, the *na-* prefixed perfective is nearly the mirror image, preferring the Goal-Object construction, while *zagruzit'* shows an almost even distribution across the two constructions. If we can say that *po-* is used in the Theme-Object construction and *na-* mainly marks the Goal-Object construction, it remains unclear what is the special function of *za-*. As the analysis in this subsection shows, in addition to constructions, metaphor should be taken into account. Table 10 illustrates the correlation between two factors, i.e. metaphor and prefixes (for the non-passive forms). Here reduced, full and extended constructions are considered together. The same frequencies are visualized in Figure 9.

All non-passive forms	non-metaphorical		metaphorical		Total
	raw fr.	relative fr.	raw fr.	relative fr.	
gruzit'	186	75%	63	25%	**249**
nagruzit'	110	75%	37	25%	**147**
zagruzit'	127	61%	81	39%	**208**
pogruzit'	227	89%	27	11%	**254**

Table 10. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the verb *gruzit'* 'load' and its Natural Perfectives (non-passive forms).

Figure 9. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the verb *gruzit'* 'load' and its Natural Perfectives (non-passive forms).

As can be seen from Figure 9, *za-* is the prefix that is most popular in metaphorical contexts. This effect is further enhanced if we take other factors into account, such as constructions and reduction.

The verb MAZAT' 'daub, smear'

Below we present the data for 'smear' verbs that is parallel to the verbs 'load' above.

All non-passive forms	non-metaphorical		metaphorical		Total
	raw fr.	relative fr.	raw fr.	relative fr.	
mazat'	171	80.7%	41	19.3%	**212**
namazat'	116	93.5%	8	6.5%	**124**
zamazat'	83	78%	26	22%	**109**
pomazat'	58	78%	16	22%	**74**

Table 11. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the verb *gruzit'* 'load' and its Natural Perfectives (non-passive forms).
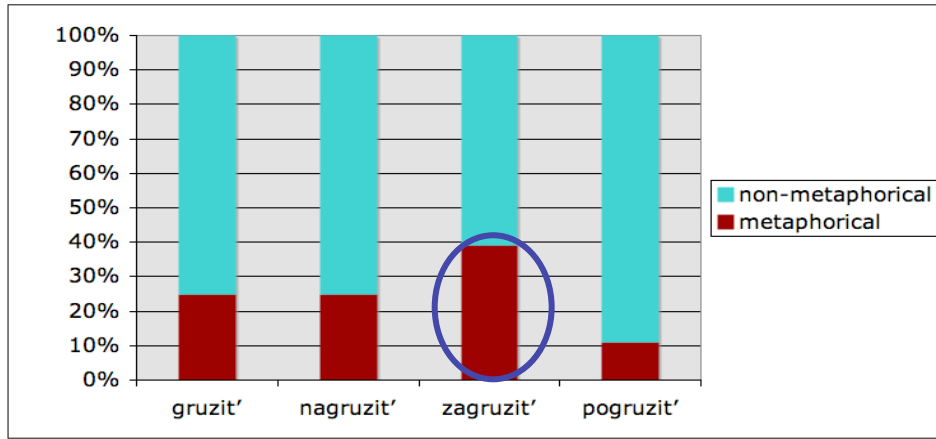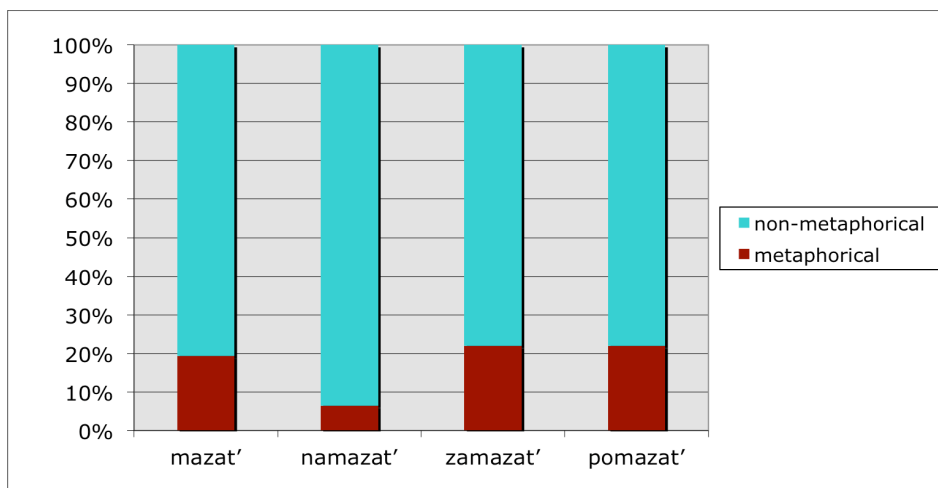
Figure 10. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the verb *mazat'* 'daub, smear' and its Natural Perfectives (non-passive forms).

The 'smear' verbs differ considerably from 'load' verbs in that the 'smear' verbs are mostly characterized by literal uses (metaphorical uses here constitute around 20% of all contexts). This effect is even more striking for *namazat'* 'daub, smear', where metaphorical extensions represent only 6.5% of the total use. This result is predictable given that *namazat'* appears to be the closest Natural Perfective for *mazat'* in terms of the Locative Alternation: only *namazat'* appears in both the Theme-Object and the Goal-Object constructions. Another important factor here is the original semantics of the prefix *na-*, which is surface oriented and thus shows a more clear overlap with the verbal semantics of *mazat'* 'daub, smear', the Goal of which is usually a surface.

      With *namazat'* 'daub, smear', novel metaphorical combinations (like 52 below) are very rare. 50% of metaphorical examples contain a set expression *na xleb ne namažeš'* [lit. you can't smear it on the bread] (see example 53 below) which is an abridged version of the idiom *spasibo na xleb ne namažeš'* [lit. you can't smear "thank you" on the bread] 'thanks do not fill a purse'.

(52) *Kazalos' by, ideja garmoničeskaja – namazat' sovetskim melodičeskim marmeladom pritornyx pevcov 90-x…* [Viktorija Arutjunova. Novyj stil' televizionnyx program (1996) // "Kommersant-Daily", 1996.01.20]
[Seemed COND, idea-NOM harmonious-NOM – smear Soviet melodious marmelade-INS mawkish singers-ACC 90s-GEN]
'It might seem to be a harmonious idea: to smear the mawkish singers of the 1990s with the melodious Soviet marmalade.'

(53) *Za tri goda situacija ne izmenilas' niskol'ko – prezident ničego real'nogo*

ne sdelal, vnešnepolitičeskie uspexi nesomnenny, no ix "na xleb ne namažes'"... [Aleksandr Xramcixin. Kompleks polnocennosti // "Otečestvennye zapiski", 2003]

[In three years-ACC situation-NOM not changed at-all – president-NOM nothing-GEN real-GEN not did, foreign-policy successes-NOM undoubtful, but they-ACC on bread-ACC not smear]

'In the three years the situation has not changed at all: the president has not done anything real, the achievements in foreign policy are obvious, but they cannot fill the purse.' [literally: you can't smear them on bread]'

Example (52) presents a situation where the singers of the 1990s (Goal) are metaphorically smeared with Soviet melodious marmalade (Theme). All metaphorical uses for *namazat'* are distributed between two major groups. The first potential metaphorical pattern contains a Goal that is smeared with a sweet Theme (marmalade, honey, etc.) in order to make it more attractive, as in (52). All other contexts would represent the second group of metaphorical extensions for *namazat'* which are an elaborate version of the idiom *spasibo na xleb ne namažeš'* [lit. you can't smear "thank you" on the bread] 'thanks do not fill a purse'. This is the case with example (53), where instead of 'thank you' the speaker uses 'achievements' as a Theme.

6.3.2. Metaphor and constructions

The verb GRUZIT' 'load'

This subsection considers the correlation between metaphorical representations and the two locative constructions as presented in Table 12 and Figure 11. No distinction between reduced and full constructions is made.

All non-passive forms	Theme-Object construction						Goal-Object construction					
	non-meta-phorical		meta-phorical		total Theme-Ob construction	non-meta-phorical		meta-phorical		total Goal-Ob construction		
	raw fr.	rela-tive fr.	raw fr.	rela-tive fr.		raw fr.	rela-tive fr.	raw fr.	rela-tive fr.			
gruzit'	176	98%	4	2%	**180**	23	33%	46	67%	**69**		
nagruzit'	32	94%	2	6%	**34**	76	68%	35	32%	**111**		
zagruzit'	70	74%	24	26%	**94**	57	50%	57	50%	**114**		
pogruzit'	226	89%	27	11%	**253**	1	0%	0	0%	**1**		

Table 12. Metaphor and constructions. Locative Alternation among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (non-passive forms).
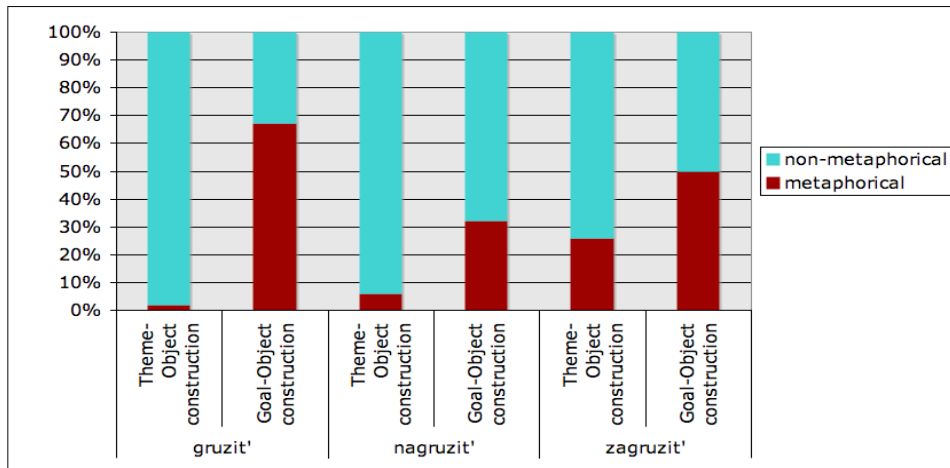
Figure 11. Metaphor and constructions. Locative Alternation among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (non-passive forms).

Although we can see that metaphorical uses are attested for both constructions (Theme-Object and Goal-Object), alternations within the same metaphor type are not common. The metaphor type is represented by a specific combination of Themes and Goals. For instance, if we deal with the metaphor HUMAN (GOAL) + INFORMATION (THEME) mentioned earlier, where humans serve as metaphorical containers for information, the Goal-Object construction is most common (see examples 54, 55. A full presentation of all the metaphor types is given in 6.3.4):

(54) *Ax, vam interesny podrobnosti iz žizni zvezd? Radi boga, Andrej Maksimov "zagruzit" vas ètoj informaciej.* [Julija Junina. Moskvič – sostojanie duši (2001) // "Argumenty i fakty", 2001.02.14]
[Oh, you are interested in the details of the life of pop stars? For Heaven's sake, Andrej Maksimov will load you-ACC this information-INS]
'Oh, you are interested in the details of the life of our pop stars? No problem, Andrej Maksimov will provide you with this information.'

Metaphorical Goal-Object construction with a missing Theme:

(55) *On čto-to vdrug zagruzilsja i rešil zagruzit' svoego predannogo slušatelja.* [Igor' Mal'cev. Muzyka (2002) // "Avtopilot", 2002.12.15]
[He-NOM somehow suddenly loaded-REFL and decided to-load his-ACC devoted-ACC listener-ACC]
'For some reason he suddenly got confused and decided to confuse his devoted listener.'

On the other hand, in the case of COMPUTER (GOAL) + INFORMATION (THEME) metaphor, the Theme-Object construction is highly preferred (see examples 56, 57 below):

(56) *Možno zagruzit' v KPK pis'ma, novosti, veb-stranicy s nastol'nogo kompjutera i čitat' vse èto, naprimer, v doroge.* [Elena Nalimova. Komp'juter na ladoni (2003) // "Bogatej" (Saratov), 2003.11.27]
[Possible za-load in iPad-ACC letters-ACC, news-ACC, web-pages-ACC from stationary computer and read all this, for example, in road]
'You can upload letters, news, web-pages into iPad from your stationary computer and read all this, for instance, while travelling'

Theme-Object construction with an omitted Goal:

(57) *Ja begom kinulsja domoj i, ne razdevajas', vključil komp'juter, zagruzil èlektronnuju kartu goroda.* [Nadežda Trofimova. Tret'je želanie // "Zvezda", 2003]
[I-NOM run-INST threw-self home and, not having-undressed, turned-on computer-ACC, loaded electronic map-ACC town-GEN.]
'I raced home and turned on my computer without even taking my coat off and downloaded the electronic map of the town.'

We find only few exceptions from the general tendency: two cases with the Theme-Object construction for HUMAN + INFORMATION (example 58) and one case with the Goal-Object construction for COMPUTER + INFORMATION (example 59):

(58) *A vot zagruzil zacem-to v svoj bednyj mozg esce sest'sot stranic.* [S. Gedroic. Figl'-Migl'. Xaraktery. Sočinenija Eleny Švarc. Roman Smirnov. Ljudi, l'vy, orly i kuropatki. Vladimir Vojnovič. Portret na fone mifa // "Zvezda", 2003]
[And here za-loaded for-some-reason in my poor brain-ACC more six-hundred-ACC pages-GEN]
'And for some reason I loaded into my poor brain additional six hundred pages.'

(59) *Staralis' zagruzit' komp'jutery v dve smeny.* [Petr Akimov. Plata za strax (2000)]
[Tried to za-load computers-ACC in two shifts]
'They tried to make computers work in two shifts'

However, example (58) marks the person's brain and not the person in general as the Goal, which makes the analogy between human brain and computers stronger and hence allows for the choice of the Theme-Object construction.

Thus, it appears that although the two metaphor types seem to be parallel, in reality, they behave differently in terms of formal representations, which means that the original properties of the target domain are preserved.

One more important conclusion that the data suggest is that metaphorical extensions, in general, are more frequent within the Goal-Object construction (see Figure 11). The correlation between the Goal-Object construction and metaphorical uses is statistically significant and has a robust effect size: X-squared = 145.3065, df = 1, p-value < 2.2e-16, Cramer's V = 0.412008[26]. The data is summarized in Table 13:

	Theme-Object construction	Goal-Object construction
Non-metaphorical	504	157
Metaphorical	57	138

Table 13. Correlation between constructions and metaphor within the 'load' verbs.

The Goal-Object construction (which marks the change of state) has a stronger preference for metaphor than the Theme-Object construction (which marks the change of location). This is also true for the unprefixed imperfective verb *gruzit'* 'load' which in general has a stronger preference for the Theme-Object construction.

The only exception is the verb *pogruzit'* since it is very rarely attested in the Goal-Object construction. The total number of metaphorical representations for this verb constitute 27 contexts (out of 254 total) among which only two contexts are related to the meaning 'load' (examples 60, 61) whereas all others are metaphorical instances of the meaning 'submerge, sink' (examples 62, 63).

(60) *Xotite/ podnesu bol'šuju čašu/ kuda pogruzite vy revnost'/ da i nos svoj zaodno*. [Aleksandr Rogožkin. Operacija S Novym godom, k/f (1996)]
[Do you want me to offer you a big cup where-GOAL you will load jealousy-ACC and your nose-ACC too]
'Do you want me to offer you a big cup where you will put your jealousy and your nose as well.'

(61) *Nad etim bol'šim neoprjatnym telom stojal otec i rydal, pogruziv lico v ladoni*. [Jurij Nagibin. Drugaja žizn' (1990-1995)]
[Over this big untidy body stood the father and cried having loaded face-

---

[26] To measure the effect size of the χ^2 values, Cramer's V was used, where 0.1 is a small size, 0.3 is a moderate size, and 0.5 is a large size (Cohen 1988: 215-271; King and Minium 2008: 327-330).

ACC <u>into palms</u>-ACC]
'Standing over his large disheveled body, his father covered his face with the palms of his hands, crying'

(62) *On povernul nazad, ottolknulsja neskol'ko raz, i skotost', narastaja, pogruzila ego opjat' v mečtu.* [Vladimir Dudincev. Belye odeždy / Tret'ja čast' (1987)]
[He turned back, pushed off a few times and the speed, excellerating, sank <u>him</u>-ACC again <u>into dream</u>-ACC]
'He turned back, pushed off a few times and the growing speed submerged <u>him</u> again <u>into a dream</u>.'

(63) *Bessporno odno: vnezapnaja smert' Stalina ošelomila i potrjasla stranu i, nado priznat', pogruzila <u>ee</u> <u>v nepoddel'nuju skorb'</u>.* [Boris Efimov. Desjat' desjatiletij (2000)]
[One thing is certain: Stalin's sudden death overwhelmed and shook the country and, one should admit, sank <u>it</u>-ACC <u>into genuine mourning</u>-ACC]
'One thing is certain: Stalin's sudden death overwhelmed and shook the country and, one should admit, submerged <u>it</u> <u>into profound mourning</u>'

These examples further support the idea that the Theme-Object construction as such is less susceptible to metaphor.

The verb MAZAT' 'daub, smear'

The same difference in the selection of Themes and Goals is attested in metaphorical uses of the 'smear' verbs. These verbs behave differently both in the number of metaphorical uses found in the corpus (see Table 14 and Figure 12 below) and the types of metaphorical extensions that they present (see subsection 6.3.4 for more detail).

Verb	Goal-Object				Theme-Object				Elaborated			
	meta-phorical		non-meta-phorical		meta-phorical		non-meta-phorical		meta-phorical		non-meta-phorical	
	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.
mazat'	17	9.8%	157	90.2%	2	25%	6	75%	22	73%	8	27%
namazat'	2	1.9%	101	98.1%	5	26%	14	74%	1	50%	1	50%
zamazat'	26	24%	83	76%	0	0%	0	0%	1	25%	3	75%
pomazat'	5	8%	58	92%	0	0%	0	0%	11	92%	0	8%

Table 14. Metaphorical extensions within *mazat'* and its counterparts.
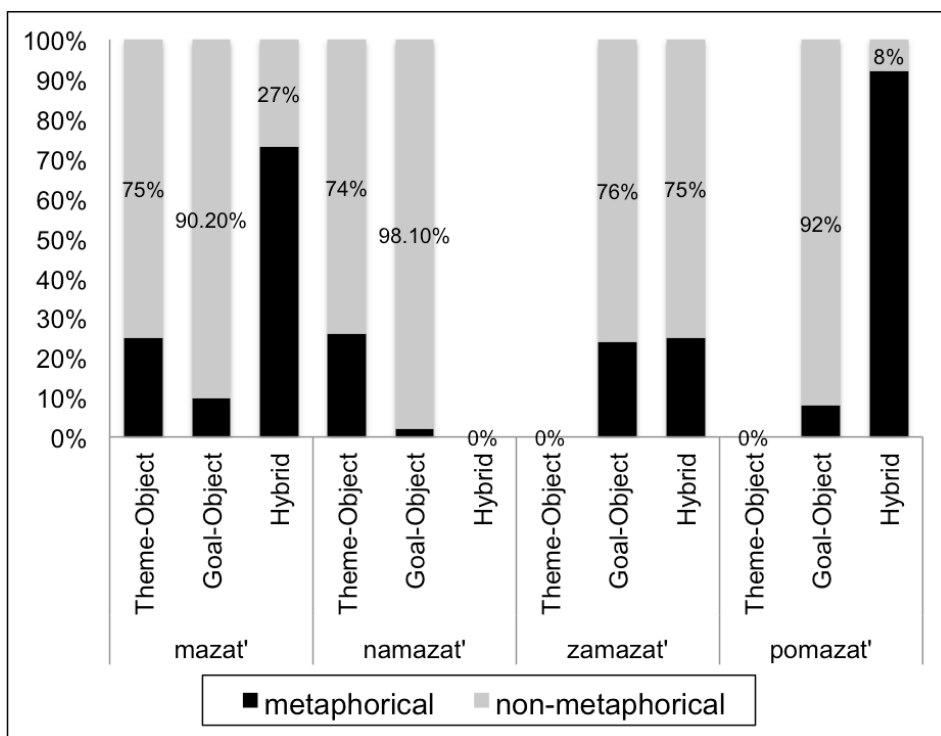
Figure 12. Metaphorical extensions within *mazat'* and its counterparts.

As can be seen from Figure 12 above, elaborated constructions in general are chacterized by more metaphorical extensions. This is particularly noticeable in the case of *mazat'* and *pomazat'* that show a higher percentage of elaborations (see discussion in section 6.2). This result gives indirect evidence that metaphor is marked by constructional restructuring. This means that metaphorical expressions are not exactly parallel to non-metaphorical ones in structure. For our data we have attested a correlation between metaphor and elaborations and metaphor and reduction (the latter will be discussed in subsection 6.3.3). However, more data is needed in order to fully support this claim.

6.3.3. Metaphor and reduction

The present subsection considers the correlation between metaphorical representations and reduced constructions. The frequency of reduction among metaphorical contexts of the non-passive forms of *gruzit'* 'load' and its Natural Perfectives is given in Table 15 and Figure 13 below.

All non-passive forms	Non-metaphorical contexts					Metaphorical contexts				
	full constructions		reduced constructions		total non-meta-phorical contexts	full constructions		reduced constructions		total meta-phorical contexts
	raw fr.	relative fr.	raw fr.	relative fr.		raw fr.	relative fr.	raw fr.	relative fr.	
gruzit'	107	57%	79	43%	**186**	30	60%	20	40%	**50**
nagruzit'	75	68%	35	32%	**110**	22	59%	15	41%	**37**
zagruzit'	90	71%	37	29%	**127**	36	44%	45	56%	**81**
pogruzit'	175	77%	52	23%	**227**	27	100%	0	0%	**27**

Table 15. Metaphor and reduction. Reduction among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (non-passive forms).
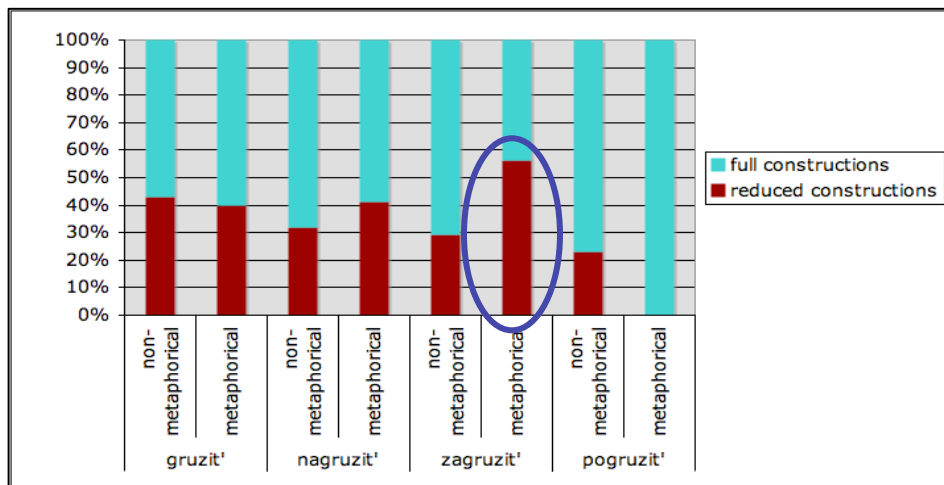
Figure 13. Metaphor and reduction. Reduction among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (non-passive forms).

As can be seen from Figure 13, the proportion of reduced constructions for the unprefixed verb *gruzit'* is almost the same in non-metaphorical and metaphorical contexts. However, reduced constructions show higher frequency within metaphorical contexts when the prefixes *na-* or *za-* are added, with *za-* having the strongest correlation with reduced constructions: X-squared = 13.3722, df = 1, p-value = 0.0002554, Cramer's V = 0.2535536.

Thus, we can say that the data from the Russian 'load' verbs suggests that in certain cases (mostly, with the prefix *za-*) metaphorical extensions correlate with reduction. Furthermore, we have seen that the Goal-Object construction is more susceptible to metaphor than the Theme-Object construction. The Goal-Object construction focuses on the changes that the Goal undergoes, and this allows for the frequent omission of the Theme.

In addition, the data allows us to draw some conclusions, which outline the relation between formal representation of metaphor and conceptual meta-

phor. On the one hand, metaphorical uses of *gruzit'* 'load' show minimal alter-nation, which supports the idea that not all properties of the source domain are borrowed to the target domain in the process of mapping and that metaphor pre-supposes specification. On the other hand, we have support for the claim that the original properties of the target domain are preserved: 'za-loading the com-puter' differs from 'za-loading the person': *zagruzit' komp'juter* 'za-load a computer' entails the meaning 'boost a computer', i.e. make it work, whereas *zagruzit' čeloveka* 'za-load a person' means 'puzzle a person', i.e. prevent him/her from functioning appropriately.

    Interestingly, reduction is not attested within metaphorical contexts of the verb *pogruzit'*. In the case of *pogruzit'*, metaphor is the extension of the "sub-merge" rather than the "load" meaning of the verb. The first participant (Theme), represented by a direct object, usually denotes a person whereas the second participant (Goal) marks the state (dream, trans, fear, etc.) into which the first participant is placed. The state here serves as the metaphorical CONTAINER and cannot be omitted. It could also be true that in metaphorical extensions the Theme-Object construction profiles both participants while the Goal-Object construction profiles mostly the Goal. This could be the subject of further re-search but goes beyond the scope of the present dissertation.

6.3.4. Basic combinations of Theme and Goal in metaphorical representations

The verb GRUZIT' 'load'
Although the verbs *gruzit'* and *nagruzit'* show similar general distribution of metaphorical and reduced constructions, they appear to have different combina-tions of metaphorical Themes and Goals within metaphorical representations. Table 16 presents the most frequent metaphorical representations attested for all four 'load' verbs.

Goal representation	Theme representation	*gruzit'*		*nagruzit'*		*zagruzit'*	
		raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.
human	information	37	74%	5	14%	10	12%
human	work	2	4%	12	32%	20	25%
electronic device	file	1	2%	0	0%	21	26%
human	problems	8	16%	0	0%	0	0%
words	meaning	0	0%	3	8%	0	0%
facility	work	0	0%	1	0%	20	25%
TOTAL number of metaphorical representations		**50**		**37**		**81**	

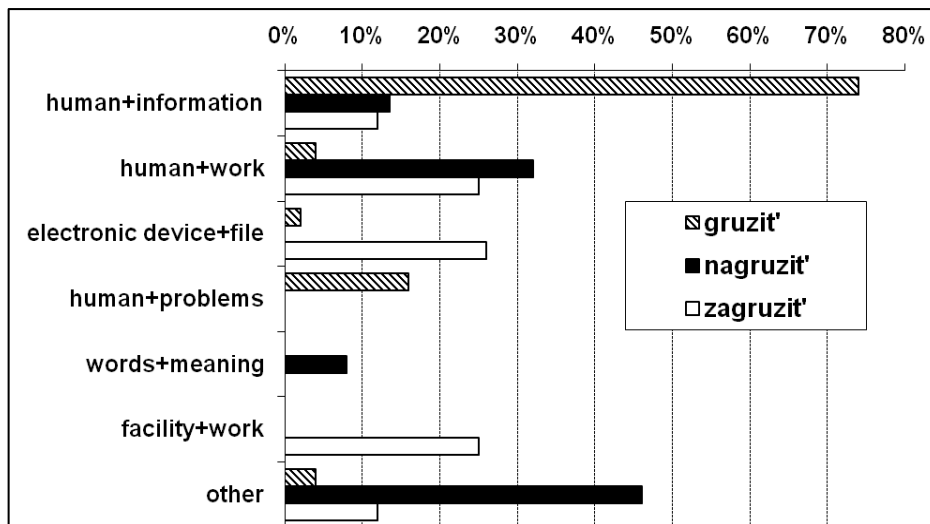Table 16. Basic combinations of Theme and Goal in metaphorical representa-tions.

Figure 14. Basic combinations of Theme and Goal in metaphorical representations.

Figure 14 above illustrates that the three 'load' verbs (*gruzit', nagruzit'* and *zagruzit'*) show different distributions of the basic metaphorical patterns. The verb *zagruzit'* is characterized by the most "balanced" distribution where all major patterns constitute around 20%. The most frequent patterns here are HUMAN+INFORMATION/WORK and FACILITY+WORK. Moreover, it is also the only verb where metaphorical extensions are attested for the Theme-Object construction (cf. the pattern ELECTRONIC DEVICE+FILE). The unprefixed verb *gruzit'* 'load' selects mostly humans as metaphorical Goals that can be loaded with work, information or problems. Unlike *gruzit'* and *zagruzit'* that show a strong preference towards certain patterns, the verb *nagruzit'* 'load' is also characterized by a number of additional patterns, such as loading words or texts with meaning (the discussion of other smaller patterns is provided below). These additional patterns also derive from the original semantics of the prefix *na-*. *Na-* is related to surfaces and hence is more widely used with such Goals as words and texts.

Illustrative examples of major metaphorical representations listed in Table 16 and Figure 14 are given below:

GOAL:HUMAN + THEME:INFORMATION

(64) *Sledujuščie 15 minut ja "**gružu**" ego informaciej o svoej rodine – ostrove Saxalin*. [Dmitrij Kovalenin. Marafonec Murakami (2002) // "Domovoj", 2002.11.04]
[Next 15 minutes I **load** him-ACC information-INS about my native-land – island Saxalin]

'In the next 15 minutes, I **loaded** him with information about my native land – the land of Island of Saxalin.'

(65) *Xačatrjan ne sderžal neudovolstvija ot togo, čto Kolomnin, kotorogo on toropilsja "**nagruzit'**" informaciej, beskonečno otvlekaetsja*. [Semen Daniljuk. Biznes-klass (2003)]
[Xačatrjan didn't suppress discontent that Kolomnin whom-ACC he was hurrying to **load** information-INS endlessly gets-distracted]
'Xačatrjan didn't hide his discontent that Kolomnin whom he was trying to quickly **fill** with information got distracted all the time.'

GOAL:HUMAN + THEME:WORK

(66) *Ja, skažem, idu pokupat' trubočnika ljubimoj ljaguške, a druz'ja, radujas' čužoj bede, **gruzjat** poručenijami. Exat' nikto ne xočet*. [Aleksej Torgašev. "Ptičku" snova žalko. Kak ob''jasnit' trudjaščimsja, počemu na Ptič'em rynke nel'zja pokupat' košek (2002) // "Izvestija", 2002.01.20]
[I, let's say, go to buy sludge-worm for my favourite frog and friends, gloating over another's misfortune, **load** commissions-INS. To go nobody not wants.]
'Let's say, I am going to the pet market to buy a sludge worm for my favourite frog. My friends, gloating over my misfortune, start commissioning me. Nobody wants to go.'

(67) *Neobxodim byl professional, kotoryj by stal "parovozom", **nagruzil** sebja vsej rabotoj*. [I. È. Kio. Illjuzii bez illjuzij (1995-1999)]
[Needed was professional which would become locomotive, **load** itself-ACC all work-INS]
'They needed a work horse, someone who would **load** himself **up** with all the work'

(68) *Zasedanie Gossoveta po kul'ture **zagruzit** rabotoj sotrudnikov Minsterstva kul'tury na bližajšie neskol'ko let*. [Andrej Reut. Gossovet gotov spasti rossijskuju kul'turu // "Gazeta", 2003]
[Meeting State-Council-GEN on culture will **load** work-INS members-ACC Ministry-GEN Culture-GEN for nearest few years]
'The agenda of the State Council on Culture **will keep** the members of the Ministry of culture **busy** for several years.'

GOAL:ELECTRONIC DEVICE + THEME:FILE

(69) *Každyj, kto rassčityvaet v Afinax zapustit' v set' virus ili **zagruzit'** drugoe PO, smožet ubedit'sja, čto dostup k diskovodam, a takže k USB-portam na PK i serverax zakryt*. [Olimpiada komp'juternaja // "Computerworld", 2004]
[Everybody who intends in Athens to launch into net-ACC virus or **load**

another software-ACC will be able to see that access to disk-drives and also to USB-ports on PC and servers closed]

'Everybody with the intention to launch a virus or **upload** <u>software</u> <u>onto the net</u> in Athens will see that the access to the disk drives as well as to the USB ports on PCs and servers is closed.'

GOAL:HUMAN + THEME:PROBLEMS

(70) *Bespomoščnoj ličnosti, čtoby ona ne "**gruzila** <u>vas</u> <u>svoimi problemami</u>", prosto ne nado davat' sovety*. [Tat'jana Blažnova. Karl Gustav Manner-geim. Memuary (2000) // "Kar'era", 2000.02.01]

[Helpless personality in-order-to it not **load** <u>you</u>-ACC <u>its problems</u>-INS just not should give advice]

'You should not provide advice to a needy person unless you are prepared for him to dump [load of] his problems on you.'

GOAL:WORDS + THEME:MEANING

(71) *Posle simvolistov ... slovo utratilo <u>ves</u>; akmeisty zaxoteli bylo <u>ego</u> **nagruzit'** – no polučalas' libo priključenčeskaja proza, libo nesvjaznoe, xot' i angel'skoe bormotanie…* [Dmitrij Bykov. Orfografija (2002)]

[After symbolists … word lost <u>weight</u>, acmeists wanted to **load** <u>it</u>-ACC – but came out either adventurous prose or incoherent, although angel-like murmur]

'After symbolists … the word lost its significance, acmeists wanted to **fill** <u>it</u> with a new meaning but this attempt ended up either as adventurous prose or as an incoherent, even though angelic murmur…'

GOAL:FACILITY + THEME:WORK

(72) *V samom dele, razve pod vlijaniem reklamy my stamen dol'še kipjatit' čaj-nik na gazovoj konforke, a elektrocstancii **zagruzjat** rabotoj lišnie turbiny?* [Veseljaščij gaz (2003) // "Novaja gazeta", 2003.01.16]

[Really, will under influence advertisement-GEN we begin to longer boil kettle on gas burner and electrical power-plants will **load** <u>work</u>-INS <u>additional turbines</u>-ACC?]

'Really, is it possible that due to the advertisement we will boil the kettle longer on a gas burner or that the electrical power-plants will **provide** <u>additional turbines</u> <u>with work</u>?'

The option "other" in Figure 14 includes other metaphorical combinations of Theme and Goal which are represented by merely one or two examples. As follows from Figure 14, metaphorical representations of both *gruzit'* and *zagruzit'* are constituted by larger groupings whereas *nagruzit'* is used in a number of smaller combinations. This is probably related to the fact that metaphorical contexts of the *na*-perfective mostly deal with more abstract notions for both Theme and Goal (see examples 73, 74).

Goal: TRIP + Theme: AIM

(73) *Ja ponjala: nado beč, štob ne vzrastit' razdraženie uže k Šure, kotoruju ja nežno ljublju, i ne vinovata ona, čto ja nagruzila rodstvennuju poezdku k nej podspudnoj zadačej*. [Galina Ščerbakova. Mitina ljubov' (1996)]

[I realized: needed run in-order-to not grow irritation already towards Sura which I tenderly love and she is not to blame that I loaded family trip-ACC to her additional task-INS]

'I realized that I need to run if I didn't want to exhibit frustration towards Sura, who I tenderly love. It is not her fault that I added a personal task to the the family trip.'

Goal: RELATIONSHIP Theme: TRUTH

(74) *Ona ... bojalas' daže treščiny, kotoraja mogla pojavit'sja, esli na ix xrupkie otnošenija nagruzit' sliškom mnogo pravdy*. [Ol'ga Novikova. Ženskij roman (1993)]

[She … was-afraid even crack which could appear if on their fragile relations-ACC load too much truth-ACC]

'She was afraid that their fragile relationship would crack under the burden of too much truth'

Summing up, we can say that *gruzit'*, *nagruzit'* and *zagruzit'* show almost a complementary distribution in representations of metaphorical Theme and Goal, the only exceptions being Goal:HUMAN+Theme:INFORMATION and Goal:HUMAN+Theme:WORK.

However, if we look at the correlation between these combinations of metaphorical Theme and Goal and reduction we find a distribution that is close to being complementary.

	HUMAN + INFORMATION		
	metaphorical context with full construction	metaphorical context with reduced construction	Total number of the metaphorical combination
gruzit'	21	21	42
nagruzit'	**5**	0	5
zagruzit'	2	**6**	8
	HUMAN + WORK		
	metaphorical context with full construction	metaphorical context with reduced construction	Total number of the metaphorical combination
gruzit'	1	1	2
nagruzit'	5	7	12
zagruzit'	**13**	7	20

Table 17. Basic combinations of Theme and Goal in metaphorical extensions and reduction.

Our data seem to support the proposal made by Goldberg (2006) who claims that the Goal-Object construction is a combination of two constructions: a causative construction and an independent construction headed by *with* (see Chapter 2):

Caused motion (*Pat loaded the hay onto the truck*)
　　　CAUSE-MOVE (**cause**　　　　**theme**　　　path/location)
　　　　　　|　　　　　　　|　　　　　　　|　　　　　　|
　　　　Load　　　　(**loader**　　　**loaded-theme**　**container**)

Causative + with constructions (*Pat loaded the truck with hay*)
　　　CAUSE (**cause patient**) + INTERMEDIARY (instrument)

　　　　|　　　　　|　　　　　|　　　　　　　　　|
　　　Load　　(**loader**　　　**container**　　　　**loaded-theme**)
　　　　　　　　　　　　　　　　　　　　(Goldberg 2006: 41)
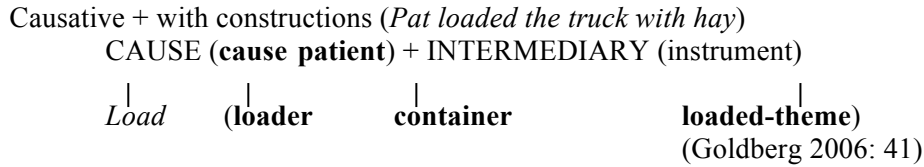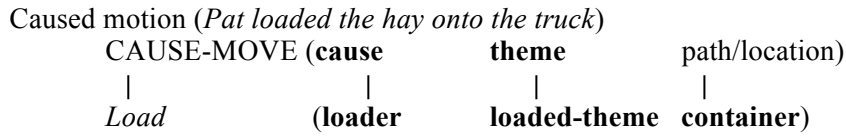
In the case of *zagruzit'* in Goal:HUMAN+Theme:INFORMATION and *nagruzit'* in Goal:HUMAN +Theme:WORK we are dealing with an independent causative construction (or a 'change of state' construction) which does not require a third participant. The contexts like *ty menja zagruzil* 'you-NOM loaded me-ACC' can be interpreted like 'you completely confused me, puzzled me', the focus is entirely placed upon the Goal and its change of state.

The verb MAZAT' 'daub, smear'

Below we provide frequencies for the basic metaphorical combinations attested for the four 'smear' verbs.

Goal representation	Theme representation	*mazat'*		*namazat'*		*zamazat'*		*pomazat'*	
		raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.	raw fr.	relative fr.
human	balm	16	39%	0	0%	0	0%	9	56%
human	mud	4	10%	0	0%	11	41%	0	0%
target	bullet	11	27%	0	0%	0	0%	0	0%
target	ball	3	7%	1	14.3%	0	0%	0	0%
ill act	0	0	0%	0	0%	6	22%	0	0%
mouth	0	0	0%	0	0%	3	11%	0	0%
eyes	words	0	0%	0	0%	2	7.4%	0	0%
canvas	paint	3	7%	1	14.3%	0	0%	0	0%
lips	honey	2	5%	1	14.3%	0	0%	3	20%
bread		0	0%	4	57.1%	0	0%	0	0%
human	kingdom	0	0%	0	0%	0	0%	4	24%
TOTAL number of metaphorical representations		**41**		**7**		**27**		**16**	

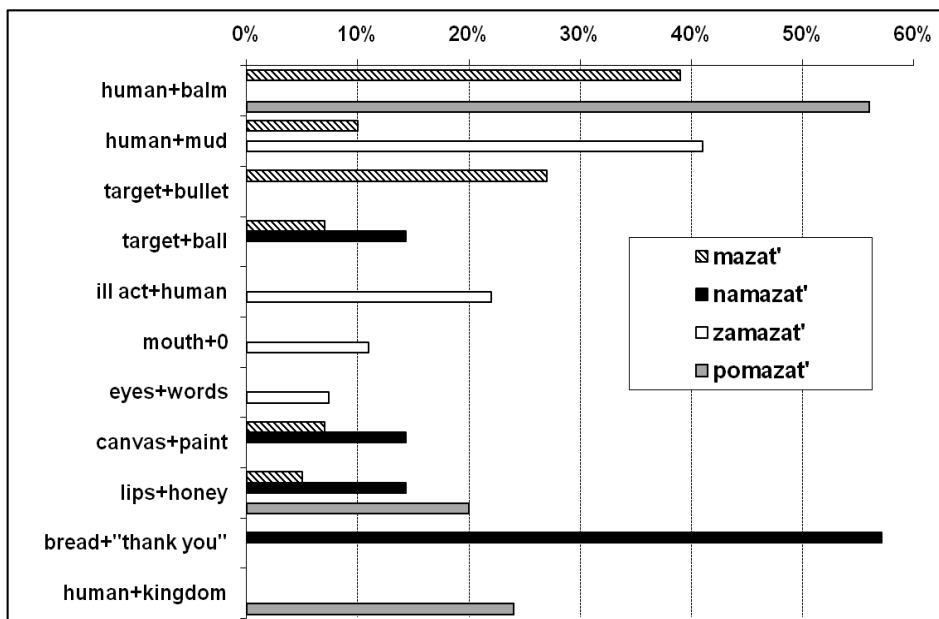Table 18. Basic metaphorical extensions within the four 'smear' verbs.

Figure 15. Basic metaphorical extensions within the four 'smear' verbs.

As pointed out earlier, the four 'smear' verbs have more similar constructional preferences as opposed to the 'load' verbs, all of which show a remarkably different distribution of the Theme-Object and the Goal-Object constructions. Yet, we have seen that the 'smear' verbs behave differently in terms of elaborations (more elaborations are attested for the unprefixed verb *mazat'* and its prefixed counterpart *pomazat'*). Another difference concerns constructions at the level of the semantic classes of nouns. All four 'smear' verbs prefer the Goal-Object construction but differ in terms of selected Themes and Goals (see subsection 6.2.1). The same split in use of Themes and Goals is attested among metaphorical extensions, which means that different 'smear' verbs occur in different metaphorical patterns. The unprefixed verb *mazat'* 'daub, smear' is characterized by such metaphorical patterns as HUMAN + BALM (example 75), TARGET + BULLET, (example 76), HUMAN + MUD (example 77). The verb *zamazat'* prefers HUMAN + MUD (example 78, 79) and ILL ACT + 0 (example 80) metaphorical patterns, whereas *pomazat'* is used in HUMAN + BALM (example 81) and HUMAN + KINGDOM (example 82) metaphorical patterns.

(75) *Vse my odnim mirom mazany, daže protivno stalo posle takix razmyšlenij!*
    [Gennadij Nikolaev. Veščie sny tixogo psixa // "Zvezda", 2002]
    [All we-NOM one balm-INS smeared, even disgusting became after such thoughts-GEN]
    'We are all the same, it is even disgusting to have had such thoughts!'

(76) *Streljaem, vernee, mažem po celjam ne my, a upravlenie kul'tury.* [Georgij Burkov. Xronika serdca (1953-1990)]
[Shoot, truer, smear along goals-DAT not we-NOM, but administration-NOM culture-GEN]
'We're not the ones who are shooting, or to be more accurate, missing the marks, but the Culture Administration.'

(77) *Spasalis' i zaščiščali ot razoblačenija oni starym sposobom – krugovoj porukoj, mazali vsex, kak kopot'* [T. Gljan. My služim zakonu (1988) // "Trud", 1988.12.31]
[Saved-REFL and protected from denunciation-GEN they-NOM old way-INS – general pledge-INS smeared all-ACC like soot-NOM]
'They saved and defended themselves from denunciation in the old way: they smeared everyone with general pledge like soot.'

(78) *Uže posle samoubijstva Sergo Stalin rešil menja zamazat' učastiem v repressijax* [Anastas Mikojan. Tak bylo (1971-1974)]
[Already after suicide-GEN Sergo-GEN Stalin-NOM decided me-ACC smear participation-INS in repressions-LOC]
'Already after Sergo's suicide, Stalin decided to stain me with participation in repressions'

(79) *Čto ni delaj, kogo-to obidiš'. Pob'jut priljudno. Zamažut. Ne otmoeš'sja.* [Aleksandr Livšic. Nu, za promyšlennost'! (2002 // "Izvestija", 002.09.12]
[What-ACC you-NOM do, someone-ACC offend. Beat in-public. Smear. Not wash-off-REFL.]
'Whatever you do, you will always offend someone. You will be beaten in public. Stained. You will not be able to wash it off.'

(80) *No i podlost' v starosti uže ne zamažeš' kak "ošibku molodosti".* [Vadimir Dudincev. Belye odeždy / Tret'ja čast' (1987)]
[But even low-act-ACC in old-age-LOC already not smear like mistake-ACC youth-GEN]
'But in old age you can't even cover up a bad deed as a "juvenile folly".'

(81) *Gospod' pomazal Menja blagovestvovat' niščim…* [Andrej Kuraev. Niščie duxom // "Al'fa i Omega", 1994]
[God-NOM smeared me-ACC evangelize poor-DAT]
'God anointed me to preach for the poor'

(82) *… prorok Samuil vtajne **pomazal** ego na carstvo v odnom iz izrail'skix plemen.* [Aleksandr Fadin. Solomon – praščur ljubvi (2002) // "Domovoj", 2002.01.04]
[prophet Samuel-NOM secretly anointed him-ACC on kingship-ACC in one-LOC from Jewish tribes-GEN]
'...the prophet Samuel secretly anointed him to be king of one of the Jewish tribes.'

One interesting observation that could be drawn from the data is the relation between the base verb and its Natural Perfective in terms of metaphorical patterns. A reasonable expectation would be that the unprefixed verb would bear all potential metaphorical patterns and that the Natural Perfectives would divide them up. This is partially true. The pattern HUMAN + BALM, attested for the unprefixed base verb, is supported by the Natural perfective with *po-*; the pattern HUMAN + MUD is highly frequent for the counterpart with *za-*. However, both the unprefixed verb and the prefixed perfectives show individual patterns that are not supported by other 'smear' verbs. For *za-* such special patterns are ILL ACT + 0, MOUTH + 0, EYES + WORDS. For *po-* we find a special pattern HUMAN + KINGDOM, which is a result of an elaboration. The *na-* perfective is characterized by a set metaphorical expression N-Acc *na xleb ne namažeš'* 'you can't smear N on the bread'. On the other hand, the unprefixed base verb *mazat'* shows the pattern TARGET + BULLET, which is not attested for the counteparts with *na-*, *za-* and *po-* (but has a correlation with *pro-*).

6.3.5. Metaphor in the Passive forms

The Locative alternation involves two objects, Theme and Goal, both of which can be in focus. As it was shown in Section 6.1, the passive construction restricts the focus to just one participant and it appears to boost the effect attested within non-passive forms. The construction that shows higher frequency for a given verb in non-passive forms will take over even more uses in the passive forms. Passive participles represent an interaction between the Locative Alternation constructions and the passive construction, and this interaction has a significant impact on the distribution of the Locative Alternation constructions and metaphor.

Passive Participles: Metaphor ~ Prefixes

Table 19 and Figure 16 below provide frequencies for the distribution of the metaphorical extensions among the four 'load' verbs. This allows us to see how metaphor interacts with prefixes.

All passive forms	non-metaphorical		metaphorical		
	raw fr.	relative fr.	raw fr.	relative fr.	Total
gružen	104	98.2%	2	1.8%	**106**
nagružen	172	78%	48	22%	**220**
zagružen	69	28%	179	72%	**248**
pogružen	107	24%	342	76%	**449**

Table 19. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the passive participles of verb *gruzit'* 'load' and its Natural Perfectives.
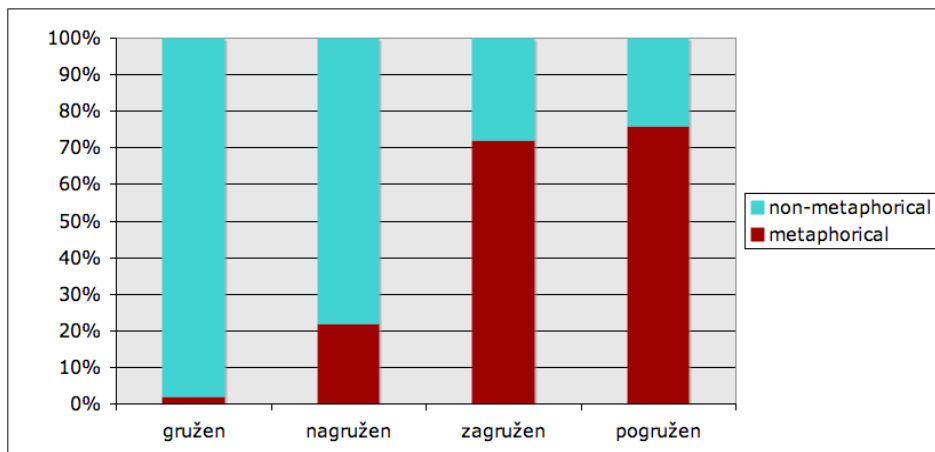

Figure 16. Metaphor and prefixes. Raw and relative frequencies of metaphorical contexts for the passive participles of verb *gruzit'* 'load' and its Natural Perfectives.

Both *zagruzit'* and *pogruzit'* show a higher frequency for metaphorical extensions in the passive participles, and this effect is particularly noticeable for *pogruzit'*. All metaphorical extensions of *pogružen*, however, are based on the 'submerge' rather than the 'load' meaning of the verb. This further supports the idea that among the Locative Alternation verbs the Goal-Object construction is more susceptible to metaphor.

Passive Participles: Metaphor ~ Constructions

The Table below illustrates the distribution of metaphorical extensions with the Theme-Object and the Goal-Object constructions for the passive participles of the 'load' verbs.

All pas-sive forms	Theme-Object construction					Goal-Object construction				
	non-meta-phorical		meta-phorical		total Theme-Ob con-struction	non-meta-phorical		meta-phorical		total Goal-Ob con-struction
	raw fr.	rela-tive fr.	raw fr.	rela-tive fr.		raw fr.	rela-tive fr.	raw fr.	rela-tive fr.	
gružen	1	0%	0	0%	**1**	103	98.1%	2	1.9%	**105**
nagružen	1	0%	0	0%	**1**	171	78%	48	22%	**219**
zagružen	8	73%	3	27%	**11**	61	26%	176	74%	**237**

Table 20. Metaphor and constructions. Locative Alternation among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (passive participles).
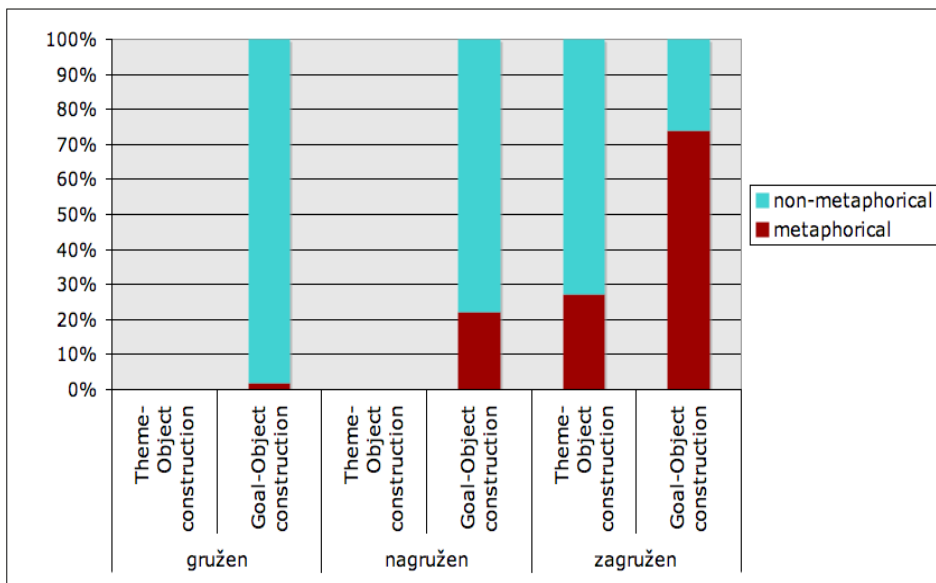

Figure 17. Metaphor and constructions. Locative Alternation among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (passive participles).

As follows from Figure 17, the passive particples of *gruzit'* and *nagruzit'* show a low frequency of metaphorical extensions, whereas metaphorical contexts are rather frequent for the passive forms of *zamazat'*, particularly in the Goal-Object construction.

Passive Participles: Metaphor ~ Reduction

Below we provide data that illustrate the correlation between metaphor and reduction for the passive participles of the 'load' verbs, parallel to the data for the non-passive forms presented in 6.1.4.

| Passive forms | Non-metaphorical contexts | | | | | Metaphorical contexts | | | | |
| | full constructions | | reduced constructions | | total non-meta-phorical contexts | full constructions | | reduced constructions | | total meta-phori-cal con-texts |
	raw fr.	relative fr.	raw fr.	relative fr.		raw fr.	relative fr.	raw fr.	relative fr.	
gružen	93	89%	11	11%	**104**	2	100%	0	0%	**2**
nagružen	113	66%	59	34%	**172**	18	37%	30	63%	**48**
zagružen	48	70%	21	30%	**69**	53	30%	126	70%	**179**
pogružen	85	79%	22	21%	**107**	342	100%	0	0%	**342**

Table 21. Metaphor and reduction. Reduction among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (passive participles).
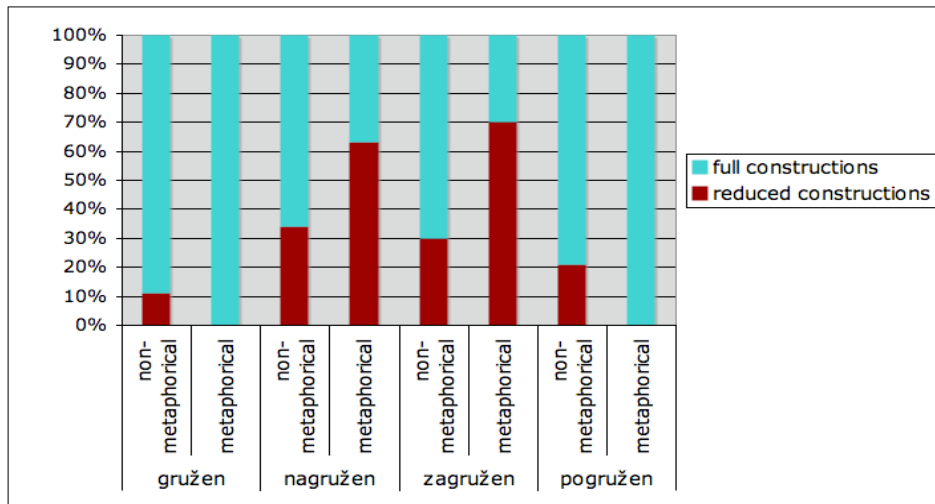

Figure 18. Metaphor and reduction. Reduction among metaphorical contexts of *gruzit'* 'load' and its Natural Perfectives (passive participles).

In general, passive participles appear to show higher frequencies for metaphorical representations with prefixed verbs. From Figure 18, it follows that there is an overlap between reduction and metaphor for the passive forms of the verbs *nagruzit'* (63 % of reduced construtions in metaphorical contexts as opposed to 34% in non-metaphorical contexts) and *zagruzit'* (70% of reduced constructions in metaphorical extensions vs. only 30% in non-metaphorical contexts).

Remarkably, for *gruzit'* and *pogruzit'* reduction (although it does not exceed 21%) is attested only in non-metaphorical contexts. The reason for that is that the prefixes *na-* and *za-* have more distinct semantics and thus can easily substitute for one of the participants. In the unprefixed *gruzit'* and the prefixed *pogruzit'* both participants need to be profiled in order to introduce a metaphorical pattern. This serves as additional evidence that *pogruzit'* is a closer Natural Perfective of *gruzit'* than *nagruzit'* and *zagruzit'*.

6.4. Prefixes and Prepositions

As discussed above, the non-passive forms of *nagruzit'* strongly prefer the Goal-Object construction, and there might be a connection here between the SURFACE meaning of the prefix *na-* and its etymological cousin, the preposition *na* 'onto'. The focus on surfaces suggests a focus on locations (goals) as opposed to goods (themes) that are loaded on them. Because prepositions are used only in the Theme-Object construction, all data in this subsection pertains only to that construction.

	preposition *na* 'onto'	preposition *v* 'into'	no preposition
gruzit'	67	67	66
nagruzit'	19	2	3
zagruzit'	7	52	35
pogruzit'	54	143	55

Table 22. Prepositions used with non-passive forms of 'load' verbs to mark the goal in the Theme-Object construction.
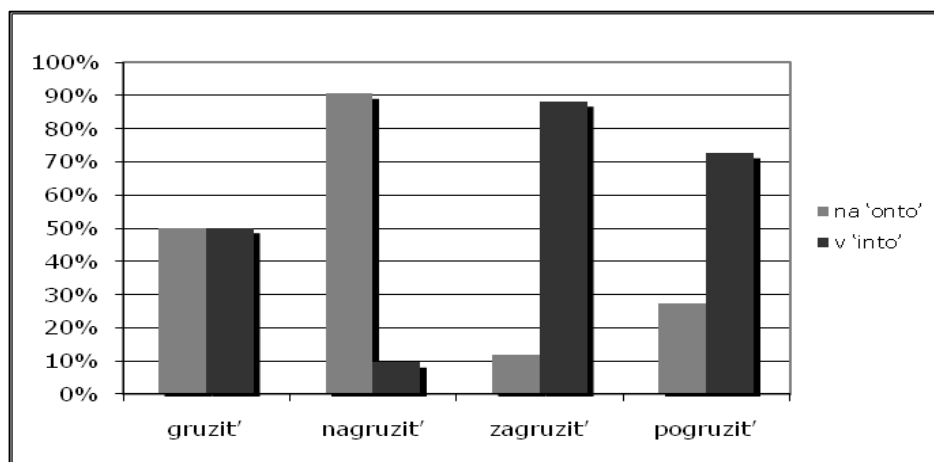

Figure 19: Prepositions used with non-passive forms of 'load' verbs to mark the goal in the Theme-Object construction

Table 22 shows the distribution of prepositions that occur in the Theme-Object construction. The right-most column in Table 22, marked "no preposition", aggregates a variety of types of data, since the path of the Theme can alternatively be marked by various adverbs or omitted altogether. Figure 19 presents the same data in terms of percentages (ignoring the uses without a preposition) graphically.

In order to probe for a significant relationship between prefixes and prepositions, the data in Table 22 was analyzed using χ^2-test, excluding the "no preposition" column, which is heterogeneous and thus not strictly comparable to the data in the other two columns. A χ^2-test comparing the distribution of frequencies yields a value of 59.8343 (df = 3, p = 6.377e-13), suggesting an as-

sociation between the choice of the prefix and the choice of the preposition. The effect size measured by Cramer's V is 0.38, thus registering between a moderate and a large effect.

The imperfective base verb *gruzit'* 'load' has no preference with regard to the prepositions *na* 'onto' and *v* 'into'. *Nagruzit'* attracts the preposition *na* 'onto', while both *zagruzit'* and *pogruzit'* follow the opposite trend, attracting the preposition *v* 'into'[27]. It appears that the choice of the preposition in the Theme-Object construction depends on whether the goal is understood as a SURFACE (*na* 'onto') or as a CONTAINER (*v* 'into'). The association of the *na-* prefixed verb with the preposition *na* makes sense, since the preposition and the prefix have inherited a meaning that refers to a SURFACE, cf. the verb *nadet'* 'put on (clothing)' and the phrase *na stol* 'onto the table'. This connection is palpable also in examples like 83):

(83) *Na teležku nagruzili celuju goru jaščikov, čemodanov i meškov.* [Sergej Rozanov. Priključenija Travki (1938)]
   [Onto cart-ACC loaded whole mountain-ACC boxes, suitcases and bags-GEN.]
   '[They] loaded a whole mountain of boxes, suitcases and bags onto the cart.'

Zagruzit' and *pogruzit'*, on the other hand, strongly prefer the preposition *v* 'into', where the goal is conceptualized as a CONTAINER, as in (84) and (85).

(84) *Krome togo, v mašinu zagruzili ogromnyj rjukzak s paraplanom, paru kanistr, vešči,* instrument *i koe-kakuju meloč'.* [Jurij Nečetov. Zimnie kanikuly (2004) // "Za rulem", 2004.03.15]
   [Beside that-GEN, into car-ACC loaded huge backpack-ACC with paraglider-INST, pair-ACC canister-GEN, things-ACC, instrument-ACC and various trifles-ACC.]
   'In addition [they] loaded a huge backpack with a paraglider, a couple of canisters, things, an instrument and various trifles into the car.'

(85) *Pogruziv s pomošč'ju šofera v mašinu svoi vešči, Tamara vsju dorogu do goroda prodremala.* [Petr Akimov. Plata za strax (2000)]
   [Having-loaded with help-INST driver-GEN into car-ACC own things-ACC, Tamara-NOM whole way-ACC to town-GEN slept.]
   'Having loaded her things into the car with the driver's help, Tamara slept all the way to town.'

---

[27] In the case of *zagruzit'*, this preference may be due to a parallelism between the preposition *v* 'into' and the preposition *za* 'beyond', both of which can refer to crossing the boundary of a container. In the case of *pogruzit'*, the preference for *v* 'into' may be explained by the presence of some examples that continue the original meaning of this verb as 'sink, plunge', from which the 'load' meaning is historically derived via metonymy (since barges sink when loaded, cf. Nichols 2008). These are, however, speculative remarks that will need further study.

6.5. Summary

We see clear differences among the four 'load' verbs. The base imperfective *gruzit'* strongly prefers the Theme-Object construction. The *na-* prefixed perfective is nearly the mirror image, preferring the Goal-Object construction. This preference of *nagruzit'* for focusing on the goal may have to do with the SUR-FACE meaning of *na-*, which corresponds to the meaning of the corresponding preposition *na* 'onto' (which this verb also shows a strong predilection for). *Zagruzit'* shows an almost even distribution across the two constructions, whereas *pogruzit'* is almost exclusively restricted to the Theme-Object construction, suggesting a focus on the Theme that is loaded rather than the place where the load ends up. This finding is striking given that all three perfectives are traditionally considered to bear semantically "empty" prefixes. If the three prefixes were indeed empty, we would expect no effect, or at the very least, an identical effect across the three perfectives, i.e. a random distribution. Here, instead, we find that the three prefixed verbs behave very differently both from the unprefixed imperfective and from each other. We take this as strong evidence against the traditional "empty" prefix hypothesis, since a zero should have no effect, and we cannot countenance three "different" zeroes.

With 'load' verbs the speaker is more free to construe the situation differently since they are not characterized by the same degree of specificity as the 'smear' verbs. We can load any kinds of objects and the Goals can be represented by both containers and surfaces. Yet, even within the 'load' verbs we find asymmetries. The use of each 'load' verb is generally skewed in favor of one of the locative constructions, with *zagruzit'* 'load' being the only exception. In this case, however, the crucial factor is the interaction between the general preferences of non-metaphorical contexts on the one hand (selecting for the Theme-Object construction) and of metaphorical extensions on the other (selecting for the Goal-Object construction). Furthermore, within the loading scene one of the participants can be further profiled, which results in the omission of the second participant. Such profiling is particularly relevant for metaphorical uses, when humans serve as metaphorical containers for information and work.

Summarizing our observations concerning the 'smear' verbs we can say that the verb *mazat'* 'daub, smear' is rather central for the Locative Alternation verbs since it can alternate between the two prototypical Locative Alternation constructions similar to the verb 'load'. Moreover, the verbs *mazat'* and *gruzit'* are the only two verbs that have Natural Perfectives (that can also show alternation). For these reasons the verbs are located in the central section of the diagram presenting the relation between the Locative Alternation verbs given in Chapter 2.

However, the verb *mazat'* 'daub, smear' also differs from the verb *gruzit'* 'load' in several important ways. First, the distribution with *mazat'* is strongly in favor of the Goal-Object construction. Moreover, only one of the prefixed

counterparts, namely the one with the prefix *na-*, shows alternation among the Natural Perfectives of *mazat'*. Second, in addition to the Theme-Object and the Goal-Object constructions, the verb *mazat'* 'daub, smear' is characterized by a large number of elaborations which can be explained by the fact that the verb *mazat'* takes substances and not solid objects as Themes.

Passive participles have the effect of increasing the relative frequency of the construction that is associated with a given verb. For the verb *mazat'*, The Goal-Object construction is even more dominant in the passive forms than in the non-passive forms. The Hybrid construction in general is not compatible with the passive forms. There is a special situation with *namazat'* where the Theme-Object construction also contains an additional Theme in the Instrumental case and there are metonymical relations between the image and the substance with which it is painted. *Namazat'* is the only 'smear' verb where the Theme-Object construction is attested with passive forms. Note that the frequency for the Theme-Object construction is the highest for the same verb with the non-passive forms. *Pomazat'* shows a low frequency with the passive forms. This is because the prefix *po-* has a very defused semantics and thus is not able to focus the emphasis on one of the participants. The frequency of the passive participles with the unprefixed verb *mazat'* 'daub, smear' is relatively high due to a single conventional expression *odnim mirom mazany* 'all people are the same/ no one is perfect'.

One more important difference between the Theme-Object and the Goal-Object constructions in terms of their relation to reduction is that the quality of reduced structures in the two constructions appears to be different. In many cases the missing component is mentioned in the previous context and thus can be treated as an instance of ellipsis. Such cases are attested for both the Theme-Object and the Goal-Object construction. Yet, the Goal-Object construction is also characterized by cases where reduction interacts with metaphor. The major metaphorical extensions involve a "person" (Goal), who serves as the metaphorical CONTAINER, and "information" or "work" (Theme), which represent metaphorical CONTENTS.

Reduction in general is more associated with the Goal-Object construction, which is parallel to the effect attested for the 'load' verbs. The similarities also concern the prefix that most triggers reduction. With both the 'load' and 'smear' verbs it is the prefix *za-*.

The prefix *po-* is less common with reduction due its less specified semantics and tends to express both participants overtly.

Unlike *gruzit'* 'load' (with 107 passive examples), *mazat'* 'daub, smear' is attested only in one passive context. The passive particples with *gruzit'* 'load' basically perform the function of adjectives (*tjažēlo gružēnnye mašiny* 'heavily loaded cars'). We do not find such effects with *mazat'* 'daub, smear', hence the frequency with passive particples is very low.

Finally, *mazat'* 'daub, smear' is characterized by omissions in the elaborated constructions. However, such omissions should be treated as instances of

restructuring rather than reduction. Reduction refers only to modifications of a single construction. However, elaboration presupposes an interaction between two or more constructions, some of which are ommited in order to accommodate the multiplicity of constructions in a single clause.

The verbs *gruzit'* and its aspectual counterparts *nagruzit', zagruzit', pogruzit'* show a different distribution among metaphorical representations and reduced constructions, proving that the prefixes *na-*, *za-* and *po-* are not empty. The major part of metaphorical extensions occurs in the Goal-Object construction, particularly in its reduced version, providing evidence that metaphor can also be detected on the formal level.

Not all Theme-Object and Goal-Object constructions are uniform. Constructions can be modified in several ways:

- o   by metaphor (changing the class of the participant);
- o   by reduction (permanently leaving out one of the participants).
- o   by elaboration (interaction with another construction)

Metaphorical extensions closely interact with: prefixes (*za-* shows a higher frequency with metaphorical extensions); constructions in general (metaphor usually correlates with the Goal-Object construction); reduced constructions (metaphorical extensions of prefixed verbs are often instantiated as reduced constructions, which is particularly noticeable for *zagruzit'*); grammatical forms of the verb (passive participles appear to show higher frequencies for metaphorical extensions within prefixed verbs).

In addition to the three correlations discussed above (between the construction and such factors as the verb, the grammatical form, reduction and metaphor), our data also shows a correlation between the prefix and prepositions. This correlation can be attested only in the full version of the Theme-Object construction. The imperfective base verb *gruzit'* 'load' has no preference with regard to the prepositions *na* 'onto' and *v* 'into'. *Nagruzit'* attracts the preposition *na* 'onto', while both *zagruzit'* and *pogruzit'* follow the opposite trend, attracting the preposition *v* 'into'. It appears that the choice of the preposition in the Theme-Object construction depends on whether the goal is understood as a SURFACE (*na* 'onto') or as a CONTAINER (*v* 'into'). The association of the *na*-prefixed verb with the preposition *na* makes sense, since the preposition and the prefix have inherited a meaning that refers to a SURFACE.

Chapter 7

Locative Alternation within verbs prefixed in *ZA-*

"You shall know a word by the company it keeps."
(Firth 1957: 11).

The present Chapter continues the discussion of the relation between prefixes and the Locative Alternation. While Chapter 6 analyzed the two central Locative Alternation verbs 'load' and 'daub, smear' that can alternate with and without the prefix, the present Chapter is designed to look at the prefix *za-* that facilitates alternation for other verbs as well. Other locative verbs that do not show alternation when unprefixed, but which we nevertheless attribute to the list of the Locative Alternation verbs, show some alternation effects when prefixed in *za-*.

It has been mentioned in Chapters 2-4 that the Locative Alternation phenomenon is the result of an interaction between three different factors, namely the semantics of the verb (Chapter 2), the meaning of the constructions (Chapter 4), and the prefix (Chapter 3). Moreover, the Locative Alternation constructions as such can be represented as non-metaphorical vs. metaphorical, full vs. reduced, and can be elaborated (i.e. can present hybrid forms with other constructions, such as for instance the passive construction). The present chapter includes three sections. First, it discusses the interaction of the semantics of the verb, the meaning of the constructions, and the semantics of the prefix *za-* in the non-passive forms of the Locative Alternation verbs (section 7.1). In this section we present the range of constructions available for each *za-* prefixed verb in terms of constructional maps. Collectively the *za-* prefixed verbs give evidence for a system of relationships among these constructions. Second, this chapter focuses on the effect that the passive factor has on the distribution of the con-

structions (section 7.2). Finally, we look at metaphorical extensions of the Locative Alternation verbs prefixed in *za-* and show how the overall distribution of the constructions is dependent on metaphor and passive forms (section 7.3). The summary of the Chapter is offered in section 7.4.

7.1. Non-passive forms

In this section we present the data for the non-passive forms prefixed in *za-* and relate the observed data to the classifications made by previous scholars. The first subsection looks at the relation between the prefix *za-* and the prototypical and non-prototpical Locative Alternation constructions. The second subsection points out deficiencies in previous approaches, which fail to account for all of the data. The last subsection offers constructional maps for each Locative Alternation verb and proposes a different system for presenting verbal semantics.

7.1.1 Overview of the Locative Alternation constructions

The data frequencies, collected as described in Chapters 4 and 5, are presented in Tables 1 and 2 below.

Verb	Gloss	Causative		Theme-Subject	Impersonal	Decaus	Hybrid	All
		Theme-Object	Goal-Object					
zapryskat'	'spray'	0	0	0	0	0	0	0
zakapat'	'drip'	8	11	0	0	64	1	84
zabryzgat'	'splatter'	0	28	8	1	3	3	43
zasypat'	'strew'	38	209	15	16	1	2	281
zalit'	'pour'	20	100	17	15	0	0	152
zamazat'	'daub, smear'	0	109	0	0	0	0	109
zagruzit'	'load'	94	114	0	0	0	0	208
zapakovat'	'pack'	13	0	0	0	0	0	13
zapixat'	'stuff'	63	0	0	0	0	0	63
zavešat'/ zavesit'	'hang'	2	21	0	0	0	0	23
zastavit'	'stand'	0	2	0	0	0	0	2
založit'	'lay'	238	8	0	0	0	0	246
Total								1224

Table 1. Locative Alternation among non-passive forms of the Russian verbs prefixed in *za-* (raw frequencies).

Verb	Gloss	Causative		Theme-Subject	Impersonal	Hybrid	Decausa-tive
		Theme-Object	Goal-Object				
zapryskat'	'spray'	0	0	0	0	0	0
zakapat'	'drip'	13.1%	9.5%	0	0	1.2%	76.2%
zabryzgat'	'splatter'	0	65%	19%	2%	7%	7%
zasypat'	'strew'	13.5%	74.4%	5.30%	5.7%	0.7%	0.4%
zalit'	'pour'	13%	66%	11%	10%	0	0
zamazat'	'daub, smear'	0	100%	0	0	0	0
zagruzit'	'load'	45%	55%	0	0	0	0
zapakovat'	'pack'	100%	0	0	0	0	0
zapixat'	'stuff'	100%	0	0	0	0	0
zavesit'	'hang'	8.7%	91.3%	0	0	0	0
zastavit'	'stand'	0	100%	0	0	0	0
založit'	'lay'	96.7%	3.3%	0	0	0	0

Table 2. Locative Alternation among non-passive forms of the Russian verbs prefixed in *za-* (relative frequencies).
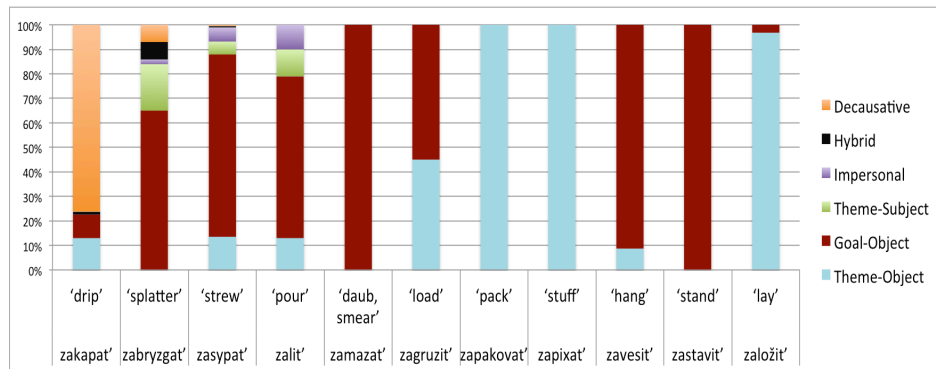

Figure 1. Locative Alternation among non-passive forms of the Russian verbs prefixed in *za-* (relative frequencies).

As can be seen from Figure 1, In addition to the prototypical Locative Alternation construction (the Theme-Object and the Goal-Object constructions), the Locative Alternation verbs with the prefix *za-* are also attested in four additional constructions: the Theme-Subject construction, the Impersonal construction, The Hybrid construction and the Decausative construction. An overview of these constructions is provided in Chapter 4. In this subsection we are going to look at the way these constructions interact with the prefix *za-*.

Za- with prototypical Locative Alternation constructions
The analysis of the alternating verbs in Russian shows that the semantics of the prefix is construction-specific. When the Goal-object construction is "headed"

by *za-*, the prefix bears the meaning of "covering" (cf. *zabryzgat',* *zamazat',* *zastavit'*) or "filling" (as in *zagruzit'*). On the other hand, when *za-* appears in the Theme-object construction, it has the meaning of reaching a natural end-point (*zagruzit'*, *zapakovat'*) or "placing" (*zapixat'*, *založit'*).

In general, the prefix *za-* seems to be more frequent in the Goal-Object construction, which indicates that there is a certain correlation between the construction and the prefix. The correlation of the prefix *za-* with the Goal-Object construction reveals itself in two ways: first, *za-* eliminates alternation within the alternating verbs like *mazat'* 'smear', strengthening the status of the Goal-Object construction, second, it shifts many verbs from the Theme-Object construction to the Goal-Object construction (cf. the verbs *zagruzit'*, *zasypat'*, *zalit'*, *zavešat'/zavesit'*, *zastavit'* in Figure 1 and the corresponding unprefixed verbs given in Chapter 8). However, the correlation between the prefix *za-* and the Goal-Object construction is not as consistent as presented in (Olbishevska 2004). As shown in Chapter 3, the prefix *za-* has a double prototype (COV-ER/BEHIND), which makes it compatible with both the Theme-Object and the Goal-Object constructions. This point is particularly evident in the case of the verbs *zasypat'* 'strew' and *zalit'* 'pour', which do not alternate without the prefix but can be used in both constructions when prefixed in *za-*.

It appears that Russian *za-* is strongly associated with a container. In particular, this idea is supported by the distribution of *za-* with spatial prefixes *na* 'on' and *v* 'in'. For instance, the unprefixed verb *gruzit'* 'load' does not set any restrictions on the type of the Goal (i.e. information whether the Goal is a container or a surface) and shows an even distribution between the container-oriented preposition *v* and the surface-oriented preposition *na* that introduce the Goal in the Accusative case. However, its Natural Perfective with *za-* strongly prefers the container-oriented *v* (88% vs. 12% with *na*), while the *na*-perfective favors the surface-oriented preposition *na* (see Sokolova, Lyashevskaya, Janda forthcoming). It is plausible that when added to the Russian alternating verbs, *za-* as a rule shifts the focus from the Theme to the Goal. Yet, a *za*-verb can be used with the Theme-Object construction if the Goal is a container. For instance, in (1-2), the Russian verb *zasypat'* 'strew' has the same Theme (the gravel). When the Goal is a surface, as in (1), only the Goal-Object construction is used (see example 1a).

(1)   a. *Kogda vse rastenija budut vysaženy,* **zasyp'te** *ploščadku graviem.*
      [Tat'jana Kojsman. Ot al'pinarija k cvetniku (2003) // "Sad svoimi ruka-mi", 2003.09.15]
      [When all-NOM plants-NOM be-FUT planted, za-strew-IMP ground-ACC gravel-INS]
      'Once the plants are planted out, strew the ground with gravel.'

      b. ?*Zasyp'te gravij na ploščadku.*
      [za-strew-IMP gravel-ACC on ground-ACC]

'Strew the gravel on the ground.'

At the same time, the Theme-Object construction is possible with the same Theme (the gravel) if the Goal represents a container, which is usually headed by the preposition *v*:

(2) ***Zasyp'te*** *gravij v akvarium* (minibiohome.com/manual_aquasaurs.php)
[za-strew-IMP gravel-ACC into aquarium-ACC]
'Strew the gravel into the aquarium.'

Even when the Goal of the verb *zasypat'* 'strew' is marked by the preposition *na* 'on', it still refers to a container:

(3) *Na dno tranšei* ***zasyp'te*** *gravij* (www.mukhin.ru/home/decoland/30.html)
[On bottom-ACC ditch-GEN za-strew-IMP gravel-ACC]
'Strew the bottom of the ditch with gravel.'

However, if the Goal of a verb is almost never a container, a shift in the construction occurs, as in the case of *zamazat'* 'smear', which is attested only in the Goal-Object construction. The verb *zamazat'* gains an additional meaning of "covering" and "hiding" the Goal, making it inaccessible (4):

(4) *... a kraskoj* ***zamaž'te*** *nadpisi na stenax pod''ezdov.* [Aleksandr Fedorov. Črezvyčajnaja situacija (2002) // "Avtopilot", 2002.01.15]
[and paint-INS za-smear-IMP inscriptions-ACC on walls-LOC entrances-GEN]
'…and use the paint to cover up the messages on the walls in the entrances.'

We might assume that the Russian *za-*, which is associated with "crossing a boundary", presupposes that the trajector is always INSIDE or BEHIND the landmark. As a result, Russian sets a restriction on the use of *zavesit'* 'hang' in the Theme-Object construction since the Goal of 'hang' is always a surface. (In other Slavic languages the situation with corresponding verbs can be different, due to differences in prototypes for *za-*. Cf. the Polish *zawiesić* 'hang' which is used in the Theme-Object construction, see Sokolova and Lewandowski 2010).

Due to the double prototype of the prefix *za-* the choice of the construction in *za-*verbs depends on the verbal root and the extension that we are dealing with, although overall among the Russian Locative Alternation verbs there is a tendency towards choosing the Goal-Object construction. We come across different preferences for metaphorical expressions as compared to non-metaphorical uses (cf. the metaphorical extensions of *zagruzit'* 'load' and *založit'* 'lay' discussed in subsection 4 of the present chapter).

Za- with other Locative Alternation constructions

The non-prototypical Locative Alternation constructions are characteristic only for the verbs located on the left side of the diagram in Figure 1. In all of these verbs the Theme is represented as a substance (mass) and the Goal is usually a surface. Moreover, most of these verbs can present the Theme as a substance acting on its own, which provides the ground for their compatibility with the non-prototypical Locative Alternation constructions. Verbs like *zakapat'* 'drip', *zabryzgat'* 'spatter', *zasypat'* 'strew', *zalit'* 'pour' deal with liquids and dry substances (the latter can be snow, hail, dirt, etc.) that can be treated more naturally as independent agents, hence we find their uses in the non-prototypical Locative Alternation constructions in the Russian National Corpus. The verb *mazat'* 'daub, smear' also has a substance as the Theme but usually these are not the substances that can act on their own. Thus, we find no attestations of these verbs in the non-prototypical constructions in the RNC, although occasionally such constructions appear on the Internet:

Impersonal construction (4 examples with the Theme 'clay')

(5) *...kuxnju zasypalo razrisovannymi listami, zalilo zavarkoj i **zamazalo** glinoj...* (http://www.diary.ru/~la-donna)
[kitchen-ACC strewed scribbled papers-INS, poured infusion-INS and smeared clay-INS]
'...the kitchen got strewn with scribbled papers, infusion poured all over, and smeared with clay'

Theme-Subject construction (7 examples with the Theme 'paint')

(6) *častično kraska **zamazala** i steklo*
(http://www.flylady.ru/fly/viewtopic.php?f=8&t=10758)
[partially paint-NOM smeared even glass-ACC]
'the paint partially smeared even the glass'

The **Theme-Subject construction** is mainly attested for the verbs located on the left side of the diagram (*zabryzgat'* 'splatter', *zasypat'* 'strew', *zalit'* 'pour'). In these cases the Theme is always a substance that can be represented as a force acting on its own. The **Hybrid construction** is more common for the unprefixed verbs (see Chapter 8 for more details). The prefix is Object oriented whereas the Hybrid construction places the focus on the Subject as an experiencer. Thus prefixed verbs are less compatible with the Hypbrid construction. For instance, the Russian National Corpus does not provide any examples of the full Hybrid construction for the verb *zabryzgat'* 'spatter'. On the Internet we do find a few instances of the full Hybrid constructions, as in examples (7-9) below:

(7) *Vardan mgnovenno razvernulsja i **zabryzgal** sljunoj na kapjušon palača: - Ja skazal - povesit', značit, povesit'!* (http://samlib.ru/g/garr_g/3inch.shtml)

[Vardan-NOM instantly turned and spattered saliva-INS on hood-ACC hangman-GEN: --I-NOM said -- hang, means hang]

'Vardan instantly turned around and started to spatter saliva on the hangman's hood: I said to hang him, so hang him!'

(8) *Ja dernulsja bylo tuda, no Ljupus vcepilsja mne v plečo zdorovoj levoj rukoj i **zabryzgal** sljunoj na uxo: --Stoj, idiot!*

(http://www.stephenking.ru/fanfics/kozha_cveta_izmeny/2.html)

[I-NOM rushed was there, but Ljupus-NOM attached me-DAT in shoulder-ACC healthy left hand-INS and spattered saliva-INS on ear-ACC: --Stand, idiot-NOM]

'I was going to rush over there, but Ljupus grabbed me by the shoulder with his mighty left hand and started spattering saliva on my ear: Stop, you idiot!'

(9) *-Ax, ty stručok, - **zabryzgal** on sljunoj na lysinu Ivana Moiseeviča, nikuda ty ne pojdeš'.* (http://www.proza.ru/2009/12/26/67)

[Oh, you jerk-NOM, - spattered he-NOM saliva-INS on bald-spot-ACC Ivan Moiseevič-GEN, nowhere you-NOM not go.]

'Oh, you jerk, - he started spattering saliva on Ivan Moiseevič's bald spot, you're not going anywhere.'

It is remarkable though that all such examples introduce direct speech (see Chapter 4).

Thus, the relation between the verbs prefixed in *za-* and the Hybrid construction can be characterized in the following way. The verbs prefixed in *za-* can be used in the Hybrid construction but less frequently than the same unprefixed verbs. Whenever a verb prefixed in *za-* appears in the Hybrid construction, the construction is usually reduced (the Goal is omitted). This tendency was discussed in Chapter 4. It follows from Figure 1, that the three *za-*verbs that occur in the Hybrid construction are *zabryzgat'* 'spatter', *zakapat'* 'drip', *zasypat'* 'strew', all of which are found on the left side of the diagram. The reason why these verbs are compatible with the Hybrid construction is the fact that the Hybrid construction with the prefix *za-* gives the ingressive effect, and the verbs mentioned above are the only verbs from the list for which the ingressive meaning is natural. Chapter 8 provides a comparative analysis of these verbs and their unprefixed analogs.

As follows from this overview, the Locative Alternation constructions are not limited to just the two traditionally described as the Theme-Object and the Goal-Object constructions. The verbs that introduce substance-like Themes (located on the left side of Figure 1) involve Hybrid, Decausative, Impersonal and Theme-Subject constructions. The more likely the Theme can be represented as a force acting on its own, the more variation of constructions is possible. The prefix, however, limits the capacity of the verb to appear in the "non-traditional" Locative constructions and is often supported by reduction.

7.1.2. Existing classifications of verb classes and evidence from the Russian data

The present subsection contrasts the results of the analysis presented above with previous classifications of verb classes. We show how our analysis is different from that of Pinker (1989) and Lewandowski (2009).

Pinker 1989

In Chapter 2, we presented a classification of verb classes relevant for the Locative Alternation introduced by Pinker (1989). Figure 2 shows two groups of alternating verbs according to Pinker (1989) (the left side of the diagram) and those verbs that were not listed among alternating verbs (the right side of the diagram).
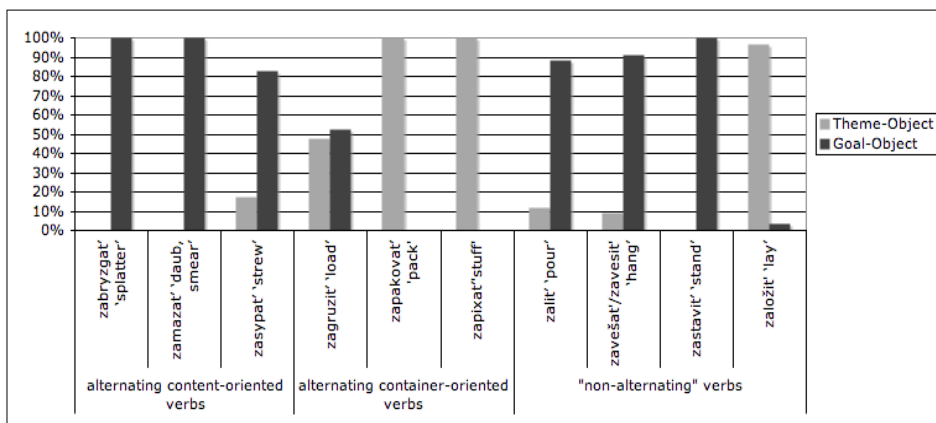

Figure 2. *Za*-verbs arranged according to groups proposed by Pinker (1989).

As follows from Figure 2, the prefix *za-* has a different effect on different verbs. On the one hand, it makes some of the non-alternating verbs alternate, as can be clearly seen in the case of *zalit'* 'pour', *zavešat'/zavesit'* 'hang', *založit'* 'lay'. The verb *zastavit'* 'stand' that also belongs to the "non-alternating" verbs according to this classification was attested only in the Goal-Object construction in the RNC (example 9 above) but shows additional contexts in the Theme-Object construction in Google (see example 10 above). Thus, we can roughly say that all verbs that should not be pertinent to the Locative Alternation in reality do alternate if they are prefixed in *za-*.

On the other hand, some of the verbs that should show alternation seem to prefer only one construction when prefixed in *za-*. This is the case with *zabryzgat'* 'spatter', *zamazat'* 'smear, daub' that occur only in the Goal-Object construction in the RNC, and the verb *zapixat'* 'stuff'. The difference between these verbs is however that the first two alternate without the prefix, so the prefix restricts the usage of the verb to one construction only.

Thus, Pinker's classification can hardly be applied to the Russian data since there are both alternating verbs that do not show alternation when prefixed with *za-* and non-alternating verbs that do show such alternation. Our case study suggests that the prefix *za-* is the prefix that allows verbs typically associated with the change of location pattern to appear in the change of state construction (cf. the Russian verb *zavesit'* 'hang'). This goes against Pinker (1989), who claims that verbs like 'hang' or 'pour' should not appear in the change of state pattern. As our data from Russian show, such a shift is possible when the corresponding verbs are prefixed with *za-*.

Lewandowski 2009

Another possible solution for classifying alternating verbs was offered in Lewandowski (2009) (see Chapter 2 for full description). Lewandowski takes Slavic data into consideration (Polish) and suggests a classification based on three major types: "manner", "path", and "hybrid". Figure 3 below arranges the Russian Locative verbs prefixed in *za-* according to Lewandowski's classification.
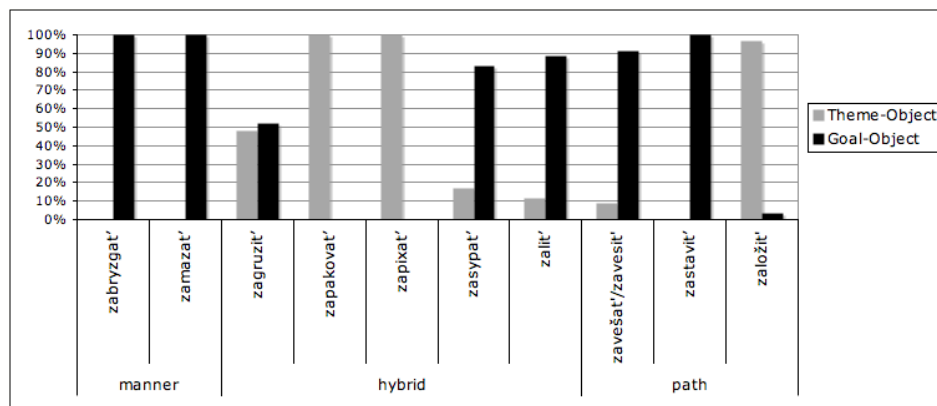

Figure 3. *Za*-verbs arranged according to groups proposed by Lewandowski (2009).

The prediction made by Lewandowski is that "path" verbs would choose the Theme-Object construction and would not show alternation, "manner" verbs should favor the Goal-Object construction, and "hybrid" verbs should alternate between the two constructions since they share the properties of both groups. However, Russian verbs classified by Lewandowski as "path" verbs alternate, contrary to this prediction, when prefixed in *za-* and mostly choose the Goal-Object construction. Moreover, "hybrid" verbs behave very differently and it is not clear what unites them within one group. Thus, applying Lewandowski's classification to the Russian data also appears to be problematic.

An alternative proposal made in the present study suggests presenting the classification of the Locative Alternation verbs as a typology of Themes and

Goals. For Themes, the relevant issue is whether the Theme represents a substance or a solid object. For Goals, the relevant issue is whether the Goal appears as a surface or a container. The three blocks that can be singled out in this respect are indicated in Figure 1 and are discussed in detail in the subsection below. Moreover, we revise the list of the Locative Alternation constructions (see the description in Chapter 4) and provide a constructional map for each Locative Alternation verb, thus illustrating which of the six constructions under consideration it can appear in.

### 7.1.3. Overview of the Locative Alternation verbs prefixed in *za-*

This section presents **Constructional maps** for the Locative Alternation verbs that arrange the constructions according to the three groups indicated in Figure 1: the central block, the right block, and the left block (see Figure 1). Constructional maps present all the constructions that a given verb appears in and shows the relation between the constructions. Similar to semantic maps offered by Haspelmath (1997), constructional maps show in which adjacent constructions the verb is attested. This means that all the constructions which are possible for the verb form a continuum on the map (i.e. there are no gaps between constructions).

The solid grey boxes indicate that the verb is attested in the given construction in the RNC. In addition, the potential of the verb to appear in other constructions, not found in the RNC, was tested against the data from the Yandex and Google search engines. If the Internet data showed occurrence of the verb in other constructions, such constructions were marked by striped boxes. Thus, if a construction is marked by a striped box it indicates that it is marginal for the verb but possible.

I. The central block

The central block is formed by the verb *zagruzit'* 'load' where the Goal can be represented as both a surface and a container and the Theme appears as an independent solid object or a set of objects. Grammatically this results in the capacity of this verb to alternate both in the unprefixed and the prefixed forms. However, the verb *zagruzit'* 'load' alternates only between the basic Locative Alternation constructions, i.e. the Theme-Object and the Goal-Object constructions.

zagruzit'
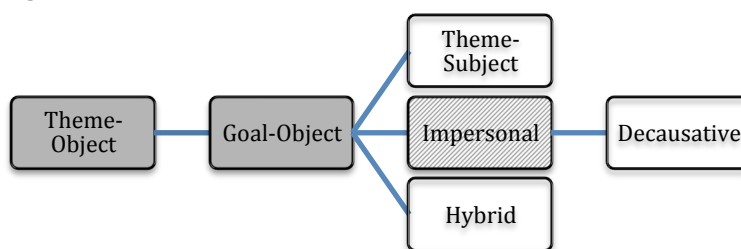
We do find occasional instances of the Impersonal construction on the Internet, as in example (10) below:

Impersonal construction
(10) *sama videla kak ženščinu mašina sbila...menja potom nadolgo **zagruzilo***
(http://www.landscrona.ru/forum/index.php?s=94a369c833ac56519ff1f19a
6c07d4fd&showtopic=386)
[self-NOM saw how woman-ACC car-NOM hit...me-ACC afterward long-time loaded]
'I myself saw a woman get hit by a car...I was depressed for a long time afterward'

In (10) the person (metaphorical container) is loaded with information and experience (metaphorical content that is reduced). The analysis of similar examples was presented in Chapter 6 (metaphorical pattern Goal:HUMAN+Theme:INFORMATION). The only difference here is that the Agent of the sentence is missing, which puts additional emphasis on the state of the Goal (person that is overloaded with information). The Impersonal construction is highly marginal for the verb *zagruzit'* 'load' and is attested only in metaphorical extensions with reduction.

II. The right block
The right block comprises the verbs that deal with discrete objects as their Themes and mostly take containers as their Goals. Such verbs are placed on the right side of the verb *zagruzit'* 'load' in Figure 1.

zapakovat'
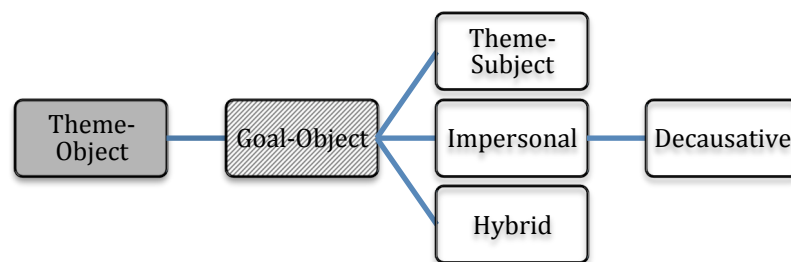
For the verb *zapakovat'* 'pack' we find only attestations of the Theme-Object construction in the RNC, as in examples (11-12) below:

Theme-Object construction
(11) ***Zapakujte** glinu v paket...* [Rodovoj dom (2004) // "Narodnoe tvorčestvo", 2004.02.16]
[Pack clay-ACC in bag-ACC]
'Pack clay in a bag...'

(12) …*otprav'te mne ee* (kerosinku) *počtoj, tol'ko zapakujte v bumagu, čtoby ona ne razbilas'* [Emma Gerstejn. Lisnjaja ljubov' (1985-2002)]
[Send it (oil cooker)-ACC me-DAT mail-INS, only pack in paper-ACC, so-that it-NOM not break]
'Sent it to me via mail, only wrap it in paper so that it does not break'

It is important, however, that these instances of the Theme-Object construction represent slightly different types. *Zapakovat'* 'pack' can refer to situations of placing something inside a container (example 11) as well as to the contexts of wrapping something, i.e. covering the surface of an object (example 12). For situations like (11) the Goal-Object construction is uncommon (see example 13), although Internet pages contain examples like (14) below, where *zapako-vat'* 'pack' is used in the Goal-Object construction:

Goal-Object construction
(13) Cf. ??*Zapakujte paket glinoj*
[Pack bag-ACC clay-INS]
'Pack the bag with clay'

(14) *Est' dva čemodana: odin ja xoču **zapakovat'** ličnymi veščami, drugoj po-darkami* (chemodan.eu/news/2008/01/4373.html?Page=5)
[Is two-NOM suitcases-GEN: one-ACC I-NOM want pack personal things-INS, other-ACC presents-INS]
'I have two suitcases: one of then I want to pack with my personal things and the other one with presents'

Example (14) profiles the Goal (suitcases) as the Direct Object and the Theme (personal things) as the noun phrase in the Instrumental case.

Contexts like (12), on the contrary, can be expressed by means of the Goal-Object construction (see example 15):

(15) Cf. *Zapakujte kerosinku bumagoj*
[Pack oil cooker-ACC paper-INS]
'Pack the oil cooker with paper'

Usually, the Theme-Object and the Goal-Object constructions differ in constru-al since they profile different objects as the Direct Object (the Theme in case of the Theme-Object construction and the Goal in case of the Goal-Object con-struction, as discussed in Chapters 2 and 4). The peculiar situation with exam-ples like (12) and (15) is that both cases profile the same object, the one that is being wrapped (here *kerosinka* 'oil cooker').

Thus, the main attestations of the Goal-Object construction for the verb *zapako-vat'* 'pack' refer to the contexts of wrapping (which is also true for the passive forms of the verb *zapakovat'* 'pack', as the following section illustrates).

Although examples like (14-15) are potentially possible, the frequencies from the RNC can be taken as evidence that the dominant construction for the verb *zapakovat'* 'pack' is the Theme-Object construction.

zapixat'
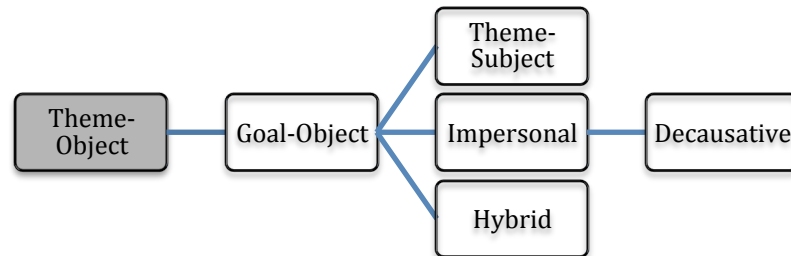
The constructional map of the verb *pixat'* 'stuff' is similar to that of *zapakovat'* 'pack'. However, all the examples deal with situations of placing something inside a container (as in 16 parallel to 11) and not to the situations of covering an object (as in 12):

Theme-Object construction
(16)   *Varvara **zapixala** žurnal k sebe v sumku...* [Tat'jana Ustinova. Podruga osobogo naznahenija (2003)]
       [Varvara-NOM stuffed magazine-ACC to self-DAT in purse-ACC]
       'Varvara stuffed the magazine in her purse...'

According to Pinker (1989) verbs like 'stuff' should alternate. In Russian, however, such alternation is marginal for the unprefixed verb *pixat'* 'stuff' (see example 17) and impossible for the prefixed verb *zapixat'* 'stuff'.

(17)   *sama ne xoču est', a menja zastavljajut, paren' **pixaet** vsjakimi gamburgerami i xot-dogami, roditeli vsjakimi čeburekami*
       (http://www.dietaonline.ru/myhome/myblog_entry.php?id=46148)
       [self-NOM not want eat, but me-ACC force, boy-NOM stuffs all-kinds hamburgers-INS and hot-dogs-INS, parents-NOM all-kinds meat-pies-INS]
       'I don't want to eat, but they force me, my boyfriend stuffs me with all kinds of hamburgers and hotdogs, and my parents with meat pies'

As can be seen from example (17), the unprefixed *pixat'* 'stuff' can alternate when it refers to the situation of someone being stuffed with food.

The remarkable thing about the verb *zapixat'* 'stuff' is that it can potentially be used in a special type of the Impersonal construction that is in fact an extension

of the Theme-Object and not the Goal-Object construction. Such extensions of the Theme-Object without the Agent are illustrated by examples (18-19):

(18) *vse smajly i ostal'nuju grafiku* **zapixalo** *v galereju...*
(http://smart60.ru/files/1200614666_Sm@peR_v10.html)
[all smileys-ACC and other graphics-ACC stuffed in gallery-ACC]
'all the smileys and other graphics were stuffed into the gallery...'

(19) *Dno bylo kamenistoe i po nemu snačala iz-za vetra voločilo jakor', a potom tak krepko* **zapixalo** *v kakuju-to ščel' meždu kamnjami, čto vytaščit' nikak ne udavalos'*
(http://www.demoscope.ru/weekly/2007/0291/semenov-tjan-shanskij.pdf)
[Bottom-NOM was rocky-NOM and along it-DAT at-first from wind-GEN dragged anchor-ACC, and then so solidly stuffed in some crevice-ACC between rocks-INS, that pull-out no-way not achieved]
'The bottom was rocky and at first the anchor was dragged across it by the wind, and then it got stuffed so solidly into a crevice that it was impossible to pull it out'

zavesit'
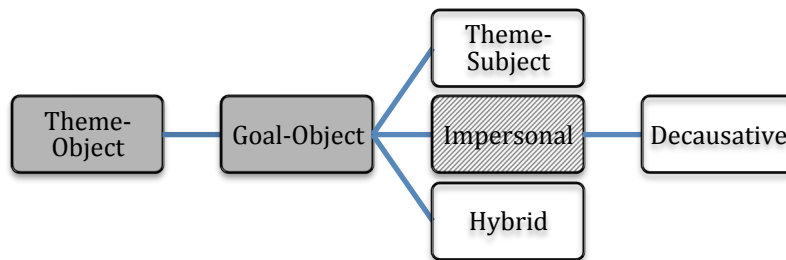
The verb *zavesit'* 'hang' is mostly compatible with the Goal-Object construction, see example (20):

Goal-Object construction

(20) *Steny krasivogo restoranno-banketnogo zala* **zavesili** *tkan'evymi drapirovkami.* [Elizaveta Kozyreva. Damskaja oxota (2001)]
[Walls-ACC beautiful restaurant-banquet hall-GEN hung woven wall-hangings-INS]
'The walls of the beautiful restaurant-banquet hall were hung with woven wall-hangings.'

In the RNC we find only two cases where *zavesit'* 'hang' appears in the Theme-Object construction:

Theme-Object construction

(21) *Kstati, kto **zavesil** vmesto štor pokryvala?* [Natal'ja Bestem'janova i dr.
Para, v kotoroj troe (2000-2001)]
[By-the-way, who-NOM hung instead-of blinds-GEN bedspreads-ACC]
'By the way, who hung up bedspreads instead of blinds?'

In cases like (21) it is more natural to use the prefix *po-* which is more consistent with the placing frame for the verb 'hang'. Thus the Theme-Object can be treated as marginal construction for the verb *zavesit'* 'hang'.

Another marginal construction attested only on Internet pages is the Impersonal construction:

Impersonal construction

(22) *Zamelo, zakružilo, **zavesilo**, Snežnoj penoj rodnoj gorodok*
(http://www.chitalnya.ru/work/273461/)
[Swept, circled, hung, snowy foam-INS native town-ACC]
'Our native town was swept, circled, and hung with a snowy foam'

Impersonal constructions with the verb *zavesit'* 'hang' usually present metaphorical contexts as we see in this example.

zastavit'
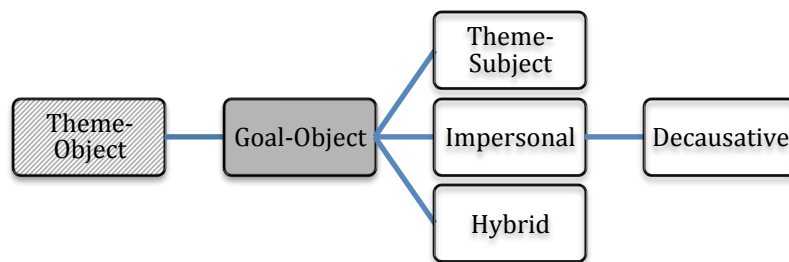
The verb *zastavit'* 'stand' (that belongs to the "non-alternating" verbs according to Pinker's classification) was attested only in the Goal-Object construction in the RNC in examples like (23):

Goal-Object construction

(23) ***Zastavit'*** *prostranstvo mebel'ju ot odnogo proizvoditelja...* [Otkrytie
Ameriki (2004) // «Mir & Dom. City», 2004.05.15]
[Stand space-ACC furniture-INS from one producer-GEN]
'Furnishing a space with furniture all from one producer...'

However, contexts with the Theme-Object construction are also possible and can be found in Google:
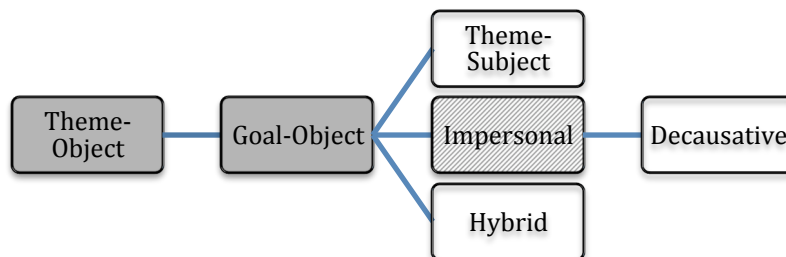
Theme-Object construction

(24) *Kogda že pomjanutaja kniga byla vsja ispisana, to menja **zastavili** v ugol...*
(http://lib.rus.ec/b/116045/read)
[When EMPH mentioned book-NOM was all scribbled-NOM, then me-ACC stood in corner-ACC]
'When the above-mentioned book was all scribbled up, they stood me in a corner...'

založit'

In the case of *založit'* 'lay' the Theme-Object and the Goal-Object constructions take different Themes and Goals. The Goal-Object construction refers to covering flat surfaces (example 25) or holes (example 26):

Goal-Object construction

(25) *Niz plat'ja **založit'** ravnomernymi skladkami i prišit' k nemu pojas.* [Stil' "militari" s ulybkoj (2003) // "Sel'skaja nov'", 2003.09.16]
[Bottom-ACC dress-GEN lay evenly-spaced folds-INS and sew-on to it-DAT belt-ACC]
'Cover the bottom of the dress with evenly-spaced folds and sew on a belt.'

(26) *Spustja vremja vyxod v tonnel' metro **založili** kamnem i ustroili pod zemlej tir.* [Vladimir Gonik. Oktjabr' v preispodnej (2003) // "Soveršenno sekretno", 2003.07.10]
[After time-ACC entrance-ACC in tunnel-ACC metro-GEN lay rock-INS and set-up under ground-INS shooting-range-ACC]
'After a while they covered the entrance to the metro tunnel with rock and set up an underground shooting-range.'

On the other hand, examples with the Theme-Object construction mostly represent lexicalized collocations like *založit' fundament/ osnovu* 'lay the foundation' (34% of all uses), cf. example (27):

Theme-Object construction

(27) *Vmeste oni **založili** osnovu novogo stilja nacional'noj muzyki.* [Zvučala muzyka čuvašskix kompozitorov (2003) // "Rossijskaja muzykal'naja gazeta", 2003.06.11]
[Together they-NOM laid foundation-ACC new style-GEN national music-GEN]
'Together, they established a new style for national music.'

The Impersonal construction for the verb also presents a marginal case that is dependent on an idiomatic collocation like the one in example (28):

Impersonal construction

(28) *No čerez nekotoroe vremja u rebenka **založilo** nos*
(http://health.mail.ru/consultation/307332/)
[But after some time-ACC by child-GEN lay nose-ACC]
'But after some time the child's nose got stuffed up'

Summary:

The verbs of the right block can be split into two groups depending on their constructional behavior. On the one hand we have verbs like 'stuff' and 'pack', which strongly prefer the Theme-Object construction and where the prefix limits the alternation capacity of the verb. On the other hand, we have verbs like 'hang', 'stand' and 'lay', which should not alternate (as the positioning verbs in Pinker's classification), yet which do show the alternation when prefixed in *za-*. In general the preference of the second group is in favor of the Goal-Object construction. The verb *založit'* 'lay' being an exception due to certain collocations like 'lay the foundation'.

Overall, the verbs of the right block are oriented towards the prototypical Locative Alternation constructions. A marginal construction is the Impersonal construction, which is attested only for the metaphorical uses of the verbs *zavesit'* 'hang' and *založit'* 'lay'. In this sense the right block is opposed to the left block, where we find attestations for both prototypical and non-prototypical Locative Alternation constructions.

III. The left block

The left block in Figure 1 includes the verbs that typically have substances as their Themes and surfaces as their Goals.

zakapat'
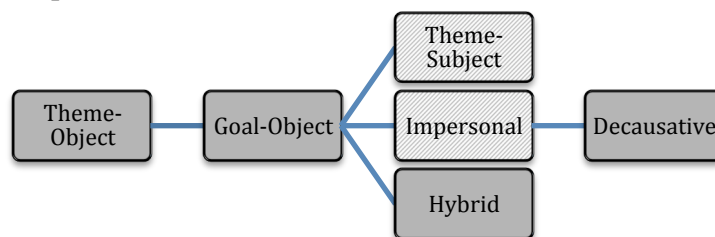
Theme-Object construction

(29) ***zakapajte*** *v nos sosudosuživajuščie kapli...* [V. Pal'čun. "Sljakot'" v pa-
zuxe (1999) // "Zdorov'e", 1999.03.15]
[drip in nose-ACC blood-vessel-constricting drops-ACC]
'Put blood-vessel constricting drops in your nose'

Goal-Object construction

(30) *I v glazax u nee takaja bezdonnaja pustota, slovno ona ix atropinom **zaka-
pala***! [N. Leonov, A. Makeev. Èxo deflota. (2000-2004)]
[And in eyes-LOC by her-GEN such bottomless emptiness-NOM, as-if she-
NOM them-ACC atropine-INS dripped]
'And there is such a bottomless emptiness in her eyes, as if she had dripped
atropine into them!'

(31) *Zatem metodično **zakapala** ves' list svečnym salom...* [Maksim Xutornoj.
Šarlatany no vol'nom vypase (2003) // "Argumenty i fakty", 2003.01.29]
[Then methodically dripped whole paper-ACC candle wax-INS]
'Then she methodically dripped candle wax over the whole paper...'

Although there is some overlap in the choice of Themes and Goals with *zaka-
pat'* 'drip', as we see in these examples, there is a tendency for the different
constructions to prefer different objects. The Theme-Object construction typi-
cally refers to medicine being dripped into an orifice. The Goal-Object con-
struction typically refers to the staining of surfaces, such as clothes or paper.

Hybrid construction

(32) *No on (golub') čudom uderžalsja na framuge, **zakapav** krov'ju na steklo.*
[Dmitrij Lipskerov. Poslednij son razuma (1999)]
[But it (pigeon)-NOM miracle-INS clung on windowsill-LOC, dripped
blood-INS on glass-ACC]
'But by some miracle he (the pigeon) clung to the windowsill, having
dripped blook on the glass.'

Decausative construction

(33) *I slezy **zakapali** emu na bol'nuju ruku i na ee belye pal'čiki.* [Vasilij
Šukšin. Bespalyj (1972)]
[And tears-NOM dripped him-DAT on injured hand-ACC and on her white
fingers-ACC]
'And the tears dripped on his injured hand and on her white fingers.'

Examples from the Internet are attested for the marginal constructions for the
verb *zakapat'* 'drip':

Theme-Subject construction

(34) *Krov' **zakapala** emu botinki*
(http://www.darkkingdom.ru/fanfics/dzed/hatred2.html)

[Blood-NOM dripped him-DAT shoes-ACC]
'Blood dripped all over his shoes'

Impersonal construction

(35) *Poka ja taščil tjaželoe telo na sebe, vsego menja* **zakapalo** *krov'ju*
(http://no-one-asked-us.livejournal.com/17729.html)
[While I-NOM pulled heavy body-ACC on self-ACC, all me-ACC dripped blood-INS]
'While I was pulling on the heavy body, all of me got dripped with blood'

zabryzgat'
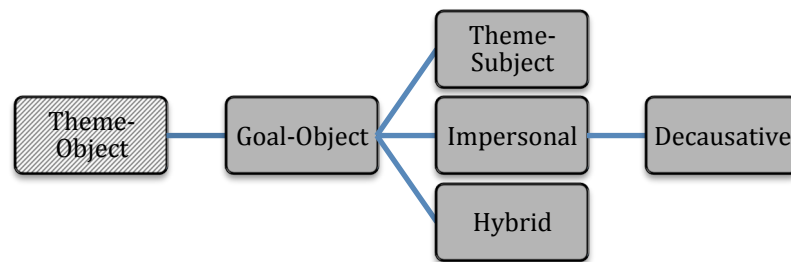
The constructional maps of the verbs *zakapat'* 'drip' and *zabryzgat'* 'spatter' overlap to a great extent. The major difference applies to the Theme-Object construction, which is basic for the verb *zakapat'* 'drip' but not for the verb *zabryzgat'* 'spatter'. On the contrary, the Theme-Object and the Impersonal constructions appear to be more characteristic of the verb *zabryzgat'* 'spatter'. The explanation lies in the type of the Themes that are common for each of these verbs. While *kapat'* 'drip' usually deals with liquids like water, most contexts with the Theme-Subject and the Impersonal constructions take blood as the Theme. The Impersonal construction refers to violent acts, hence the verb *bryzgat'* 'splatter' (close to 'flood' in this use) becomes a more natural choice in such constructions.

Theme-Subject construction

(36) *...potom ja uvidel, kak smuglaja krasavica brosilas' k moim nogam, sxvatila pistolet ... i krov'* **zabryzgala** *moi brjuki.* [Aleksandr Kabakov. Poslednij geroj (1994-1995)]
[...then I-NOM saw, how dark-skinned beauty-NOM threw-self to my feet-DAT, grabbed pistol-ACC and blood-NOM spattered my pants-ACC]
'...then I saw the dark-skinned beauty throw herself at my feet, she grabbed the pistol... and blood spattered my pants.'

Impersonal construction

(37) *Dom, govorjat, ves' v krovišče byl -- potolki **zabryzgalo**.* [Dmitrij Bykov. Orfografija (2002)]

[House-NOM, say, all-NOM in thicket-LOC was -- ceilings-ACC spattered]

'The house, they say, was all in a thicket -- the ceilings were spattered.'

Theme-Object construction

(38) *V zaključenie prazdnika Vodjanoj razdal detjam medali v vide morskix zvezd i os'minožek i lil na každogo vodu iz čaši, a zatem **zabryzgal** vodu vokrug sebja.* (http://merchen177.narod.ru/p19aa1.html)

[In conclusion-ACC holiday-Gen Water-GEN distributed children-DAT medals-ACC in shape-LOC sea stars-GEN and octopuses-GEN and poured on each-ACC water-ACC from cup-GEN and then spattered water-ACC around self-ACC]

'At the conclusion of the Water festival he distributed medals to the children shaped like sea stars and octopuses and poured water on each of them and then spattered water about.'

The Theme-Object construction for the verb *zabryzgat'* 'splatter' is marginal but possible, the prefix *za-* in this case provides the ingressive reading, as emphasized in Chapter 4.

Goal-Object construction

(39) *Larisa myla tarelki, starajas' ne **zabryzgat'** sebja vodoj.* [Lev Kornešov. Gazeta (2000)]

[Larisa-NOM washed plates-ACC, trying no spatter self-ACC water-INS]

'Larisa washed the plates, trying not to spatter herself with water.'

Hybrid construction

(40) *Pal'cy skrjučatsja. Zaryčit, sljunoj **zabryzžet**. Ešče mgnovenie i nabrositsja, razorvet.* [Poxoždenija bednogo pediatra (2003) // "Kriminal'naja xronika", 2003.07.08]

[Fingers-NOM curl up. Roars, saliva-INS spatters. Still moment-ACC and throws-self, explodes.]

'His fingers will curl up. He will roar, start to spatter saliva. One moment later he will cast himself about, explode.'

Decausative construction

(41) *...i slezy **zabryzgali** y nee iz glaz.* [Jurij Petkevič. Vozvraščenie na rodinu (2001)]

[and tears-NOM spattered by her-GEN from eyes-GEN]

'...and tears spattered from her eyes.'

zasypat'
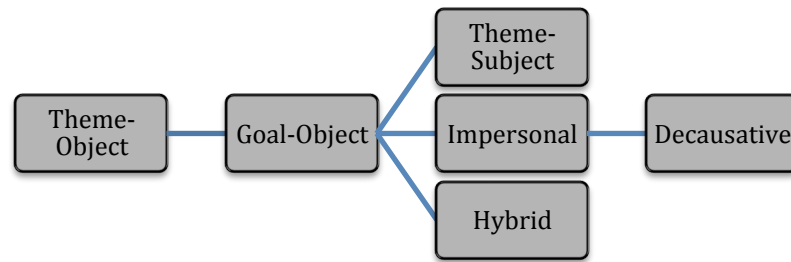
The verb *zasypat'* 'strew' is the only verb from our list that is attested in all the Locative Alternation constructions in the RNC. The reason for this is the highly versatile character of the Themes and the Goals that this verb goes with. The Themes represent dry substances that can also appear as an independent natural force (snow, hail, etc.). The Goals can be both surfaces and containers, which makes *zasypat'* 'strew' stand out from the other verbs of the left block that are only compatible with surfaces as Goals.

Theme-Object construction
(42) ... ***zasypat' krupu v kipjaščuju vodu.*** [Mixail Rumer-Zaraev. Diabet // "Zvezda", 2000]
[strew semolina-ACC in boiling water-ACC]
'...pour the semolina into boiling water.'

Goal-Object construction
(43) ***Zasyp'te*** *boloto peskom...* [D. I. Korotčaev, A. Frolov. Ruku, tovarišč stroi-tel'! // "Junost'", 1972]
[Strew swamp-ACC sand-INS]
'Fill the swamp with sand...'

Theme-Subject construction
(44) *Grad oskolkov vmeste s iskrami zasypal okopy.* [Vladimir Bogomolov. Moment istiny (V avguste sorok četvertogo...) (1973)]
[Hail-NOM shrapnel-GEN together with sparks-INST filled trenches-ACC]
'A hail of shrapnel and sparks filled the trenches.'

Impersonal construction
(45) *My sošli s lošadej, nas sbilo s nog vzryvnoj volnoj i zasypalo zemlej i kamnjami* [E. M. Meletinskij. Moja vojna (1971-1975)]
[We-NOM got off horses-GEN, we-ACC knocked-down from legs-GEN burst wave-INST and strewed earth-INS and stones-INS]
'We got off the horses, were knocked off our feet and were covered with earth and stones by the blast'

Hybrid construction

(46) *Utrom "Junkersy-88" **zasypali** bombami, na brejuščem proneslis' "messe-ra" i polezli na nas tanki.* [Viktor Nekrasov. Čerez sorok let... (Nečto vmesto posleslovija) (1981)]

[Morning-INS Junkers-88-NOM strewed bombs-INS, on approach-LOC rushed "monsieurs"-NOM and crawled on us-ACC tanks-NOM]

'In the morning the Junkers-88s started strewing bombs, the "monsieurs" rushed at low altitude and tanks came crawling at us.'

Decausative construction

(47) *Zima. **Zasypal** sneg.* [Vladimir Makanin. Andegraund, ili geroj našego vremeni (1996-1997)]

[Winter-NOM. Strewed snow-NOM.]

'It was winter. Snow had begun to pour down.'

zalit'
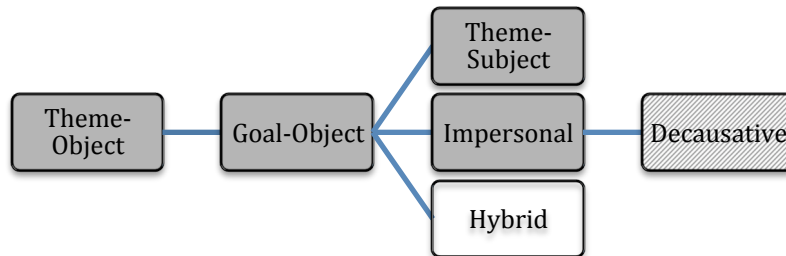
On the one hand, the verb *zalit'* 'pour' is very similar to *zasypat'* 'strew' in that both of them refer to pouring, the difference being only in the substance that represents the Theme. *Zalit'* 'pour' refers to liquids, while *zasypat'* 'strew' refers to dry substances. However, as can be seen from the constructional map above, *zalit'* 'pour' is mainly attested in the constructions that bear a Direct Object, unlike *zasypat'* 'strew', which also occurs in the Hybrid construction and the Decausative construction (constructions without the Direct Object). With *lit'* 'pour' the most natural prefix to use in the Decausative construction is *po-*, however due to the double prototype of *za-*, it can also be used in occasional ingressive contexts, as in the example below.

Theme-Object construction

(48) *Vykopav jamku po razmeram kornej, **zalejte** v nee dva vedra vody...* [Sama sadik ja sadila (2004) // "Priazovskij kraj", 2004.10.07]

[Having-dug hole-ACC along dimensions-DAT roots-GEN, pour in it-ACC two-ACC buckets-GEN water-GEN]

'After digging a hole big enough for the roots, pour in two buckets of water...'

Goal-Object construction

(49) *Izjum nužno **zalit'** kipjatkom* [Inna Ščepetkova. To, bez čego ne byvaet leta (2002) // "Semejnyj doktor", 2002.07.15]
[Raisins-ACC necessary pour boiling-water-INS]
'It is necessary to pour boiling water on the raisins.'

Theme-Subject construction

(50) *Podvaly **zal'et** voda...* [Anatolij Gladilin. Bol'šoj begovoj den' (1976-1981)]
[Basements-ACC pours water-NOM]
'Water will fill the basements...'

Impersonal construction

(51) *…vsju kvartiru **zalilo** vodoj, daže k sosedjam proteklo.* [V. N. Pavlenko, K. Vanner. Osobennosti psixologii evangel'skix xristian-baptistov (2004) // "Voprosy psixologii", 2004.10.12]
[whole apartment-ACC poured water-INS, even to neighbors-DAT leaked-through]
'The whole apartment was filled with water, it even leaked through to the neighbors.'

Decausative construction

(52) *Nu vot opjat' večerom dožd' **zalil**...* (http://ulbike.ru/forum/19-183-2)
[Well here again evening-INS rain-NOM poured]
'Well now again it started raining in the evening...'

zamazat'
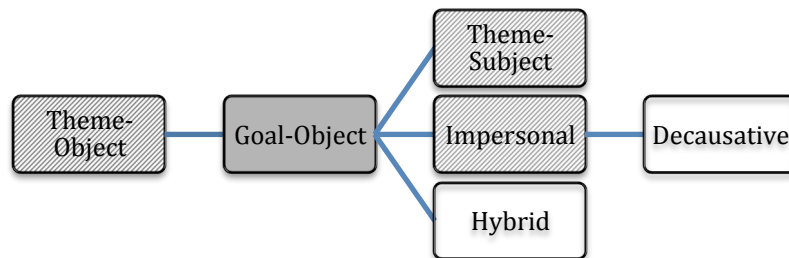
As shown in Chapter 6, the prototypical construction for *zamazat'* 'daub, smear' is the Goal-Object construction. Internet pages give evidence that this verb can potentially also appear in the Theme-Object (example 53), the Theme-Subject (example 54) and the Impersonal construction (example 55) and thus is still pertinent to the Locative Alternation.

Theme-Object construction
(53) *A ja vot vymyl karčerom vsju perekidku, vymyl pod davleniem ves' pesok i*
   ***zamazal** tuda teflonovuju smazku*
   (http://www.veloonline.com/forum.shtml?post=7231)
   [And I-NOM here washed Karcher-INS whole casting-ACC, washed under
   pressure-INS all sand-ACC and smeared there teflon grease-ACC]
   'And so I washed the whole casting with a Karcher, washed away all the
   sand with the pressure-washer and smeared on teflon grease'

In Yandex we find only one example of the Theme-Object construction with the
Goal *tuda* 'there' and the Theme (in this case *smazka* 'grease') in the Accusa-
tive case. Three other similar examples take the Theme in Genitive instead of
Accusative (*zamazal tuda novoj smazki*). This indicates that the Theme-Object
construction is highly marginal for the verb *zamazat'* 'smear, daub', which sup-
ports the ideas presented in Chapter 6.

Theme-Subject construction (7 examples with the Theme 'paint')
(54) *častično kraska **zamazala** i steklo*
   (http://www.flylady.ru/fly/viewtopic.php?f=8&t=10758)
   [partially paint-NOM smeared even glass-ACC]
   'the paint partially smeared even the glass'

Impersonal construction (4 examples with the Theme 'clay')
(55) *...kuxnju zasypalo razrisovannymi listami, zalilo zavarkoj i **zamazalo***
   glinoj... (http://www.diary.ru/~la-donna)
   [kitchen-ACC strewed scribbled papers-INS, poured infusion-INS and
   smeared clay-INS]
   '...the kitchen got strewn with scribbled papers, infusion poured all over,
   and smeared with clay'

Summary
To sum up, the verbs of the right block cover more space on the constructional
map than the verbs of the left block. In general there is a preference for the
Goal-Object construction, which supports the idea that it is more common for
the prefix *za-* to trigger the Goal-Object construction (see Chapter 4).
   The widest range of constructions are found for the verb *zasypat'* 'strew',
the most limited set (basically only the Goal-Object construction) characterizes
the verb *zamazat'* 'smear'. In the case of *zasypat'* 'strew' the Themes can be
represent a force acting on its own whereas this is not the case for *zamazat'*
'daub, smear' (see also Chapter 6 for more detail).

7.2. Passive forms

In Chapter 6, we pointed out some substantial differences in the behavior of passive forms. In the case of passive participles we observe an interaction between the Locative Alternation constructions and the passive construction. This results in the reorganization of the structure (the Theme in the Theme-Object construction and the Goal in the Goal-Object construction are marked as the grammatical subjects) and in the stronger profiling of one of the participants (the profiled element becomes the grammatical subject and the agent can be omitted altogether). Thus, passive participles, in general, show a slightly different distribution of the constructions than the one observed among the non-passive forms. As we saw in Chapter 6, passive forms boost the effect attested for the non-passive forms, i.e. whichever construction is dominant for the non-passive forms is even more frequent in the passive forms, or the alternation disappears altogether in the favor of the dominant construction. Thus, the general constructional picture for a given verb depends on the frequency of its passive participles, hence we consider them as a separate factor and present their analysis in a separate section. Moreover, passive was found to be a significant factor in the logistic regression model presented in Chapter 6 for the 'load' verbs (see section 6.1)

Verb	Gloss	Causative		Theme-Subject	Impersonal	Hybrid	Decausative	All
		Theme-Object	Goal-Object					
zapryskan	'spray'	0	0	0	0	0	0	0
zakapan	'drip'	0	20	0	0	0	0	20
zabryzgan	'splatter'	0	104	0	0	0	0	104
zasypan	'strew'	5	193	0	0	0	0	198
zalit	'pour'	4	106	0	0	0	0	110
zamazan	'daub, smear'	0	75	0	0	0	0	75
zagružen	'load'	11	237	0	0	0	0	248
zapakovan	'pack'	7	2	0	0	0	0	9
zapixan	'stuff'	4	0	0	0	0	0	4
zavešan/en	'hang'	0	144	0	0	0	0	144
zastavlen	'stand'	0	28	0	0	0	0	28
založen	'lay'	24	6	0	0	0	0	30

Table 3. Locative Alternation among passive forms of the Russian verbs prefixed in *za-* (raw frequencies).

Tables 3 and 4 list the frequencies for the passive participles of the Locative Alternation verbs prefixed in *za-*. In Figures 1 and 2 we offer a visual compari-

son of the constructional distribution in the non-passive (Figure 4) and the passive forms (Figure 5).

| Verb | Gloss | Caus | | Theme-Subject | Impersonal | Hybrid | Decausa-tive |
		Theme-Object	Goal-Object				
zapryskan	'spray'	0	0	0	0	0	0
zakapan	'drip'	0	100%	0	0	0	0
zabryzgan	'splatter'	0	100%	0	0	0	0
zasypan	'strew'	13.5%	74.4%	0	0	0	0.4%
zalit	'pour'	4%	96%	0	0	0	0
zamazan	'daub, smear'	0	100%	0	0	0	0
zagružen	'load'	4%	96%	0	0	0	0
zapakovan	'pack'	78%	22%	0	0	0	0
zapixan	'stuff'	100%	0	0	0	0	0
zavešan/en	'hang'	0	100%	0	0	0	0
zastavlen	'stand'	0	100%	0	0	0	0
založen	'lay'	80%	20%	0	0	0	0

Table 4. Locative Alternation among passive forms of the Russian verbs prefixed in *za-* (relative frequencies).
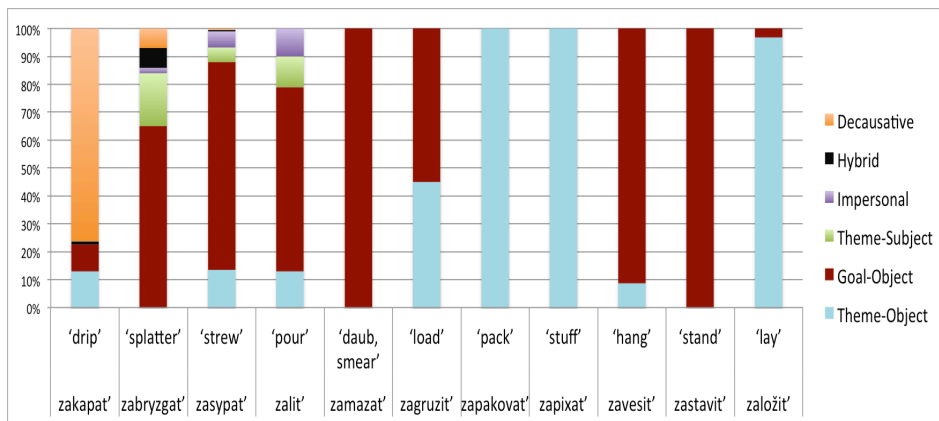

Figure 4. Locative Alternation among non-passive forms of the Russian verbs prefixed in *za-* (relative frequencies).
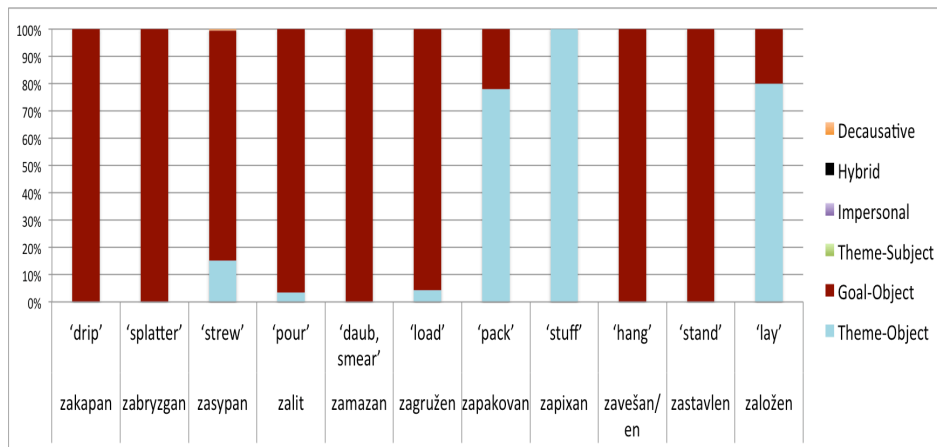
Figure 5. Locative Alternation among passive forms of the Russian verbs prefixed in *za-* (relative frequencies).

One of the most apparent observations that can be made by comparing Figures 4 and 5 concerns the list of constructions attested for the non-passive forms. In the passive participles we attest alternation only between the two basic constructions (the Theme-Object and the Goal-Object). This result is logical since the passive construction can interact only with the Locative Alternation constructions that have a Direct Object, which leaves us only the Theme-Object and the Goal-Object constructions as options.

Another observation concerns the distribution of the two Locative constructions in the passive forms. For those verbs that prefer the Goal-Object construction in the non-passive forms (both mass-oriented verbs on the left side of Figures 4-5 (*zakapat'* 'drip', *zabryzgat'* 'splatter', *zasypat'* 'strew', *zalit'* 'pour', *zamazat'* 'daub, smear'; and count-oriented verbs on the right side of the diagrams, such as *zavesit'* 'hang', *zastavit'* 'stand') the frequencies are skewed in favor of the Goal-Object construction. In a sense, the alternation in the passive participles becomes more limited. This effect is particularly transparent in the case of the non-passive and passive forms of verb *zagruzit'* 'load'. In the non-passive forms, the distribution between the two constructions is almost equal, whereas the passive forms show a strong preference for the Goal-Object construction.

For those verbs that in the non-passive forms prefer the Theme-Object construction the result does not always appear to be consistent with what has been stated above. The prediction that the passive participle forms boost the effect observed in the non-passive forms seems to be violated in the case of *zapakovat'* 'pack' and *založit'* 'lay'. In the passive forms of these verbs we observe a higher degree of alternation. However, the two distributions that deviate involve rather small quantities of data, so we cannot say for certain that the prediction is violated.

For *založit'* 'lay', the dominant construction is the Theme-Object construction. The relative frequency of the Goal-Object construction in the non-passive forms is 3%, whereas in the passive forms it rises to 11%. This difference, however, is based on rather sparse data in the case of the passive forms (24 for the Theme-Object and 3 for the Goal-Object). Another important factor here is the difference in semantics between the sentences with the Goal-Object construction and the Theme-Object construction. Examples with the Goal-Object construction refer to cases of covering a surface or a hole with some scattered objects, as in example (56) below:

(56) *Kak okazalos', tajnyj xod prosto byl **založen** <u>belokamennymi glybami</u> na krepčajšem rastvore.* [Taisija Belousova. Propavšaja libereja (2003) // "Soveršenno sekretno", 2003.09.01]
[As turned-out, secret entrance-NOM simply was covered white boulders-INS on firm mortar-LOC]
'As it turned out, the secret entrance was simply covered with white boulders set in firm mortar.'

On the other hand, examples with the Theme-Object construction mostly represent lexicalized collocations like *založit' fundament/ osnovu* 'lay the foundation' (34% of all uses), cf. example (57):

(57) *Vmeste oni **založili** osnovu novogo stilja nacional'noj muzyki.* [Zvučala muzyka čuvašskix kompozitorov (2003) // "Rossijskaja muzykal'naja gazeta", 2003.06.11]
[Together they-NOM laid foundation-ACC new style-GEN national music-GEN]
'Together, they established a new style for national music.'

In cases like (57), the verb and its Direct Object basically serve as one compound predicate. For this reason such contexts are unlikely to be represented with a passive construction, since profiling the foundation or the foundation stone appears unnecessary. Hence, we have more examples of such contexts in the non-passive forms of the verb *založit'* 'lay', which makes the percentage of the Theme-Object constructions higher among the non-passive forms.

The passive forms of the verb *zapakovat'* 'pack' prefer the Theme-Object, thus reflecting the same preference as the one attested for the non-passive forms of this verb:

(58) *<u>vse</u> **zapakovano** <u>v celofan</u> i ukrašeno vetočkoj sosny i lentočkami.* [Naši deti: Podrostki (2004)]
[Everything-NOM packed in cellophane-ACC and decorated branch-INS pine-GEN and ribbons-INS]

'Everything is packed in cellophane and decorated with a pine branch and ribbons.'

The remarkable observation, however, is that while we do not have attestations for the Goal-Object construction among the non-passive forms of the verb *za-pakovat'* 'pack', we do find two examples of the Goal-Object construction in the passive forms of the same verb (see examples 59-60).

(59) *...iz dverej s akkuratnym,* **zapakovannym** *gazetoj musornym vederkom, pokazalas' znakomaja Nine Aleksandrovne sosedka* [Ol'ga Slavnikova. Bessmertnyj. Povest' o nastojaščem čeloveke (2000-2001) // "Oktjabr'", 2001]
[from door-GEN with tidy packed-INS newspaper-INS trash bucket-INS appeared familiar-NOM Nina Aleksandrovna-DAT neighbor-NOM]
'...at the door with a trash bucket tidily packed in newspaper appeared Nina Aleskandrovna's familiar neighbor'

(60) *...nesmotrja na to, čto ona (kolbaska) byla s oboix koncov* **zapakovana** *metalličeskimi skobkami...* [Vladimir Kunin. Kysja (1998-2000)]
[in-spite-of on that-ACC, that it (sausage)-NOM was from both ends-GEN packed metal brackets-INS]
'...in spite of the fact that it (the sausage) was packed up with metal brackets on both ends...'

Both cases represent the Goal-Object construction that refers to wrapping and covering an object but not filling a container (see discussion in the subsection 7.1.3). The meaning of filling a container is blocked even with those Themes and Goals that allow for this meaning in the non-passive forms, cf. examples (61) and (62) below:

(61) *Est' dva čemodana: odin ja xoču* **zapakovat'** *ličnymi veščami, drugoj podarkami* (chemodan.eu/news/2008/01/4373.html?Page=5)
[Is two-NOM suitcases-GEN: one-ACC I-NOM want pack personal things-INS, other-ACC presents-INS]
'I have two suitcases: one of then I want to pack with my personal things and the other one with presents'

(62) *Sumka s lekarstvami ležala v čemodane, čemodan* **zapakovan** *i obmotan plenkoj* (http://ftour.otzyv.ru/read.php?id=160353&p=20)
[Bag-NOM with medicine-INS lay in suitcase-LOC, suitcase-NOM packed and wrapped film-INS]
'The bag with the medicine lay in the suitcase, the suitcase was packed and wrapped with film'

Examples (61) and (62) illustrate that while we do find contexts like *zapkovat' čemodan veščami* 'pack the suitcase with things' in the non-passive forms, the passive construction *čemodan zapakovan* 'the suitcase is packed' entails the meaning of a suitcase being locked and wrapped, rather than stuffed.

Another interesting observation concerns the verb *zastavit'* 'stand' that is used as a Locative verb mainly in the passive forms: only 2 non-passive forms are attested as opposed to 28 passive participles. Thus, it appears that in general all passive participles of the Locative Alternation verbs prefixed in *za-* tend to show a slightly higher percent of the Goal-Object construction than the one attested for the non-passive forms of the same verbs.

Considering the data presented in this subsection, we can specify the statement that in the Locative Alternation passive forms boost the effect attested for the non-passive forms. To be more precise, **participles skew the data towards a more prototypical pattern.** It is important to note which nouns fill the argument positions of the Locative alternation constructions. Passive constructions provide stronger profiling, thus the increase in the frequency of the dominant construction would depend on whether the argument can be profiled or not (as in the case of *založit'* 'lay'). In general the profiling among the Locative Alternation verbs prefixed in *za-* goes in favor of the Goal, i.e. speakers are more interested in how the state of the Goal is changed or how the Goal has been modified. When we look at the frequencies it is important to consider the sub-meanings of the verb and metaphorical extensions.

A similar dependency on the class of the participant is found among metaphorical extensions, which will be analyzed in the following section.

7.3. Locative Alternation verbs prefixed in *za*- and metaphorical extensions

The constructional profile of a given Locative Alternation verb depends on the Themes and Goals that the verb is associated with and thus it is also dependent on the metaphorical extensions of the verb. Metaphorical extensions do not always retain the same preferences for constructions as non-metaphorical uses. In this section we will look at some remarkable mismatches in the choice of the construction between metaphorical and non-metaphorical contexts of the Locative alternation verbs with *za*-.

7.3.1. Overview of metaphorical extensions in the Locative Alternation verbs prefixed in *za*-

The distribution between metaphorical and non-metaphorical uses of each Locative Alternation verb is provided in Tables 5 and 6 below.

Verb	Gloss	Non-passive		Passive	
		non-meta-phorical	meta-phorical	non-meta-phorical	meta-phorical
zakapat'	'drip'	84	0	19	1
zabryzgat'	'splatter'	43	4	101	3
zasypat'	'strew'	224	57	190	8
zalit'	'pour'	124	28	53	57
zamazat'	'daub, smear'	86	27	53	22
zagruzit'	'load'	127	81	69	179
zapakovat'	'pack'	13	0	7	2
zapixat'	'stuff'	45	18	4	0
zavesit'	'hang'	20	3	136	8
zastavit'	'stand'	2	0	28	0
založit'	'lay'	122	124	11	19

Table 5. Metaphorical extensions among the Locative Alternation verbs prefixed in *za*- (raw frequencies).

Verb	Gloss	Non-passive		Passive	
		non-metaphorical	meta-phorical	non-metaphorical	metaphorical
zakapat'	'drip'	100%	0	95%	5%
zabryzgat'	'splat-ter'	91.5%	8.5%	97.1%	2.9%
zasypat'	'strew'	80%	20%	96%	4%
zalit'	'pour'	81.6%	18.4%	48%	52%
zamazat'	'daub, smear'	76%	24%	71%	29%
zagruzit'	'load'	61%	39%	28%	72%
zapakovat'	'pack'	100%	0	78%	22%
zapixat'	'stuff'	71.4%	28.6%	100%	0
zavesit'	'hang'	87%	13%	94.4%	5.6%
zastavit'	'stand'	100%	0	100%	0
založit'	'lay'	49.6%	50.4%	36.7%	63.3%

Table 6. Metaphorical extensions among the Locative Alternation verbs prefixed in *za-* (relative frequencies).
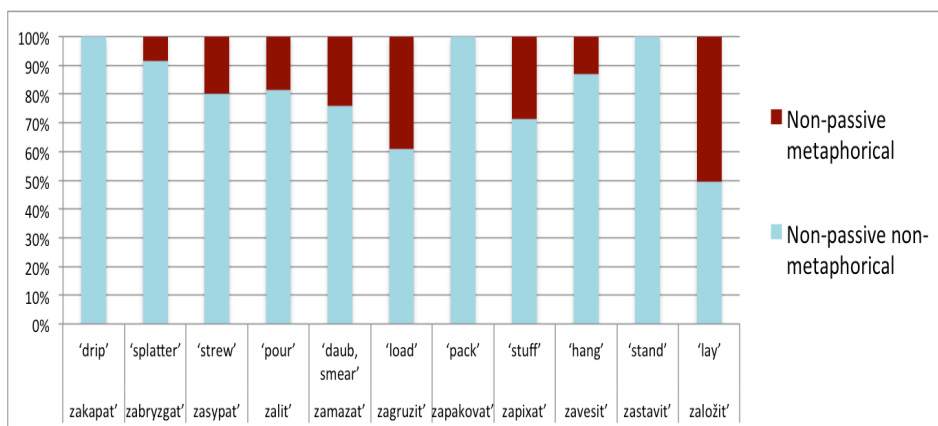

Figure 6. Metaphorical extensions among the non-passive forms of the Locative Alternation verbs prefixed in *za-*.
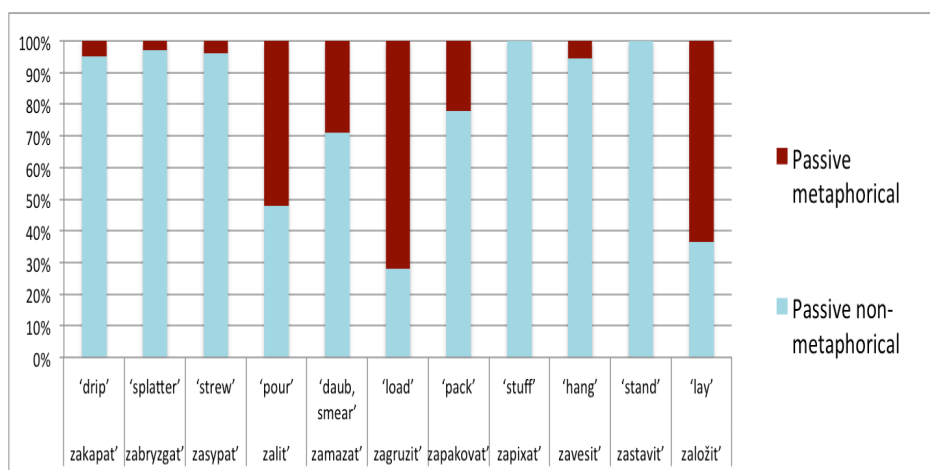
Figure 7. Metaphorical extensions among the passive forms of the Locative Alternation verbs prefixed in *za-*.

Figures 6 and 7 indicate that the passive construction can both reduce and increase the number of metaphorical extensions of the Locative Alternation verbs. The increase in metaphorical uses in the passive forms is attested for the central 4 verbs *zalit'* 'pour', *zamazat'* 'daub, smear', *zagruzit'* 'load', *zapakovat'* 'pack', and the verb *založit'* 'lay'. For *zagruzit'*, metaphorical extensions constitute 72% in the passive forms vs. 39% in the non-passive forms; for *zalit'* these numbers constitute 52% vs. 18.4%, for *zapakovat'* 'pack' it is 22% vs. 0%, for *založit'* 'lay' 63.3% vs. 50.4%, for *zamazat'* 'daub, smear' 29% vs. 24%.

The verbs *zasypat'* 'strew', *zabryzgat'* 'splatter' on the left side of the diagram and *zapixat'* 'stuff', and *zavesit'* 'hang' on the right side of the diagram show a lower percentage of metaphorical extensions in the passive construction. For *zapixat'* 'stuff', the distribution is 0% of metaphorical extensions in the passive forms vs. 28.6% in the non-passive forms, *zasypat'* 'strew' is characterized by 4% of metaphorical uses in the passive forms vs. 20% in the non-passive forms, for *zavesit'* 'hang', the distribution is 5.6% vs. 13%, and *zabryzgat'* 'splatter' shows 2.9% vs. 8.5%. The general tendency behind the passive construction is that it boosts the effect of the most typical and lexicalized pattern. Below we analyze both effects (increase and decrease in metaphorical forms) in more detail.

7.3.2. Verbs with a higher percentage of metaphorical uses in the passive forms

The highest frequency of metaphorical extensions among passive forms is attested for the verb *zagruzit'* 'load' (39% in non-passive vs. 72% in passive). The metaphorical extensions for this verb have been discussed in detail in Chap-

ter 6. The general patterns for *zagruzit'* 'load' are Goal:HUMAN+Theme:WORK (example 63), Goal:FACILITY+Theme:WORK (example 64) that require the Goal-Object construction and Goal:ELECTRONIC DEVICE+Theme:FILE (example 65) that chooses the Theme-Object construction.

(63) *Zasedanie Gossoveta po kul'ture **zagruzit** rabotoj sotrudnikov Minsterstva kul'tury na bližajšie neskol'ko let.* [Andrej Reut. Gossovet gotov spasti ros-sijskuju kul'turu // "Gazeta", 2003]
[Meeting State-Council-GEN on culture will **load** work-INS members-ACC Ministry-GEN Culture-GEN for nearest few years]
'The agenda of the State Council on Culture **will keep** the members of the Ministry of culture **busy** for several years.'

(64) *V samom dele, razve pod vlijaniem reklamy my stamen dol'še kipjatit' čaj-nik na gazovoj konforke, a elektrocstancii **zagruzjat** rabotoj lišnie turbiny?*
[Veseljaščij gaz (2003) // "Novaja gazeta", 2003.01.16]
[Really, will under influence advertisement-GEN we begin to longer boil kettle on gas burner and electrical power-plants will **load** work-INS additional turbines-ACC?]
'Really, is it possible that due to the advertisement we will boil the kettle longer on a gas burner or that the electrical power-plants will **provide** additional turbines with work?'

(65) *Každyj, kto rassčityvaet v Afinax zapustit' v set' virus ili **zagruzit'** drugoe PO, smožet ubedit'sja, čto dostup k diskovodam, a takže k USB-portam na PK i serverax zakryt.* [Olimpiada komp'juternaja // "Computerworld", 2004]
[Everybody who intends in Athens to launch into net-ACC virus or **load** another software-ACC will be able to see that access to disk-drives and also to USB-ports on PC and servers closed]
'Everybody with the intention to launch a virus or **upload** software onto the net in Athens will see that the access to the disk drives as well as to the USB ports on PCs and servers is closed.'

As we have shown in Chapter 6, the passive construction reinforces the focus placed on one of the participants, which makes the status of the profiled participant more important than the status of the second participant. The most frequent patterns among the metaphorical constructions of the verb *zagruzit'* 'load' put emphasis on the condition of a person who is loaded with work or information, or a factory or facility which is loaded with work (viz. can be used to its full capacity). In such metaphorical contexts it is not as vital for the speaker to verbalize the whole event but rather to focus on the condition of the Goal (a person or a facility), which makes the use of the passive construction very appropriate.

Since the most frequent metaphorical patterns require the Goal-Object construction, metaphorical contexts for the verb *zagruzit'* 'load' have a crucial effect on the general distribution between the Theme-Object and the Goal-Object constructions. The use of each verb is generally skewed in favor of one of the locative constructions. The only exception is the Russian verb *zagruzit'* 'load', where the distribution between the Theme-Object and the Goal-Object constructions is almost even (Theme-Object: 45%; Goal-Object: 55%). A more elaborate analysis of the examples indicates that this is due to the number of additional metaphorical uses that this verb has in the Goal-Object construction (see examples 1-2 and Chapter 6). It is remarkable that in non-metaphorical uses, *zagruzit'* favors the Theme-Object construction (70 examples in the Theme-Object construction vs. 57 in the Goal-Object construction) whereas in metaphorical contexts, it is skewed towards the Goal-Object construction (24 examples in the Theme-Object construction vs. 57 in the Goal-Object construction).

The verb *zalit'* 'pour' has 52% metaphorical extensions in passive forms vs. 18.4% metaphorical extensions in non-passive forms. Of the 28 metaphorical extensions among non-passive forms of the verb *zalit'* 'pour', 8 contexts relate to forgetting sorrows and thoughts by sinking them in alcohol, as in examples (66) and (67) below:

(66) *...pivom takuju novost' ne **zal'eš'**.* [Marina Djačenko, Sergej Djačenko. Magam možno vse (2001)]
[beer-INS such news-ACC not pour]
'...you can't drown such news with beer.'

(67) *Ja xotel **zalit'** èto vospominanie, **zalit'** ego xot' kipjatkom, xot' svincom, xot' kislotoj.* [Marija Golovanivskaja. Protivorečie po suti (2000)]
[I-NOM wanted to pour that memory-ACC, pour it-ACC whether boiling-water-INS, whether lead-INS, whether acid-INS]
'I wanted to drown that memory, drown it with either boiling water or with lead or with acid.'

Remarkably, the metaphorical extensions in the passive forms of the same verb reveal completely different patterns. Out of the 57 metaphorical contexts, we find only one example related to alcohol (see example 68), and 36 examples referring to a situation that describes a space covered with light (the pattern Goal:SURFACE+Theme:LIGHT, see examples 69 and 70):

(68) *Nesmotrja na "**zalitye** glaza", on vse že soobrazil, čto v takom sostojanii sadit'sja za rul' opasno...* [Elena Kamzolkina. Priklučenie s avtomobilem (2002) // "Večernjaja Moskva", 2002.07.18]
[Despite on "poured eyes-ACC", he-NOM all-NOM EMPH understood, that in such condition-LOC sit-down behind steering-wheel-ACC dangerous...]

'Despite his "glazed over eyes", he understood all the same that it was dangerous to get in the driver's seat in his condition...'

(69) *...professorskij kabinet byl **zalit** jarkim solncem...* [D. S. Danin. Nil's Bor (1969-1975)]
[professor's office-NOM was poured bright sunlight-INS]
'...the professor's office was filled with bright sunlight...'

(70) *Ja stojal na scene, **zalitoj** svetom prožektorov...* [Magsud Ibragimbekov. Kto poedet v Truskavec (1977)]
[I-NOM stood on stage-LOC, poured light-INS flood-lamps-GEN]
'I stood on the stage which was filled with light from the flood lamps...'

Given the special status of the passive construction discussed above (higher degree of profiling a participant and placing the focus on the state of the profiled participant), such a mismatch between the metaphorical patterns of the verb *zalit'* 'pour' in non-passive and passive forms is predictable. A metaphorical context like Goal:SURFACE+Theme:LIGHT can hardly be presented as an event but rather as a state, hence the passive construction is more natural.

We find a similar effect in the distribution of metaphorical extensions for the verb *zapakovat'* 'pack'. The RNC does not contain any attestations of metaphorical non-passive uses of this verb. Yet, we do find two examples of metaphorical extensions among the 7 attested passive forms of *zapakovat'* 'pack':

(71) *Gora myšc, **zapakovannaja** v kožannuju kurtku, pokoilas' na tumboobraznyx nogax.* [Dar'ja Doncova. Uxa iz zolotoj rybki (2004)]
[Mountain-NOM muscles-GEN, packed in leather jacket, rested on pillar-shaped legs-LOC]
'A mountain of muscles packed into a leather jacket rested on pillar-shaped legs.'

(72) *...est' Inna -- i otlično, počemu by ej ne byt' na belom svete, takoj vot dolgovjazoj ... **zapakovannoj** v belyj trikotaž "lapšu"* [Dar'ja Simonova. Pervyj (2002)]
[...is Inna-NOM and excellent, why CONDIT her-DAT not be on white world-LOC, such here gangly-creature-NOM ... packed in white knit sweater-ACC]
'...Inna exists -- and that is wonderful, why shouldn't she exist in this wide world, such a gangly creature... packed into a white knitted sweater'

Examples like (71) and (72) metaphorically describe the way a person is dressed, this way they place more focus on the state of the person rather than on the event of 'packing' a person into his/her clothes.

The difference in the frequency between the non-passive and passive metaphorical extensions for the verbs *založit'* 'lay' and *zamazat'* 'daub, smear' is not as drastic and overall reflects the general tendency of the passive construction to boost the frequency of the typical pattern. As shown in subsection 7.1, the most frequent examples with *založit'* 'lay' in the non-passive forms are lexicalized collocations like *založit' fundament/ osnovu* 'lay the foundation' (83 examples, which constitute 34% of all uses), cf. example (73):

(73) *Vmeste oni **založili** osnovu novogo stilja nacional'noj muzyki.* [Zvučala muzyka čuvašskix kompozitorov (2003) // "Rossijskaja muzykal'naja gazeta", 2003.06.11]
[Together they-NOM laid foundation-ACC new style-GEN national music-GEN]
'Together, they established a new style for national music.'

We have pointed out that in such contexts the verb and its Direct Object basically serve as one compound predicate that is unlikely to appear as a passive construction. As a result we find only two similar examples with passive forms, see example (74):

(74) *V naši dni idet sledstvie po delu o pokušenii na Platona Makovskogo, vladel'ca nemerennogo sostojanija, osnova kotorogo **založena** v period dikogo kapitalizma.* [Tat'jana Alekseeva. "Oligarx" čtit Ugolovnyj kodeks (2002) // "Finansovaja Rossija", 2002.09.19]
[In our days-ACC goes inquiry-NOM along case-DAT about assassination-attempt-LOC on Platon Makovskij-ACC, owner-ACC vast estate-GEN, foundation-NOM which-GEN laid in period-ACC wild capitalism-GEN]
'There is currently an ongoing inquiry into the case of the assassination attempt on Platon Makovskij, the owner of a vast estate, the foundation for which was laid during the period of wild capitalism.'

Another pattern that is rather salient among the non-passive forms of the verb *založit'* 'lay' are contexts that refer to situations of setting principles, ideas and beliefs in a person's mind (the pattern Goal:HUMAN+Theme:IDEAS, 20 examples out of 124 metaphorical extensions), as in (75) below:

(75) *On kasaetsja ne tol'ko obraza Rossii, kotoryj Vladimir Putin xočet **založit'** v soznanie vsego mira.* [Svetlana Lur'e. "Koncert" deržav (2003) // "Specnaz Rossii", 2003.06.15]
[It-NOM touches not only image-GEN Russia-GEN, which-ACC Vladimir Putin-NOM wants lay in consciousness-ACC whole world-GEN.]
'It involves not only the image of Russian that Vladimir Putin wants to fix in the consciousness of the whole world.'

Such contexts constitute 63% of all metaphorical extensions in the non-passive forms (12 examples out of 19):

(76) *Otricatel'noe otnošenie k oligarxam* **založeno** *i kul'turoj, i tekuščej propa-gandoj, i nynešnimi èkonomičeskimi realijami...* [Elena Kostjuk. Sverxbed-nye protiv sverxbogatyx (2003) // "Vremja MN", 2003.07.30]
[Negative relationship-NOM to oligarchs-DAT laid and culture-INS, and on-going propaganda-INS, and current economic realities-INS...]
'A negative relationship to the oligarchs is rooted in the culture, ongoing propaganda, and realities of the current economic situation...'

The pattern Goal:HUMAN+Theme:IDEAS places the focus on the state of the Theme (principles and ideas) by characterizing it and introducing the agent (the source of the ideas). In contexts like (76) the agent is usually expressed overtly by the Instrumental case, whereas the Goal (people's minds) is omitted. Such focus is more compatible with the passive construction.
        Another salient pattern within the passive forms of the verb *založit'* 'lay' is Goal:BODY PART+Theme:0, where the sentences refer to stuffy noses and ears. In subsection 7.1, we saw that the same meaning can be expressed by means of the Impersonal construction as in (77):

(77) *No čerez nekotoroe vremja u rebenka* **založilo** *nos*
    (http://health.mail.ru/consultation/307332/)
    [But after some time-ACC by child-GEN lay nose-ACC]
    'But after some time the child's nose got stuffed up'

However, the passive construction is a more common choice to refer to situations like (77), since the focus is placed on the state of the Goal (the nose/ear), see example (78):

(78) *V aptekax v poslednee vremja vstrečajutsja ne tol'ko grustnye, bol'nye lju-di s* **založennymi** *nosami i receptami v rukax.* [Krasota (2003) // "100% zdorov'ja", 2003.01.15]
    [In drugstores-LOC in last time-ACC meet not only sad, sick people-NOM with laid noses-INS and prescriptions-INS in hands-LOC]
    'Lately in the drugstores one meets not only sorry sick people with stuffy noses and prescriptions in their hands.'

        For *zamazat'* 'daub, smear' the most frequent metaphorical pattern is Goal:HUMAN/SITUATION+Theme:MUD, which is applicable to both non-passive (example 79) and passive forms (example 80). Overall, the difference in the frequency between the non-passive and passive metaphorical extensions is not as drastic (24% non-passive vs. 29% passive) and reflects the general tendency of the passive construction to boost the frequency of the typical pattern.

(79) *Èto stalinskoe lože! Otnjalo vse ego dostoinstva,* **zamazalo** *grjaz'ju vse te nrastvennye i intellektual'nye kačestva, za kotorye ego ljubili v partii.* [Anna Larina (Buxarina). Nezabyvaemoe (1986-1990)]
[It-NOM stalinist bed-NOM! Took-away all his dignity-ACC, smeared dirt-INS all those moral and intellectual qualities-ACC for which-ACC him-ACC loved in party-LOC]
'It's the curse of stalinism! It took away all his dignity, smeared with dirt all his moral and intellectual qualities, for which the loved him in the Party.'

(80) *Oni / konečno / tože* **zamazany** */ no proklinat' vsex za členstvo v partii vrjad li pravil'no.* [Diskussija o naučnoj fantastike (1986-1990)]
[They-NOM of-course also smeared-NOM but curse everyone-ACC for membership-ACC in party-LOC hardly whether right]
'They are of course also smeared, but it would hardly be right to curse everyone for being a party member.'

The analysis of the four central verbs considered above illustrates the idea that some metaphorical patterns are more natural for passive forms, which gives us higher frequency of metaphorical extensions with passive forms of certain verbs. Usually such cases become entrenched and lexicalized (as the cases with *zalit svetom* 'covered with light', *zagružen na polnuju moščnost'* 'used to its full capacity').

7.3.3. Verbs with a lower percentage of metaphorical uses in the passive forms

A much lower frequency of metaphorical extensions with passive forms is attested for the verbs *zapixat'* 'stuff', *zasypat'* 'strew'.

In the RNC, we found no attestations of metaphorical contexts with passive forms of the verb *zapixat'* 'stuff'. Metaphorical contexts with non-passive forms of this verb refer to contexts where people are pushed into cars and houses (the pattern Goal:CONTAINER+Theme:HUMAN):

(81) *...voznikla real'naja opasnost', čto mnogix poprostu* **zapixajut** *v neprigodnye dlja žil'ja truščoby.* [Mixail, Kovrigin Pavel Pančenko. Razborki na dorogax (2003) // "Vslux o…", 2003.06.09]
[...arose real danger-NOM that many-ACC simply stuff in unfit-ACC for living-GEN slums-ACC]
'...there arose the real danger that many people would simply be stuffed into slums that are unfit for living.'

(82) *Nekotorye iz tex, kogo milicii udalos' **zapixat'** v metro proexali odnu ostanovku...* [Nikolaj Cyrlin. Vtoroj putč. Vpečatlenie (2003) // "Lebed'" (Boston), 2003.10.12]
[Some-NOM from those-GEN, who-ACC police-DAT managed stuff in metro-ACC rode one stop-ACC...]
'Some of those who the police managed to stuff into the subway rode one stop...'

Internet pages contain similar examples in the passive construction, such as (83) below, although overall the pattern Goal:CONTAINER+Theme:HUMAN is less compatible with the passive construction.

(83) *V rezul'tate narjadom on byl operativno **zapixan** v avtomobil' i uvezen v storonu vytrezvitelja* (http://www.vlad-forum.net/archive/index.php/t-5372.html)
[In result-LOC warrant-INS he-NOM was efficiently stuffed in car-ACC and taken in direction-ACC sobering-up-station-GEN]
'As a result under the warrant he was efficiently stuffed into a car and taken in the direction of a sobering up station.'

Examples like (81-82) denote violent situations and thus presuppose overt marking of the agent, which makes the passive construction less common.

The majority of the metaphorical contexts for the verb *zasypat'* 'strew' have questions, jokes and citations as metaphorical Themes and refer to situations like (84-85):

(84) *Ja ego **zasypal** množestvom voprosov...* [Bulat Okudžava. Putešestvie diletantov (Iz zapisok otstavnogo poručika Amirana Amilaxvari) (1971-1977)]
[I-NOM him-ACC strewed quantity-INS questions-GEN...]
'I showered him with a pile of questions...'

(85) *Poxvalite trojku za iskrometnoe čuvstvo jumora i ona **zasyplet** vas šutkami i anekdotami...* [Aleksandr Klejn. Mark Zaxarov: Processy kosmičeskogo razvitija -- prodolžajutsja // "Pjatoe izmerenie", 2002]
[Praise trio-ACC for sparkling sense-ACC humor-ACC and it-NOM strews you-ACC jokes-INS and anecdotes-INS]
'Praise that trio for a sparkling sense of humor and it will shower you with jokes and anecdotes...'

Examples like (84-85) represent the metaphorical pattern Goal:HUMAN+Theme:INFORMATION. Remarkably, passive forms of the verb *zasypat'* 'strew' show only two instances of this pattern, see example (86):

(86) *K radosti èkskursovoda, polučivšego otstavku, ja byl migom **zasypan** vo-
prosami.* [A. A. Bek. Talant (Žizn' Berežkoba) / Časti 1-3 (1940-1956)]
[To delight-DAT guide-GEN, received-GEN dismissal-ACC, I-NOM was
instant-INS strewn questions-INS]
'To the delight of the guide who had been dismissed, I was immediately
showered with questions.'

While this pattern allows questions to appear as metaphorical Themes in passive
forms (although such contexts are marginal), some other Themes from this pat-
tern (for instance, jokes) are blocked altogether. Thus, the metaphorical uses of
the verb *zasypat'* 'strew' show a strong preference towards the non-passive
forms:

(87) a. *On **zasypal** ego šutkami*
[He-NOM strewed him-ACC jokes-INS]
'He showered him with jokes'

b. ?*On **zasypan** šutkami*
[He-NOM strewn jokes-INS]
'He is showered with jokes'

As mentioned earlier, the passive participle triggers focus on the partici-
pant that is being modified. Moreover, when the passive participle of the Loca-
tive Alternation verbs with the prefix *za*- occurs in the Goal-Object construc-
tion, we usually observe a holistic effect. Cf. the examples (88-91) below:

(88) *Bol'šaja komnata byla plotno **zastavlena** mebel'ju.* [Elena Xaeckaja. Sinie
strekozy Vavilona / Semero pravednyx v raju gospodina (2004)]
[Big room-NOM was completely made-stand furniture-INS]
'The living-room was completely filled with furniture.'

Example (88) implies that the room is completely covered with furniture.

(89) *Zdes' vse ostalos' kak prežde: stol, **zasypannyj** tabletkami, trjap'e na pro-
davlennom divane* [Gennadij Gorelik. Andrej Saxarov. Nauka i svoboda
(2004)]
[Here everything-NOM remained as before: table-NOM, strewn-NOM
pills-INS, rags-NOM on broken-down sofa-LOC]
'Here everything remained as before: the table was covered with pills and
there were rags on the broken-down sofa'
The table in (89) is completely covered with pills.

(90) *okna fabriki byli **zamazany** černoj kraskoj* [Slavjanskie narody. Ukraincy
(2001) // "Žizn' nacional'nostej", 2001.12.28]

[windows-NOM factory-GEN were smeared black paint-INS]
'The windows of the factory were smeared with black paint'

In example (90), the windows at the factory were painted over with black paint completely, so that you could not see through them.

(91) *U nego vsja rubaška byla **zakapana** želtkom* [Kollekcija anekdotov: vrači (1970-2000)]
[By him-GEN whole shirt-NOM was dripped yolk-INS]
'His whole shirt was stained with yolk'

In (91), the shirt was completely stained with yolk.

In the case of *zasypat'* 'strew', the holistic effect applies to both surfaces and containers when the Goal is inanimate. Cf. examples below, where the Goal is a container (92) and a surface (93):

(92) *K dverjam podošli, a dver'-to uže zakryta, jama glinoj **zasypana**!* [Svetlana Vasilenko. Duročka (1998)]
[To door-DAT approached, and door-NOM already closed, hole-NOM dirt-INS strewn!]
'They approached the door, but the door was already closed, the hole was filled in with dirt!'

(93) *Dvor okolo doma **zasypan** byl graviem.* [Jurij Kazakov. Prokljatyj sever (1964)]
[Yard-NOM around house-GEN strewn was gravel-INS]
'The yard around the house was covered with gravel.'

It should be noted that even when the Goal is a container as in (92) it is always an open container (like a pit or a hole), so the result of filling the Goal in (92) also entails covering it.

When the Goal refers to a human being (thus forming a metaphorical extension), the holistic effect holds only if the person serves as a metaphorical container but not as a metaphorical surface. The cases with humans as metaphorical surfaces set restrictions on the use of passive participles that strengthen the holistic effect. Hence we find examples like *zagružen informaciej* 'loaded with information', where a person is a metaphorical container, but not *zasypan šutkami* 'covered with jokes', where a person would serve as a metaphorical surface. This also explains the tendency expressed in (87) above.

The idea that humans are more natural metaphorical containers than metaphorical surfaces also sheds light on the tendencies outlined in Chapter 6 in connection with the Russian 'load' verbs. It has been noted, that both *nagruzit'* prefixed with *na-* and *zagruzit'* prefixed with *za-* are frequent in the pattern

Goal:HUMAN+Theme:WORK. In the non-passive forms, this pattern is attested in 32% of metaphorical uses of *nagruzit'* and in 20% of metaphorical uses of *zagruzit'*. Yet, in the passive forms, this pattern is found only for *zagruzit'*. The RNC bears no attestation of this pattern for the passive forms of *nagruzit'*. This observation illustrates an interesting tendency for the 'load' verbs stated in (94) below:

(94) a. *Nagruzit' rabotoj*
    [Load work-INS]
    'To load with work'

    b. *Zagružen rabotoj*
    [Loaded work-INS]
    'Loaded with work'

In the non-passive forms it is more natural to choose the prefix *na*- with the pattern Goal:HUMAN+Theme:WORK whereas in the passive forms the same pattern is used with the prefix *za*-. The prefix *za*- is container oriented and thus is more common with this pattern due to the activation of the holistic effect.

Thus, the lower frequency for metaphorical contexts with passive forms of some verbs (such as *zasypat'* 'strew') can be interpreted as the effect of blending. The restriction set on the use of the pattern Goal:HUMAN+Theme:INFORMATION in passive forms is dependent on the properties of the target domain (humans) that are preserved during metaphorical mapping. The holistic effect with humans as Goals is preserved when they serve as metaphorical containers. The verb *zasypat'* 'strew' can take both containers and surfaces as potential Goals, where the effects for containers is similar to that of surfaces (entails covering). In the case of *zasypat'*, humans appear as metaphorical surfaces. This clashes with the passive forms that reinforce the holistic effect, hence the use the pattern Goal:HUMAN+Theme:INFORMATION is not common for the passive forms of *zasypat'*.

The metaphorical data attested for the verbs *zabryzgat'* 'splatter', *zavesit* 'hang', *zakapat'* 'drip' are very scarce (*bryzgat'*: 4 examples non-passive (95) vs. 3 examples passive (96); *zavesit'*: 3 examples passive (97) vs. 8 examples non-passive (98), *zakapat'*: 1 example passive (99)).

(95) *Nebo gusto zabryzgalo poljanku **podsnežnikami** (kapel'ki neba na zemle!)*
    [Gavriil Troepol'skij. Belyj Bim černoe uxo (1971)]
    [Sky-NOM thickly spattered clearing-ACC snow-drops-INS (drops-NOM sky-GEN on earth-LOC!)]
    'The sky spattered the clearing thickly with snow-drops (drops of sky on earth!)'

(96) *...po pravuju storonu ot menja ... možno bylo videt' platany Aleksandrov-*
      skogo prospekta, uže **zabryzgannye** *osennej želtiznoj.* [Mark Giršin. Žili-
      poživali // "Zvezda", 2003]
      [Along right side-ACC from me-GEN possible was see sycamores-NOM
      Aleksandrovskij boulevard-GEN, already spattered autumn yellow-INS]
      '...to my right one could see the sycamores of Aleksandrovskij boulevard,
      which were already spattered with the yellow color of autumn.'

(97) *Ego, prezidenta,* **zavesivšego** *polneba čutkimi storožaščimi sputnikami,*
      sočli avantjuristom! [Vladimir Makanin. Odnodnevnaja vojna // "Novyj
      Mir", 2001]
      [Him-ACC, prezident-ACC, having-hung half-sky-ACC sensitive surveill-
      lance satellites-INS, considered shady-dealer-INS]
      'They considered him, the president, who had filled half the sky with sensi-
      tive surveillance satellites, to be a shady dealer!'

(98) *Nad sinej roščej,* **zavešennoj** *dymkoj tumana, uže podnimalos' solnce.* [A.
      P. Ladinskij. Anna Jaroslavna -- koroleva Francii (1960)]
      [Above indigo grove-INS, hung haze-INS fog-GEN, already rose sun-
      NOM]
      'Above the indigo grove draped in the haze of the fog, the sun was already
      rising.'

(99) *V plečax širok, lico krugloe, čistoe, ne* **zakapannoe** *nikakimi tam vesnuš-*
      kami. [I. F. Standjuk. Maksim Perepelica (1956)]
      [In shoulders-LOC wide, face-NOM round, clear, not dripped any there
      freckles-INS]
      'He is wide in the shoulders with a clear round face that has not been spot-
      ted with any freckles.'

A possible explanation for this scarcity of data is the fact that these verbs do not
show any recurrent conventional metaphorical patterns. Thus, in this case it is
hard to speak of a tendency towards an increase or a decrease of metaphorical
uses in the passive forms.

7.4. Summary

Summarizing the analysis presented in this Chapter, several important observations should be made. First, in general the profiling among the Locative Alternation verbs prefixed in *za-* goes in favor of the Goal, i.e. speakers are more interested in how the state of the Goal is changed or how the Goal has been modified. Yet, the prefix *za-* provides additional opportunities for alternation with verbs that do not alternate when unprefixed. This effect is granted by the double prototype of the prefix *za-* (COVER/BEHIND), which makes it compatible with both placing and filling frames.

Second, the data offered in this Chapter provide evidence that in addition to the prototypical Locative Alternation construction (the Theme-Object and the Goal-Object constructions), four adjacent constructions are pertinent to the Locative Alternation phenomenon: the Theme-Subject construction, the Impersonal construction, The Hybrid construction and the Decausative construction. We show the relation between these relevant constructions by presenting them in a network and provide constructional maps that illustrate which constructions from the network are typical for each verb. Collectively these verbs present a coherent picture of the relationships among these constructions because every verb uses a contiguous subset of the constructional network. Presenting the Locative Alternaion constructions as a network with the center and the periphery is also compatible with the frame semantics approach (see Chapter 2).

Third, instead of presenting the verbal semantics of the Locative Alternation verbs in terms of content-oriented and container-oriented conflation classes or the opposition between the manner, path, and hybrid verbs, we propose a classification of verbs that is based on the types of Themes and Goals. This classification is presented as three major blocks: the central block which comprises the prototype for the Locative Aternation (the Russian 'load' verbs) and two other blocks that form the periphery of the category. Moreover, the verbs inside those blocks are also arranged as located closer or father away from the center. The left periphery block involves the verbs that take substances as their Themes and surfaces as their Goals. This applies to verbs like *zakapat'* 'drip', *zabryzgat'* 'spatter', *zasypat'* 'strew', *zalit'* 'pour'. The distinctive property of these verbs is that they are characterized by a bigger profile on the constructional map and can be used with the non-prototypical Locative Alternation constructions. Most of these verbs can present the Theme as a substance acting on its own, which facilitates their compatibility with the non-prototypical Locative Alternation constructions. The right periphery block includes the verbs that take independent solid objects as their Themes and mostly containers as their Goals. The verbs attributed to this block are *zapakovat'* 'pack', *zapixat'* 'stuff', *zavesit'* 'hang', *zastavit'* 'stand', *založit'* 'lay', the use of which is more or less limited to the prototypical Locative Alternation constructions.

In addition to the three factors mentioned above, namely the prefix, the construction, and the type of the verb, we have illustrated the importance of two additional factors for the Locative Aternation phenomenon – passive forms and metaphor. We show that in the case of passive participles an interaction between the Locative Alternation constructions and the passive construction is observed. Passive constructions provide stronger profiling, and hence skew the data towards a more prototypical pattern. Thus, passive participles, in general, show a slightly different distribution of the constructions than the one observed among the non-passive forms.

Metaphorical extensions do not always retain the same preferences for constructions as non-metaphorical uses. Conventional metaphorical patterns can skew the frequency in favor of one particular construction (cf. the case with *zagruzit'* 'load' which shows a preference for the Theme-Object construction in non-metaphorical uses, and a a preference for the Goal-Object construction in metaphorical uses, which makes the overall distribution of the two cnstructions almost equal). Metaphorical extensions also interact with the passive construction. Some metaphorical patterns are more natural for passive forms, which grants a higher frequency of metaphorical extensions with passive forms of certain verbs (cf. higher frequency of metaphorical extensions for the verbs *zagruzit'* 'load' and *zalit'* 'pour' due to the high frequency of conventional expressions like *zalit svetom* 'covered with light', *zagružen na polnuju moščnost'* 'used to its full capacity').

Chapter 8

Conclusion

"This is how ideas and truths are innate in us — as inclinations, dispositions, tendencies, or natural potentialities, and not as actual thinkings, though these potentialities are always accompanied by certain actual thinkings, often insensible ones, which correspond to them."

Gottfried Wilhelm Leibniz, *New Essays on Human Understanding*, 1705.

Despite the fact that a substantial number of previous scholarly works have been devoted to the Locative Alternation phenomenon, some key problems remain open. The present study aimed to illustrate that three basic factors are crucial for the Locative Alternation: the semantics of the verb, the semantics of the constructions and the way both of them can be modified.

The first question is how one should describe the semantics of the verb. Is a universal classification of verbal roots possible? The discussion of this issue is presented in **Chapter 2** together with an overview of previous approaches to the Locative Alternation phenomenon. The present study is in agreement with the claim proposed by Iwata (2008) that the semantics of verbs pertinent to the Locative Alternation phenomenon varies across languages, i.e. is language specific. As we have shown, the semantics of verbal roots should be described in terms of classifying Themes and Goals, which assumes that a more fine-grained description of verbal semantics is required in order to explain a greater portion of data. On a more general scale, Themes can be presented as solid objects or as substances. A more detailed classification would arrange Themes and Goals in semantic classes, which would enable us to distinguish between metaphorical and non-metaphorical uses, characterized by somewhat different preferences among the Locative Alternation constructions.

The second question relates to the semantics of the syntactic structures at stake. A constructional approach proved to be more successful in accounting for the facts in the Locative Alternation, since this type of approach does not have to worry about the derivational asymmetry and makes it possible to assign to each of the two syntactic structures a semantics of its own. Yet, the problem still remains how the Locative Alternation constructions are related to each other and to the semantics of the verb. It is the latter question that the present study addresses. An overview of the Locative Alternation constructions is given in **Chapter 4**. Our data provide evidence that in addition to the prototypical Locative Alternation constructions (the Theme-Object and the Goal-Object constructions), four adjacent constructions are pertinent to the Locative Alternation phenomenon: the Theme-Subject construction, the Impersonal construction, the Hybrid construction and the Decausative construction. We show the relation between these relevant constructions by presenting them in a network and provide constructional maps that illustrate which constructions from the network

are typical for each verb. Collectively these verbs present a coherent picture of the relationships among these constructions because every verb uses a contiguous subset of the constructional network.

In addition to further elaborating on the two factors mentioned above, namely the semantics of the verb and the nature of the constructions, we approach other factors relevant to the Locative Alternation. Such additional factors include modifications that are attested at both the semantic and the constructional levels. On the one hand, it is possible to modify the semantics of the verb by adding prefixes (the role of prefixes in the Locative Alternation has been discussed in **Chapter 3**). The latter have their own relation to verbal semantics, showing a range of different modifications, from merely changing the aspectual characteristic (imperfective to perfective) to a significant alteration of the semantics. It has been shown that whenever the constructional preferences of the prefixed verb are comparable with its unprefixed version (for instance, when both verbs show alternation), the prefixed verb represents a Natural Perfective. However, when the prefix crucially alters the constructional properties of the unprefixed verb, the prefixed perfective is not a Natural Perfective. On the other hand, we also observe three basic modifications of constructions, which can occur in three basic directions: metaphorical extensions, reduction within constructions (when one of the participants is omitted), elaboration (i.e. interaction with other constructions). Metaphorical extensions show different constructional preferences from those of the literal uses and can have a crucial impact on the overall constructional properties of the verb. Different prefixes behave differently in terms of metaphorical extensions even when they are part of Natural Perfectives. Furthermore, metaphorical uses appear to be related to reduction and elaboration. Reduction is more characteristic of the prefixed verbs, which is in accordance with prefix orientation towards objects (in a sense, the prefix can replace an object). Elaboration is more characteristic of the unprefixed verbs where we find not only omission of some arguments but also a reorganization of the structure. The number of elaborations also depends on the semantics of the verb. More elaborations are attested for the verbs that present Themes as substances.

The three factors discussed in Chapters 2-4 (semantics of the verb, semantics of the prefix, semantics of the constructions) are the focus of the central portion of the dissertation where we present the analysis of the two Locative Alternation verbs that bear Natural Perfectives with prefixes *na-*, *za-*, *po-* (**Chapter 6**). All verbs that become pertinent to the Locative Alternation when prefixed with *za-* are treated in the following chapter (**Chapter 7**). The *za-* perfectives discussed in Chapter 7 are not Natural Perfectives of their unprefixed counterparts. Five additional verbs that do not alternate when unprefixed show alternation with the prefix *za-*: *zakapat'* 'drip', *zasypat'* 'strew', *zalit'* pour', *zavesit'/zavešat'* hang', *založit'* 'lay'. This special function of the prefix *za-* is dependent on the semantics of this prefix. The prefix has a double prototype COVER/BEHIND based on a different construal of the situation, which makes it compatible with both 'placing' and 'covering/filling'.

Subsections 8.1 and 8.2 below summarize the finding presented in the analysis part of the dissertation.

8.1. Conclusions related to the central Locative Alternation verbs

8.1.1. General conclusions

We see clear differences among the four 'load' verbs. The base imperfective *gruzit'* strongly prefers the Theme-Object construction. The *na-* prefixed perfective is nearly the mirror image, preferring the Goal-Object construction. This preference of *nagruzit'* for focusing on the goal may have to do with the SUR-FACE meaning of *na-*, which corresponds to the meaning of the corresponding preposition *na* 'onto' (which this verb also shows a strong predilection for). *Zagruzit'* shows an almost even distribution across the two constructions, whereas *pogruzit'* is almost exclusively restricted to the Theme-Object construction, suggesting a focus on the Theme that is loaded rather than the place where the load ends up.

Given that the perfective verb *pogruzit'* shows the same focus (i.e. on the Theme) as the unprefixed verb *gruzit'*, *pogruzit'* might seem to be the most natural perfective counterpart of *gruzit'*. However, the fact that the Goal-Object construction constitutes 27% of the total number of uses of *gruzit'* prevents us from making such conclusions. *Pogruzit'* is a natural perfective counterpart of *gruzit'* but only for the Theme-Object construction. Moreover, *gruzit'* and *pogruzit'* behave differently in terms of grammatical forms and reduction.

This finding is striking given that all three perfectives are traditionally considered to bear semantically "empty" prefixes. If the three prefixes were indeed empty, we would expect no effect, or at the very least, an identical effect across the three perfectives, i.e. a random distribution. Here, instead, we find that the three prefixed verbs behave very differently both from the unprefixed imperfective and from each other. We take this as strong evidence against the traditional "empty" prefix hypothesis, since a zero should have no effect, and we cannot countenance three "different" zeroes.

Summarizing our observations concerning the 'smear' verbs we can say that the verb *mazat'* 'daub, smear' is rather central for the Locative Alternation verbs since it can alternate between the two prototypical Locative Alternation constructions similar to the verb 'load'. Moreover, the verbs *mazat'* and *gruzit'* are the only two verbs that have Natural Perfectives (that can also show alternation). For these reasons the verbs are located in the central section of the diagram presenting the relation between the Locative Alternation verbs. He verb *gruzit'* 'load' is the mot central verb while *mazat'* 'daub, smear' is close to it. Gruzit'

However, the verb *mazat'* 'daub, smear' also differs from the verb *gruzit'* 'load' in several important ways. First, the distribution with *mazat'* is strongly in favor of the Goal-Object construction. Moreover, only one of the prefixed counterparts, namely the one with the prefix *na-*, shows alternation among the Natural Perfectives of *mazat'*. Second, in addition to the Theme-Object and the Goal-Object constructions, the verb *mazat'* 'daub, smear' is characterized by a large number of elaborations which can be explained by the fact that the verb *mazat'* takes substances and not solid objects as Themes.

The Russian corpus data on the Locative Alternation show that even when we deal with a construal, the data is always skewed, i.e. each verb prefers either the Theme-Object or the Goal-Object construction. All 'smear' verbs prefer the Goal-Object construction since the Theme is specified as a substance, thus the major focus is usually placed on the Goal (i.e. the key factor here is specificity). The 'load' verbs are more free in the selection of Themes and Goals, hence a more even distribution between the two constructions. Within the loading scene one of the participants can be further profiled, which results in the regular omission of the second participant.

When the data appears to show no asymmetry in construal (the case of *zagruzit'*), we deal with an interaction of various factors, which show an overlap effect (for instance, non-metaphorical uses select the Theme-Object construction whereas metaphorical uses select the Goal-Object construction).

Summing up, we can say that even when the situation can have multiple interpretations, the speaker is forced to pick one of them, i.e. to construe the situation in a particular way, which depends on the physical properties of objects and their conceptual interpretation. In this sense, asymmetries can be considered an essential property of construal phenomena.

8.1.2. Passive forms

Passive participles have the effect of increasing the relative frequency of the construction that is associated with a given verb. Gruzit' To summarize for the verb *mazat'*, the Goal-Object construction is even more dominant in the passive forms than in the non-passive forms. The Hybrid construction in general is not compatible with the passive forms. There is a special situation with *namazat'* 'daub, smear' where the Theme-Object construction also contains an additional Theme in the Instrumental case and there are metonymical relations between the image and the substance with which it is painted. *Namazat'* is the only 'smear' verb where the Theme-Object construction is attested with passive forms. Note that the frequency for the Theme-Object construction is the highest for the same verb with the non-passive forms. *Pomazat'* shows a low frequency with the pas-

sive forms. This is because the prefix *po-* has a very diffuse semantics and thus is not able to focus the emphasis on one of the participants. The frequency of the passive participles with the unprefixed verb *mazat'* 'daub, smear' is relatively high due to a single conventional expression *odnim mirom mazany* 'all people are the same/ no one is perfect'.

8.1.3. Reduction

One more important difference between the Theme-Object and the Goal-Object constructions in terms of their relation to reduction is that the quality of reduced structures in the two constructions appears to be different. The missing component is mentioned in the previous context and thus can be treated as an instance of ellipsis. Such cases are attested for both the Theme-Object and the Goal-Object construction. Yet, the Goal-Object construction is also characterized by cases where reduction interacts with metaphor. The major metaphorical extensions involve a "person" (Goal), who serves as the metaphorical CONTAINER, and "information" or "work" (Theme), which represent metaphorical CONTENTS.

Reduction in general is more associated with the Goal-Object construction, which is parallel to the effect attested for the 'load' verbs. The similarities also concern the prefix that most triggers reduction. With both the 'load' and 'smear' verbs it is the prefix *za-*.

The prefix *po-* is less common with reduction due its less specified semantics and tends to express both participants overtly.

Unlike *gruzit'* 'load' (with 107 passive examples), *mazat'* 'daub, smear' is attested only in one passive context. The passive particples with *gruzit'* 'load' basically perform the function of adjectives (*tjaželo gružennye mašiny* 'heavily loaded cars'). We do not find such effects with *mazat'* 'daub, smear', hence the frequency with passive participles is very low.

Finally, *mazat'* 'daub, smear' is characterized by omissions in the elaborated constructions. However, such omissions should be treated as instances of restructuring rather than reduction. Reduction refers only to modifications of a single construction. However, elaboration presupposes an interaction between two or more constructions, some of which are ommitted in order to accommodate the multiplicity of constructions in a single clause.

8.1.4. Metaphor

The verb *gruzit'* and its aspectual counterparts *nagruzit', zagruzit', pogruzit'* show a different distribution among metaphorical representations and reduced constructions, proving that the prefixes *na-*, *za-* and *po-* are not empty. The ma-

jor part of metaphorical extensions occurs in the Goal-Object construction, particularly in its reduced version, providing evidence that metaphor can also be detected on the formal level.

Not all Theme-Object and Goal-Object constructions are uniform. Constructions can be modified in several ways: by metaphor (changing the class of the participant); by reduction (permanently leaving out one of the participants); by elaboration (interaction with another construction).

In case of *zagruzit'* in Goal:HUMAN+Theme:INFORMATION and *nagruzit'* in Goal:HUMAN+Theme:WORK metaphorical representations we deal with an independent causative construction (or a 'change of state' construction) which does not require a third participant. Our data support the proposal that the Goal-Object construction is compositional and represents a combination of two constructions: a causative construction and an independent construction headed by *with*.

Metaphorical extensions closely interact with: prefixes (*za-* shows a higher frequency with metaphorical extensions); constructions in general (metaphor usually correlates with the Goal-Object construction); reduced constructions (metaphorical extensions of prefixed verbs are often instantiated as reduced constructions, which is particularly noticeable for *zagruzit'*); grammatical forms of the verb (passive participles appear to show higher frequencies for metaphorical extensions within prefixed verbs).

8.1.5. Prepositions

In addition to the three correlations discussed above (between the construction and such factors as the verb, the grammatical form, reduction and metaphor), our data also shows a correlation between the prefix and prepositions. This correlation can be attested only in the full version of the Theme-Object construction. The imperfective base verb *gruzit'* 'load' has no preference with regard to the prepositions *na* 'onto' and *v* 'into'. *Nagruzit'* attracts the preposition *na* 'onto', while both *zagruzit'* and *pogruzit'* follow the opposite trend, attracting the preposition *v* 'into'. It appears that the choice of the preposition in the Theme-Object construction depends on whether the goal is understood as a SURFACE (*na* 'onto') or as a CONTAINER (*v* 'into'). The association of the *na-* prefixed verb with the preposition *na* makes sense, since the preposition and the prefix have inherited a meaning that refers to a SURFACE.

8.2. Conclusions related to other verbs pertinent to the Locative Alternation

First, in general the profiling among the Locative Alternation verbs prefixed in *za-* goes in favor of the Goal, i.e. speakers are more interested in how the state of the Goal is changed or how the Goal has been modified. Yet, the prefix *za-* provides additional opportunities for alternation with verbs that do not alternate when unprefixed. This effect is granted by the double prototype of the prefix *za-* (COVER/BEHIND), which makes it compatible with both placing and filling frames.

Second, the data offered in this Chapter provide evidence that in addition to the prototypical Locative Alternation construction (the Theme-Object and the Goal-Object constructions), four adjacent constructions are pertinent to the Locative Alternation phenomenon: the Theme-Subject construction, the Impersonal construction, The Hybrid construction and the Decausative construction. We show the relation between these relevant constructions by presenting them in a network and provide constructional maps that illustrate which constructions from the network are typical for each verb. Collectively these verbs present a coherent picture of the relationships among these constructions because every verb uses a contiguous subset of the constructional network. Presenting the Locative Alternation constructions as a network with the center and the periphery is also compatible with the frame semantics approach.

Third, instead of presenting the verbal semantics of the Locative Alternation verbs in terms of content-oriented and container-oriented conflation classes or the opposition between the manner, path, and hybrid verbs, we propose a classification of verbs that is based on the types of Themes and Goals. This classification is presented as three major blocks: the central block which comprises the prototype for the Locative Alternation (the Russian 'load' verbs) and two other blocks that form the periphery of the category. Moreover, the verbs inside those blocks are also arranged as located closer or father away from the center. The left periphery block involves the verbs that take substances as their Themes and surfaces as their Goals. This applies to verbs like *zakapat'* 'drip', *zabryzgat'* 'spatter', *zasypat'* 'strew', *zalit'* 'pour'. The distinctive property of these verbs is that they are characterized by a bigger profile on the constructional map and can be used with the non-prototypical Locative Alternation constructions. Most of these verbs can present the Theme as a substance acting on its own, which facilitates their compatibility with the non-prototypical Locative Alternation constructions. The right periphery block includes the verbs that take independent solid objects as their Themes and mostly containers as their Goals.

The verbs attributed to this block are *zapakovat'* 'pack', *zapixat'* 'stuff', *zavesit'* 'hang', *zastavit'* 'stand', *založit'* 'lay', the use of which is more or less limited to the prototypical Locative Alternation constructions.

In addition to the three factors mentioned above, namely the prefix, the construction, and the type of the verb, we have illustrated the importance of two additional factors for the Locative Alternation phenomenon – passive forms and metaphor. We show that in the case of passive participles an interaction between the Locative Alternation constructions and the passive construction is observed. Passive constructions provide stronger profiling, and hence skew the data towards a more prototypical pattern. Thus, passive participles, in general, show a slightly different distribution of the constructions than the one observed among the non-passive forms.

Metaphorical extensions do not always retain the same preferences for constructions as non-metaphorical uses. Conventional metaphorical patterns can skew the frequency in favor of one particular construction (cf. the case with *zagruzit'* 'load' which shows a preference for the Theme-Object construction in non-metaphorical uses, and a preference for the Goal-Object construction in metaphorical uses, which makes the overall distribution of the two constructions almost equal). Metaphorical extensions also interact with the passive construction. Some metaphorical patterns are more natural for passive forms, which grants a higher frequency of metaphorical extensions with passive forms of certain verbs (cf. higher frequency of metaphorical extensions for the verbs *zagruzit'* 'load' and *zalit'* 'pour' due to the high frequency of conventional expressions like *zalit svetom* 'covered with light', *zagružen na polnuju moščnost'* 'used to its full capacity').

8.3. Directions for Future Research

This dissertation aims to develop an empirically well-grounded account for the Russian Locative Alternation verbs by looking at three factors: the semantics of verbs, the semantics of constructions and the semantics of prefixes. Still, some issues were inevitably left open. In this subsection we present four major topics for future research. Some of the theoretical issues listed below (subsections 8.3.1 and 8.3.2) are closely related to the Locative Alternation phenomenon. The other subsections (8.3.3 and 8.3.4) lead us into the discussion of more general theoretical issues, such as metaphor and the relation between language and cognition.

8.3.1. Unprefixed verbs and the Locative Alternation

The present dissertation focused merely on the relation between the Locative Alternation and prefixes. We have looked at the two Russian verbs that can alternate without a prefix (*gruzit'* 'load', *mazat'* 'daub, smear') and their aspectual counterparts with the prefixes *na-*, *za-* and *po-* that affect the behavior of the verb in the Locative Alternation. We have also considered a special case with the prefix *za-* that enables some additional verbs to alternate. Although most of such verbs do not show alternation between the Theme-Object and the Goal-Object constructions when unprefixed, they appear in both constructions when the prefix *za-* is added.

It has been shown that additional verbs that are involved in the Locative Alternation when prefixed in *za-* are attested not only in the two basic Locative Alternation constructions but also in a set of other constructions, closely related to the Theme-Object and the Goal-Object constructions. This widens the scope of the Locative Alternation phenomenon and relates it to other frames. The verbs that alternate between the Theme-Object and the Goal-Object constructions with the prefix *za-* are not attested in these two central constructions when unprefixed, but occur in the adjacent constructions (Theme-Subject, Impersonal, Hybrid, Decausative) and show elaborations and metaphorical extensions. In order to further test the hypothesis that reduction is more characteristic of the prefixed verbs and elaboration is more characteristic of the unprefixed verbs, we would need to undertake a comparative analysis of the verbs presented in Chapter 7 with their unprefixed counterparts.

8.3.2. Relation between frames and constructions

A separate issue is how constructions are related to frames, as presented by Fillmore, Boas, et. al. FrameNet proposes a network of frames. A frame is perceived as any system of concepts related in such a way that to understand any one concept results in all of them becoming available (Petruck 1996, Boas 2008). Literally speaking a frame refers to a scenario with a certain number of participants and a given verb, compatible with the frame, can profile different participants depending on its semantics. Crucially, a frame is described independently of the words that use it. Words are described according to frames that they evoke and the ways in which the elements of their frames may or must be realized in sentences built up around the words.

Constructions also present a set, independent of the verbal semantics. Yet, they are compatible with certain verbs. In the present dissertation, the Locative Alternation constructions are presented as a network. One of the things that could be further researched is the relationship between the Locative Alternation constructions and the larger frames that they evoke.

8.3.3. The interaction between Metaphor and Constructions

In the cognitive linguistic view, metaphor is defined in terms of "cross-domain mapping" (Lakoff and Johnson 1980, Lakoff 1993: 203). More recent studies indicate that metaphors involve more than just mappings or bindings between two domains (or mental spaces) and should rather be treated as instances of blending among several domains (Fauconnier and Turner 2008). Another question is how such mapping or blending is expressed on the formal level. As noted in some recent corpus studies, there are frequent formal differences between metaphorical and literal uses of the same words, suggesting that metaphors have well-defined grammatical forms (Deignan 2005).

The issue that still needs to be addressed is whether such differences are also attested at the level of constructions. Corpus research on metaphor usually starts with a metaphorical expression and examines which collocates and grammatical forms it combines with (Deignan 2005). It would be interesting to begin with specific constructions and analyze how they mark metaphorical uses. This approach will enable us to test whether metaphorical uses are marked on the constructional level. An analysis of the Locative Alternation Constructions in the Russian National Corpus indicates that their modifications are related to metaphor. These constructions can be modified in two ways: via elaboration and via reduction. Elaboration is the result of an interaction between Locative Alternation Constructions and other constructions. In order to get a metaphorical extension, we do not simply fill the argument roles of a construction with linguis-

tic units describing another domain, but often also perform structural changes. In order to examine the relation between metaphor and constructions in more detail we need a comparative analysis of the unprefixed verbs pertinent to the Locative Alternation, as proposed in 8.3.1.

8.3.4. On Language and Cognition

Finally, it would be useful to relate the data extracted from the corpus presented in this study to a psycholinguistic experiment. For instance, one might check which construction is associated with each Locative Alternation verb in the mind of the native speaker. The goal of the experiment would be to test whether the frequencies attested in the corpus correspond to actual speakers' performance and whether they match the relative cognitive salience of various constructions with a given verb in the speakers' grammar/mind. For each stimulus (Locative Alternation verb), a subject would be asked to generate several sentences and write down the first one that comes to his/her mind (a similar experiment has been carried out for diffent submeanings of the prefix *za-* in Sokolova and Endresen 2011). This will enable us to get a complete picture.

It is vital to compare the resuts of the corpus study with a psycholinguistic experiment, since these data analyze the phenomenon from different angles. It has been widely claimed that the actual use of a language (be it discourse or speech in general) is different from language "per se" (i.e. the types of examples that we can get via introspection). Roughly, we can say that the former (the actual use) is better described by means of dynamic models while the latter ("language per se") is compatible with a static model. As the dissertation shows, a dynamic model appears to be more accurate in considering all the factors in the actual use of the Locative Alternation verbs. In addition, a comparison with results from a psycholinguistic experiment would enable us to address the question of what exactly corpus data and introspection show and how they are related to each other. Below we present some issues for general discussion.

Based on research in psychology (Gestalt psychology in particular) we can propose three factors that are relevant for perception: 1) empirical data (physical properties of the objects around us, so to say, the "narrow picture"); 2) background information stored through experience (various generalizations, schematic and relative thinking, so to say, a "broad picture); 3) cognitive apparatus (very broadly, the capacities of the brain).

The importance of the first factor (empirical data) is obvious for all. Once we have smelled a rose, every time when we encounter the same smell we know that we are dealing with a rose. However, when we come across a white car at

night, what we see is not white but dark grey. Yet, we are still able to say that it is the same car that was white during the day. Specific objective characteristics, such as size, distance and color, cannot be inferred purely from the retinal input. Our knowledge about the physical world we are living in interacts with our perception. This means that the second factor (background information) presupposes that when we perceive something our judgments are based not only on the actual empirical data, but also on the generalizations stored in our brain.

Finally, the importance of the last factor (cognitive apparatus) was proven by the ambiguous figures that we discussed in Chapter 1. Such pictures give rise to "percepts" that have roughly equal probability. The same physical input to the eye can give rise to different interpretations and, therefore, we can say that the perception of objects goes beyond sensation and generalizing.

A similar principle might be applicable to language. Maybe within Cognitive Grammar, there should not be any "language" in the Saussurean sense. Language is acquired through experience. Humans are exposed to frequent chunks of information and structure (empirical data) and on the basis of this information they build generalizations, or schemas (Tomasello 2003, Dabrowska 2004). Can we say that speech sometimes looks different from introspective examples because introspection is the result of generalizing? In order to answer this problem it is necessary to compare different types of data, as proposed here.

Appendix

Table 1. Works on the Locative Alternation in chronological order

	Load the hay onto the truck	*Load the truck with hay*
Fillmore 1968	A – L – O case frame	A – O – L case frame
Fillmore 1977, 1999?, 2008	placing frame	filling frame
Bowerman 1982	Figure as direct object Pattern F	Ground as direct object Pattern G
Pinker 1989	the *into/onto* variant *hay* is the theme	the *with*-variant *truck* is the theme
Kaser and Hale 1992, Lewandowski 2009	Locatum	Location
Goldberg 1995	caused-motion construction	causative construction plus with-adjunct
Baker 1996	Theme Phrase	Goal Phrase
Brinkman 1997	theme-object sentence	goal-object sentence with nonincremental theme
Michaelis and Ruppenhofer 2000	the applicative construction	the oblique-theme construction
Mateu 2000	locatum argument, associated to the direct internal argument	location argument
Padučeva 2004, 2008	исходная диатеза	диатеза «полного охвата»
Olbishevska 2004	figure frame	ground frame
Iwata 2005	locative variant	*with* variant
Goldberg 2006	caused-motion construction	an independent construction headed by *with*
Nichols 2008	Theme-object	Goal-object

Table 2. Works on the Locative Alternation in grouped thematically

		Load the hay onto the truck	*Load the truck with hay*
frame approach	Fillmore 1968	Agent – Loc – Obj case frame	Agent – Obj – Loc case frame
	Fillmore 1977, 2008 Boas 2006	placing frame	filling frame
	Olbishevska 2004	figure frame	ground frame
lexical approach	Bowerman 1982	Figure as direct object Pattern F	Ground as direct object Pattern G
	Rappaport and Levin 1988, Pinker 1989	the *into/onto* variant the *into/onto* locative/construction (p. 78, 80) *hay* is the theme	the *with*-variant *truck* is the theme
	Baker 1996	Theme Phrase	Goal Phrase
	Brinkman 1997	theme-object sentence	goal-object sentence with nonincremental theme
	Mateu 2000	locatum argument, associated to the direct internal argument	location argument
	Nichols 2008	Theme-object	Goal-object
Constructional approach	Goldberg 1995	caused-motion construction	causative construction plus with-adjunct
	Goldberg 2006	caused-motion construction	an independent construction headed by *with*
	Michaelis and Ruppenhofer 2000	the applicative construction	the oblique-theme construction
	Padučeva 2004, 2008	прямая диатеза	диатеза «полного охвата»
	Iwata 2005	locative variant	*with* variant
	Lewandowski 2009	Locatum construction	Location construction

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