ABSTRACT

The interdisciplinary effervescence of the 1960's-1970's resulted in the adoption of terms like "information," "entropy" and "code" into linguistic and literary analysis; one of the schools that contributed to this tendency was the Soviet semiotics school, represented by scholars like Iurii Lotman, Boris Uspenskii, Viacheslav Ivanov & al. This dissertation offers a critical examination of the controversial and problematic aspects of the interdisciplinary connection between information theory and semiotics, concentrating on Iurii Lotman's works on the theory of the text. In order to address the question of the applicability and relevance of information-theoretic principles to text analysis, this dissertation proposes (a) to offer a concise statement of the basic terms and concepts of information theory; (b) to offer an understanding of how "structure" in the linguistic sense can be related to the concepts of information theory; (c) to evaluate Lotman's use of information-theoretic terminology against the scientific "standard"; (d) to develop an understanding of what, in information theory, could be relevant to the analysis of texts and in what way it is possible to approach texts as informational objects; (e) to offer a few practical examples of how certain features of the text viewed as an informational object can be used, within the limits of their definition, to support and to complement traditional methodologies of text analysis.
The central claims that emerge from my theoretical investigation are (a) that the formalism of information theory is not compatible with Iurii Lotman's theory of the text (partly due to terminological ambiguities already present in the field) and that the attached terminology has been used in ways unrelated to the assumptions and results of information theory; (b) that the formalism of information theory does provide the basic elements for an approach to structure in the most general sense and that these elements can be made relevant to both linguistic description and text analysis; (c) that it is possible to formulate a coherent approach to the text as an informational object by taking into account the statistical, distributional properties of the discrete variables that can be defined on the text at its various structural levels; (d) that it is possible to use these properties to characterize the specifics of the language of a text and its relationships to other texts, and therefore to guide, and add coherence to, the application of traditional approaches to the text. The second part of my dissertation is dedicated to applying the theoretical considerations of the first part to the analysis of texts chosen from 20-th century Russian literature.
ACKNOWLEDGMENTS

I wish to thank my adviser, Prof. Irene Masing-Delic, whose advice, direction and expertise were essential in the process of writing this dissertation. In particular, I am thankful for her help in addressing what was the most challenging part of my research - that of making the results of the theoretical investigation relevant to issues of current interest in the study of literature. She made considerable efforts in ensuring that my dissertation maintained its coherence and accuracy and along with scientific guidance provided much needed moral support.

I am indebted to Prof. Charles Gribble, in whose Russian and Slavic linguistics classes I became acquainted with Structuralism; these classes influenced the choice of my topic and provided me with the basic scientific vocabulary needed to formulate the ideas developed in this dissertation (as did many of the books that Prof. Gribble generously offered me).

I am grateful to Prof. Anelya Rugaleva for directing my attention to the subtle connections between linguistics and the theory of literature, and also for encouraging me to follow a research lead that started in a course paper written for one of her classes, and later materialized, under Prof. Delic's supervision, in Chapter 4 of this dissertation.

I also wish to thank the Department of Slavic and East European Languages and Literatures at the Ohio State University, for the intellectual and material support without which this project would not have been possible, and to all my professors and colleagues,
from whom I had a lot to learn. Especially, I would like to thank the Department Chairman, Prof. Daniel Collins, who took time from his demanding schedule to become involved in this project.
VITA

January 7, 1975……………………………. Born - Campina, Romania

1997………………………………………. B. A., Russian and French, Bucharest University, Romania

2001………………………………………. M.A., Russian, The Ohio State University

2001-present……………………………. Graduate Teaching Associate, The Ohio State University

FIELDS OF STUDY

Major Field: Slavic and East European Languages and Literatures
TABLE OF CONTENTS

Abstract...........................................................................................................................................ii
Acknowledgments.............................................................................................................................iv
Vita..................................................................................................................................................vi
List of Tables.................................................................................................................................ix
List of Figures.................................................................................................................................x

Chapters:

1. Introduction...................................................................................................................................1
   1.1. The Object of Research.........................................................................................................1
   1.2. Outline of the Chapters.........................................................................................................9
   1.3. Context and Sources..............................................................................................................12
   1.4. Limitations and delimitations..............................................................................................17
   1.5. Intended audience and prerequisites..................................................................................19

2. Information Theory in Semiotics, Its Limitations and Relevance...........................................20
   2.1. Preliminaries: Information-theoretic definitions.................................................................20
       2.1.1. Absolute entropy...........................................................................................................20
       2.1.2. Conditional entropy and mutual information.................................................................23
       2.1.3. The relationship between entropy and information.......................................................28
       2.1.4. Summary.......................................................................................................................33
   2.2. Entropy, predictability, and structure in language...............................................................34
   2.3. A critique of Lotman's interpretation of entropy and information.....................................38
   2.4. The text as an information-theoretic object.........................................................................49

3. "Flying objects" in Georgii Ivanov's Распад атома and in the works of his contemporaries........57
   3.1 The verb "to fly" in the Russian linguistic background..........................................................57
   3.2. The verb "to fly" and its context in Ivanov's Распад атома..................................................60
   3.3. The verb "to fly" and its contexts in Ivanov's poetry..............................................................63
   3.4. The verb "to fly" in the poetry of Ivanov's contemporaries..................................................71
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.</td>
<td>Conditional probability tables for two discrete variables in three distinct correlation modes, corresponding to zero, non-zero and maximum conditional entropy</td>
<td>25</td>
</tr>
<tr>
<td>2.2.</td>
<td>Table 2.2. An information-theoretic interpretation of structure in terms of entropy</td>
<td>36</td>
</tr>
<tr>
<td>3.1.</td>
<td>The environment of the verb &quot;to fly&quot; in Georgii Ivanov's poetry</td>
<td>69</td>
</tr>
<tr>
<td>3.2.</td>
<td>Contexts of the verb &quot;to fly&quot; in works of authors contemporary with G. Ivanov</td>
<td>71</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.</td>
<td>Entropy in bits per symbol in the case of a choice</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>between two possibilities, with probabilities p and 1-p</td>
<td></td>
</tr>
<tr>
<td>2.2.</td>
<td>The structural coupling of two variables and the corresponding conditional</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>entropy</td>
<td></td>
</tr>
<tr>
<td>2.3.</td>
<td>Predictability as the complement of entropy</td>
<td>35</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

1.1. Delineation of the Research Object

Conceptualizing the traditional preoccupations of humanist studies in the scientific terms of cybernetics and information theory is the defining feature of the structural-semiotic approach to language, literature and culture. In particular, it is the defining feature of the vast body of works generated by the group of researchers that came to be known as the Moscow-Tartu Semiotics School (Iurii Lotman, Boris Uspenskii, Viacheslav V. Ivanov, Vladimir Toporov, Andrei Zalizniak and others) from the late 1950's onwards\(^1\). Along with important contributions to structural linguistics\(^2\), the group produced a number of works relevant for the theory of literature and culture, with significant impact in the Slavic field and beyond. Iurii Lotman's \textit{Structure of the Artistic Text} (Lotman 1977) and


\(^2\) A few major titles that can be mentioned in this respect are: \textit{Istoricheskaia fonologiiia russkogo iazyka} by Viacheslav V. Ivanov (1968), \textit{Sravnitel'naiia grammatika slavianskix iazykov} by B. Gasparov and P. Sigalov (1974), \textit{Strukturnaia lingvistika} by S. Shaumian (1965), \textit{Lokativ v slavianskix iazykax} by V. N. Toporov (1961), and \textit{Strukturnaia tipologiia iazykov} by B. A. Uspenskii (1965).
Culture and Explosion (Lotman 2000) are prime examples of works representative of the semiotic approach, which are widely discussed, taught and applied in the field of Slavic languages, literatures and cultures, and to a significant extent in other fields of the humanities, and that are influenced to varying degrees by concepts originating in cybernetics and information theory. As Lotman, the most prolific and arguably the most influential member of the movement, wrote in the introductory chapter to his Analysis of the Poetic Text, "Structural and semiotic literary criticism… arose as part of the scientific revolution that marked the middle of the twentieth century, and is linked organically to the ideas of structural linguistics, information theory and cybernetics." (Lotman 1972: 17). However, the link, which Lotman termed "organic," between semiotics, structural linguistics, cybernetics and the mathematical theory of information is far from being unproblematic; the problems appearing at this point of confluence give the starting point for the present dissertation.

There is a broad consensus among scholars who have analyzed the semiotic discourse of Iurii Lotman in the Structure of the Artistic Text that his use of cybernetic and information-theoretic concepts is in many cases less than accurate and less than consistent (see Vroon 1977: ix-xi, Shukman 1977: 119-133, Meijer 1973: 210). Similar observations apply in equal measure to works belonging to other members of the movement, specifically to those works concerned with the general theory of sign systems (rather than with the structural description of the forms of language or historical linguistics) (see Matejka, Shishkoff, Suino and Titunik 1977:xiii-xv).³ Key terms like communication, information, entropy, code and (modelling) system appear to be the most

³ Vroon and Shukman discuss specifically Lotman's Structure of the Artistic Text; Matejka et al. refer to the works of the Moscow-Tartu school in general.
problematic, potential "stumbling blocks" and a "sources of confusion" because of their polysemy (Vroon 1977: xiii, ix). Another contributing factor may be found in the circumstance that they were "largely adapt[ed by the authors] to their own purposes, rather than taken over [from information theory] without a change in definition."
(Thompson 1977: 227). The term secondary modelling systems (Russian: Vtorichnye modeliruiushchie sistemy), which was introduced in 1962 by A. A. Zalizniak, Viach. Vs. Ivanov and V. N. Toporov, and which became "the distinguishing mark of the Soviet school of semiotics and the heading under which its work has been carried on," was never defined or discussed in the works of the group beyond a few general remarks by Lotman and Ivanov (Shukman 1977: 24).

There is also wide agreement that terminological inconsistencies are unavoidable in works as complex as those produced by the Moscow-Tartu school and that the inconsistencies are more than made up for by the erudition, eloquence and intuition of the authors. Matejka et al., for example, in their introduction to the 1977 anthology Readings in Soviet Semiotics, after warning the reader that formal theories have a high potential for abuse, and suggesting that the "wide appeal [...] and astounding prolificness [of the Moscow-Tartu group] have to some extent been conditioned by such abuse" (1977:xiv), state that this type of risk is "inherent and ineluctable for an intellectual movement which is nomothetic, universalist and pencyclopedic as the Soviet structural-semiotic movement

---

is" (ibid). Opinions as to the extent and degree of the terminological problems in Lotman's work differ: while Ann Shukman states that Lotman is at his best when not bound by scientific exactitude and that his "metaphorical" use of information-theoretic terminology often obscures rather than illuminates his points and often results in paradoxical and counter-intuitive statements (see Shukman 128 ff, 132ff.), Ewa Thompson considers Lotman to be, despite the "many loose ends" in his theories, "more successful than other scholars in applying the concepts of communication theory to literature" (Thompson 1977: 228, 237).

From the standpoint of a researcher of literature and culture, who is aware that the object of research appears quite often to be immune to schematic approaches, and that erudition and intuition often provide the clearer path to a satisfactory solution of the research problem, the liberties taken by the Moscow-Tartu scholars with information-theoretic and cybernetic terminology, as well as the resulting contradictions and paradoxes, may not represent a major obstacle in deriving insight from their theoretical works. On the contrary, blurring the distinction between language and metalanguage by applying precise scientific terms outside their area of definition, allowing them to become polysemantic and metaphorical and thereby to take on a "life of their own," may turn out in the end to be a more productive approach than a strictly formal one; when the subject of investigation is language in its (often paradoxical) communicative, social and cultural aspects, formalization is not the answer, it could be argued. This is, almost literally, the argument that has been made by one of the leading French structuralists, Roland Barthes,
who said in an essay aptly titled "Science versus literature"⁶ that, if structuralist discourse is to make itself "entirely homogeneous with its object of study," "integral writing" might be a more practical path than "exhaustive formalization" and that the distinction between language and metalanguage "is subject, in the end, to the paternalistic model of a science without language" (Barthes 1970: 416). This "compromise" position may explain why a discussion of the limitations of cybernetic and information-theoretic notions in semiotic discourse has not been undertaken so far. However, observations such as that of R. Vroon that "the broad applicability of Lotman's system is due in large measure to the "moveability" of the metalanguage it employs" (Vroon 1977: ix)⁷ would indicate that such a discussion is in fact necessary, especially given the continued interest in the semiotic perspective in general and in Lotman's works in particular (as can be seen, for example, in Edna Andrews's 2003 book Conversations with Lotman.)⁸ The overarching goal of such a discussion (to which the present work will hopefully contribute something) would be to create the premises for a coherent critical approach to existing semiotic theories by addressing the "stumbling block" of their metalanguage.

Observations such as those brought up by Vroon, Shukman and Matejka point to a number of questions that any humanities researcher interested in the semiotic approach and in particular in the works of the Moscow-Tartu school could legitimately ask: for example, how relevant and applicable are, after all, cybernetics and information theory to the study of literature and culture; to what extent are they useful for the analysis of texts

---

⁷ Vroon in fact stated that one of the major purposes of his translation of The Structure of the Artistic Text was to encourage a critical examination of the metalanguage employed by Lotman (see 1977:xi).
in the semiotics framework other than as a source of terminology of great impact and significant heuristic value? Why is it that systemic, formal principles, successfully applied to the description of the structures of language (as in structural phonology, morphology, syntax), do not show the same degree of clarity when extended to the description of the "secondary modelling systems" of literature and culture? What is the source of the terminological ambiguities surrounding information-theoretic concepts in the works of Lotman and his colleagues, and can these ambiguities in principle be resolved? What is there to learn about texts if we approach them as informational objects, and to what extent can we talk about "artistic" properties or "literariness" on the basis of the information-theoretic properties of texts?\(^9\) Such questions cannot be adequately treated within semiotics only, or within information theory only, but must be approached from, and require a good understanding of, both perspectives; in other words they require an interdisciplinary approach.

This dissertation aims at offering, in its first, theoretical part, a few basic elements for a framework in which such questions can be addressed; it does so by taking a close look at the information-theoretic premises of Iurii Lotman's semiotic works, in the context of the cybernetics works that informed the structural-semiotic approach in its beginnings. The second part of the dissertation provides several examples of literary analysis, guided by ideas developed in the first part.

Since the questions formulated above, as well as the literature concerned with them in one way or another, are vast, their discussion in this dissertation is necessarily restricted to just a few basic aspects that could be treated in a reasonably clear and

---

\(^9\) See for example, Lotman's claim that the artistic quality of a text can be related to the "concentration of information" (Lotman 1977, 30 ff.).
concise fashion. The limitations on the sphere of interest and goals of the current work are as follows.

Of the works relevant for the structural-semiotic perspective, the most important for the development of the present dissertation are the widely taught and quoted Structure of the Artistic Text\textsuperscript{10} and Culture and Explosion\textsuperscript{11} by Iurii Lotman, as well as some of his theoretical articles. From the cybernetics works that have influenced the semiotic approach, my discussion involves mainly Claude Shannon's "Mathematical Theory of Communication" (1948) and Norbert Wiener's The Human Use of Human Beings: Cybernetics and Society." Also important, as the link between Shannon and the Moscow-Tartu school, is Roman Jakobson's article on the functions of language, "Linguistics and Poetics\textsuperscript{12}.

Within the sphere of interest centered around the works mentioned above, the present dissertation proposes to achieve the following goals: (a) to offer a concise statement of the basic terms and concepts of information theory; (b) to offer an understanding of how "structure" in the linguistic sense can be related to the concepts of information theory; (c) to evaluate Lotman's information-theoretic terminology against the scientific "standard" and offer explanations for its ambiguities; (d) to develop an understanding of what, in information theory, is relevant to the analysis of texts and how texts can be approached as informational objects; (e) to offer a few practical examples of how certain basic parameters of the text (viewed as an informational object) can be used,

within the limits of their definition, to complement and to guide the application of
traditional methodologies of text analysis.

A legitimate question, which should be addressed already at this point, is why
should a researcher of Slavic languages and literatures be concerned with problems of
such a general nature, which also are so different from the ones that are currently
discussed in the field. One simple answer would be: to discover alternative ways of
looking at things, and consequently – knowing that what we see depends on how we look
– to discover new things. The natural languages, the specialized languages of science,
artistic literature, the visual arts and other components of human culture all function as
means for information production and transmission within human society. The goal of
humanist inquiry is to model the structure, function and dynamics of such systems. In
practice, in linguistic or literary analysis, one is often confronted with difficulties of a
conceptual nature, arising from an apparent incapacity of existing analytical models to
account in a consistent fashion for the empirical data; one is compelled then to search for
alternative models, alternative description languages, in the hope to reveal more facets of
the phenomenon under study, be it a matter of syntax, poetics, or the historical evolution
of a literary genre. This is not everything, however. The field of Slavic languages and
literatures has a long tradition of experimentation with formal and structural
methodologies. The Russian Formalists, the Prague Structuralist School, and the
Moscow-Tartu semiotics school (which together amount to almost a century of research)
have left a vast and complex legacy that invites a continuation of their efforts. In the case
of the Moscow-Tartu school, this means, among other things, a continuation of the
dialogue with the mathematical theory of information, communication and organization -
i.e. cybernetics, or, in its most abstract form, systems theory. Last but not least, there is
the awareness of recent evolutions in the fields that are interdisciplinarily linked with the
Structuralist movement, and of the potential relevance of these evolutions for the
reevaluation of past, and guidance of current research.

1.2 Outline of the chapters

This dissertation is divided into two parts; a theoretical part, contained in Chapter 2, and an applications part, spanning the next three chapters. Where possible, I have tried
to make the chapters self-contained units.

Following the introduction of Chapter 1, Chapter 2 provides, first, the minimal
context necessary for the understanding of the basic parameters of mathematical
information theory and gives a short account of their relationship to "structure" in a
linguistic setting. This is a prerequisite step for ensuring a coherent critique of the use of
information-theoretic notions in semiotic theories. The second part of the chapter is
dedicated to formulating a critical perspective on Iu. M. Lotman's approach to the artistic
text and evaluating the relevance of information-theoretic concepts as well as their
limitations in what concerns the analysis of texts. I explore the use of information-
theoretic terminology in (mainly) Lotman's Structure of the Artistic Text, Culture and
Explosion, and Universe of the Mind. I show that Lotman's use of the concepts is
incongruent with the premises of communication theory, as developed by Claude
Shannon, and that the terminological confusion can be accounted for, at least in part, by
Norbert Wiener's popularization work The Human Use of Human Beings. I argue that
global parameters such as the quantity of information are of little relevance to the study of texts; I show that the statistical correlation of linguistic variables that can be defined in a text (or group of texts) is relevant to the description of structures in the text and can be used to formulate a meaningful (albeit limited) approach to the text as an informational object.

In Chapters 3, 4 and 5 I offer several examples of analyses of literary texts which take into account the correlation of variables within and among texts. In Chapter three I explore the distributional properties of the verb летать 'to fly' and related verbs in the works of the Russian émigré poet Georgii Ivanov (1898-1958). Starting from the unusual variety of "flying objects" that can be found in Распад атома (1938), I show that Ivanov's poetry is characterized by a specific pattern in the use of the verb "to fly." This trait evolves gradually in Ivanov's creation and the process of its evolution reveals a number of connections between the poetic language of Georgii Ivanov and that of his contemporaries, the most important of these connections relating Ivanov's creation to that of Aleksandr Blok.

In Chapter 4 I discuss how intertextual relationships can be described, in an information-theoretic perspective, as mappings among texts, and source texts - as generative models of the corresponding "destination" texts. As an example, I explore the relationship between a 1918 poem by Valerii Briusov, "Memento mori" and Mikhail Bulgakov's novel Master i Margarita; I use the modelling relation between the two texts to provide a more thorough approach that includes historical and cultural factors; in addition, I offer textual and contextual arguments to support the hypothesis of a genetic relationship between the two texts.
Chapter 5 is dedicated to the clarification of the notion of "secondary code" and the associated notion of "multiple encoding" - notions that, in Lotman's approach to the artistic text, generate a number of paradoxes, as noted by both Vroon (1977:ix-x) and Shukman (1977: 72 ff, 130 ff.). I argue that a stricter notion of code, that is still successfully applicable to text analysis, can be obtained by considering a) the invariant structures that can be defined for an ensemble of texts (e.g. those structures that can be seen as the stable, defining characteristics of genre, style, plot, etc.) and b) the circularity of the relationship between texts and (what in semiotic theory is referred to as) "codes."

The invariant structures of an "artistic code" may be considered generative models with respect to a given text, and they can be used as a basis for comparison and classification purposes. To exemplify, I analyze the relationship between Ivan Bunin's short story "Грамматика любви" (1915) and the folk tale "code," to show that certain invariant structures characteristic of Russian folk tales, similar to those that have been described by V. Propp in his Morphology of the Fairytale (1928) can be identified in the narrative structure of "Грамматика любви." The analysis is then extended to other works by Bunin ("Суходол," "Легкое дыхание," "Господин из Сан Франциско") to obtain a picture of the role and prevalence of mythological and folktale structures in Bunin's work in general.

The final chapter is dedicated to conclusions and ideas for future research.
1.3. Context and Sources

The works that have influenced the structure and the content of the present dissertation can be divided in three categories: theoretical studies dedicated to Lotman and the Moscow-Tartu school; interdisciplinary works relevant for both semiotics and cybernetics; and general reference works in cybernetics, systems and mathematics. In order to give an idea of the context of this dissertation, I will mention some of the relevant works in each category; the list is by no means complete or even entirely representative for the current state of affairs in the respective fields.

Among recent works in the Slavic field dedicated to the semiotic approach, Edna Andrews's *Conversations with Lotman* (U. Toronto Press, 2003) deserves special mention, since it most closely parallels the general area of interest of my thesis, as well as its organization (insofar as it contains both a theoretical and an applications part, and one of the applications, coincidentally, is dedicated to the intertext in Bulgakov's *Master i Margarita*). Andrews undertakes a descriptive and critical analysis of Lotman's theories and contrasts them with other theories, including those of R. Jakobson, C. S Peirce, T. Sebeok, T. von Uexkull and R. Thom. She also applies Lotmanian principles to the construction of textual space, using texts by Zamiatin and Bulgakov as test cases. Finally, argues for the relevance of Lotman's semiotic theories to current developments in cognitive science. The present dissertation differs from Andrews's work by being dedicated, primarily, to the understanding, from a formal perspective, of the information-theoretic concepts used by the Moscow-Tartu school (and in particular by Lotman), rather than to the application of Lotman's semiotic theories. The second chapter of this
thesis (the one centered on the analysis of semiotic ideas) is focused on the problems arising in Lotman's theories from the use of information-theoretic or cybernetic concepts and on the insights that can be gained from a more formal understanding of informational processes than that offered by Lotman or Jakobson; although not intended specifically as such, this chapter can be read as a preliminary to Andrews's analysis. While I concur with Andrews both in her interest in semiotics and in her appreciation of Lotman's contribution to the semiotic approach, I consider that the incompatibilities between Lotman's semiotic metalanguage and the metalanguage of information theory must be addressed before his ideas can be developed in the area of cognitive science and that the terminological dissolution signalled by Lotman's Western translators and critics makes it difficult to establish with a reasonable degree of precision how Lotman's semiotic constructs compare to other, structuralist or non-structuralist theories of text and culture.

Ann Shukman's Literature and Semiotics. A Study of the Writings of Yu. M. Lotman (Amsterdam: North-Holland, 1977) provided a thorough critical analysis of Lotman's work up to and including The Structure of the Artistic Text. The scope of the work is wider than the title would indicate: in addition to the overview of Lotman's works, Literature and semiotics contains a concise analysis of Uspenskii's Poetics of Composition (1970), a history of the Russian semiotics movement and also a survey of the body of knowledge generated by the Moscow-Tartu school up to the mid 70's. Ann Shukman's work, though not informed by cybernetics or communication theory, helped shape the idea of this dissertation by directing my attention to the inconsistencies in the use of information-theoretic terminology in Lotman's works and the underlying foundational problems. It also offered useful insight on the sources and evolution of
Lotman's ideas about structure and meaning in literature, and also, on the complexities of the relationship between Lotman and Jakobson.

Another analytical study, Alan Reid's *Literature as Communication and Cognition in Bakhtin and Lotman* (1990) is less directly related to the concerns of the present dissertation but worth mentioning, as it refers to both theoretical writings and works of applied criticism by Lotman and Bakhtin to reveal, in a contrastive study, the similarities in their approach to cultural communication phenomena.

The point of confluence of cybernetics and sign systems has been explored by several authors before; their ideas have influenced the perspective of this dissertation to different degrees. Part of the interest in the notion of semiotic modelling is due to Sebeok Tamás, a scholar with a broad range of interdisciplinary interests. An insightful critic of the works of the Moscow-Tartu school, he was the first, to my knowledge, to offer an analysis of the concept of "modelling system" advanced by Zalizniak, Ivanov and Toporov, and to propose a reformulation (Sebeok 1991:49) of Lotman's definition (Lotman 1967: 130-131), that he later developed into a full-fledged theory of semiotic modelling (Sebeok, T. and F. Danesi *The Forms of Meaning: Modelling Systems Theory and Semiotic Analysis*, Berlin: Mouton de Gruyter, 2000). Despite the similarity of the title, the present dissertation differs from Sebeok and Danesi's work both in its scope and in its approach. Unlike Sebeok and Danesi, I do not attempt to formulate a general theory of semiotic modelling but only to explore the relevance of information theory for the understanding of structures in language and in the literary texts. Sebeok and Danesi's theory of models is far more influenced by thinkers like Charles Peirce and Jakob von Uexkull than by recent developments in systems theory; for this reason, it is
fundamentally dependent upon notions like "reference" and "signification." Sebeok and Danesi's definition of models as meaning-carrying forms ("form that has been imagined or made externally to stand for an object known as a referent, or for a class of similar (or related) objects, known as referential domain," 2000: 2), as well as their typology of models (distinguishing among signs, texts, codes and metaphors, on several levels of abstraction, coresponding largely to Peirce's "firstness," "secondness" and "thirdness") amount, essentially, to a generalization and amplification of previous theories of the "sign" (linguistic or otherwise). Such theories and the underlying notions, strongly connected to the sphere of thought defined by the history of semiotic ideas, do not have a clear dynamical and statistical interpretation and thus no clear equivalent in cybernetic modelling; they cannot be "exported," or be made relevant, outside the particular context in which they were formulated; for this reason, I could not find a way to relate them to the concerns of the present thesis.

Sebeok's explorations of the connections between semiotics and the life sciences (see for example, A Sign is Just a Sign, 1997) have brought to my attention the works of systems scholars like René Thom (Stabilité structurelle et morphogenese, 1977, Mathematical Models of Morphogenesis, 1983), Humberto Maturana and Francisco Varela (Autopoiesis and Cognition: The Realization of the Living, 1980) and the potential relevance of these works for the study of human communication. Thom, investigating the genesis and evolution of forms ("catastrophe theory") in a mathematical setting, and Maturana and Varela, investigating the ecology of cognition, are keenly aware of the implications of their research for linguistic studies. However, since their main focus is in the area of mathematical biology and ecology, their incursions into the
field of humanities are limited to a few general hypotheses. Subsequent works by Thom (Semiophysics, 1990) diverge from the area of interest of my dissertation.

Another text that drew my attention to the descriptive potential, and in equal measure, to the terminological dangers of formal approaches is Semiogenesis: Essays in the Analysis of the Genesis of Language, Art and Literature, a collective volume edited by Walter Koch (1982) which parallels the preoccupations of the Moscow-Tartu school while remaining largely unaware of its efforts. Among the scholars contributing to this volume, Koch himself recognizes the need to ground semiotic inquiry in a wider framework such as that offered by systems theory (see "Semiogenesis: Some Perspectives for Its Analysis" in Koch 1982: 15-104.) Also in this volume, Thomas Ballmer, a linguist known for his contributions to structural semantics and pragmatics, offers a notable attempt to sketch a unifying framework for perception, cognition and language, titled "The Interaction between Ontogeny and Phylogeny: A Theoretical Reconstruction of the Evolution of Mind and Language" (ibid.: 481-543.)

Among the recent attempts to approach questions of language from the cybernetic side of the interdisciplinary relationship "linguistics-cybernetics", I can mention The Alternative Mathematical Model of Linguistic Semantics and Pragmatics by Vilem Novak (1992); and Chaotic Logic: Language, Thought and Reality from the Perspective of Complex System Science by Ben Goertzel (1994). Between these works, the specific area of interest and the degree of formalization differ significantly, although both have appeared in the same series. The first is important for its probabilistic ("fuzzy-logic" oriented) approach to formal semantics and pragmatics; the second, for a system-theoretic approach to cognition oriented specifically toward the understanding of linguistic
communication. Compared to these works, the present dissertation is concerned with problems of a much simpler nature; however, the interested reader may consult them in order to obtain an idea of recent developments in the field.

The ideas about information and communication that informed the present work are derived from several reference works, all characterized by a formal approach. The most important, besides Claude Shannon's classical article "A Mathematical Theory of Communication" (1949) and Norbert Wiener's Cybernetics or Control and Communication in the Animal and the Machine (1948), are Jiří Klir's An Approach to General Systems Theory (1969) and Facets of Systems Science (2001). Each of these authors contributed in a different manner to the ideas presented in this dissertation. Claude Shannon's work offered an understanding of the basic notions of information theory, and Jiří Klir's system theoretic approach offered an understanding of the wider relevance of the notions introduced by Shannon. Norbert Wiener's works, on the other hand, appeared as one of the sources of the terminological confusion in the works of the Moscow-Tartu school.

1.4. Limitations and Delimitations.

Although this dissertation offers some theoretical premises that could be used for the design of quantitative approaches to text analysis, it is not in itself concerned with the application of quantitative methods, but rather with the "qualitative" principles that underlie the application of quantitative methods. In fact, in regard to text analysis, the precision afforded by a thorough quantitative approach does not, usually, add much to the
knowledge or insight gained from a simple appreciation that can be easily performed during a careful reading, given the discrete and probabilistic nature of the distributional relationships among the linguistic forms that make up a text. However, awareness of distributional properties is important for the understanding of the text as an information-theoretic object; also, quantitative methods are unavoidable in the study of the "linguistic background," where in order to ensure accuracy, distributional relationships must be characterized over large amounts of linguistic data.

This dissertation is not intended as a comprehensive critical analysis of the works of Lotman and the Moscow-Tartu group; it focuses almost exclusively on the insights that can be gained from a reconsideration of the information-theoretic background of Lotman's theoretical works and on the issue of the applicability of information-theoretic concepts to text analysis. As these are just the basic, preliminary steps toward a more thorough investigation, it would be premature to extend the scope of this dissertation from the theory of the text to the theory of culture, or to attempt to reevaluate more complex notions (such as, for example, the semiosphere or the distinction between binary and ternary models of culture, developed by Lotman in his later works). Such notions, and in general any results without a transparent connection to information theory, or any that appeared too complex to be approached safely at the present stage, have been intentionally left outside the discussion.

Although the semiotic approach to the text is the point of departure of this thesis, the dissertation in and of itself lies outside what is traditionally considered to be semiotic theory; no attempts have been made to discuss the notion of sign or propose a theory of signification.

18
The reader should be aware that although I have tried to work within a well-defined circle of assumptions, terminology may not always be as clear as it should, and that caution and critical sense must be exercised, especially taking into account that cybernetics and information theory are not exactly devoid of controversies themselves.

1.5. Intended audience and prerequisites

The intended audience of this dissertation are language and literature scholars, and in particular Russian and Slavic scholars, interested in the semiotic approach. While the theoretical part may appeal to a wider category of researchers, the applications assume some degree of familiarity with 20th century Russian literature. I also assume a familiarity with the problems of interest for general semiotics. The first paragraphs of Chapter 2 are dedicated to the understanding of basic information-theoretic concepts and assume a minimal familiarity with certain mathematical conventions; however, I have tried to make my presentation as simple and straightforward as possible, and to structure the chapter so that the understanding of the main arguments should not be significantly affected by the difficulty of the paragraphs that involve mathematical formulas.
CHAPTER 2

INFORMATION THEORY IN SEMIOTICS, ITS LIMITATIONS AND RELEVANCE

The first goal of this chapter is to provide the minimal context necessary for the understanding of the concepts of entropy and information as formulated in mathematical information theory and to give a short account of their relevance in a linguistic setting. This is a prerequisite for addressing a second issue - that of the terminological difficulties related to the use of information-theoretic concepts in Iu. M. Lotman's semiotic theory of the text. The second part of the chapter is dedicated to formulating a critical perspective on Iu. M. Lotman's approach to entropy and information and evaluating the relevance of information-theoretic concepts for the analysis of texts as well as their limitations.

2.1. Preliminaries: The information-theoretic definition

2.1.1. Absolute entropy

Entropy, a concept originating in physics, is a measure of the distributional variety of the states of physical systems. The higher the variety of states that a system can
exhibit under given conditions, the higher the entropy; entropy can be seen thus a
measure of unpredictability in the physical universe. Entropy can also be interpreted, as
Claude Shannon has shown (see Shannon 1948: 385-390), as a measure of the rate of
production of information; the higher the entropy of a given system, the less predictable
the behavior of that system and the more information it generates, in the statistical sense.
Intuitively, of course, the more "constrained" a system appears to be, the more
predictable its behavior, and the more redundant and less "informative" each new state
that we become aware of in the process of observation. At one extreme of the spectrum,
which could be called "chaotic," all of the possible behaviors are equiprobable at any
given time and thus maximally unpredictable. in the other extreme, that could be called
"maximally constrained" or "frozen," the state is maximally predictable as there is no
change in state and thus no "variety" of states.

To give a simple example, let's suppose a variable can take one of the values 0 or
1; in other words, its state space is the set \{0, 1\}. The entropy, and therefore the rate of
generation of information for such a variable, is maximized (see fig. 2.1) when the two
states obtain with equal probability; a time series generated by such a variable could look
like this:

\[
\ldots10010100001001011100111110010100101100\ldots\ldots
\]

The rate of production of information, when the probability of each of the two
states is 50%, is one bit per symbol (one binary choice). Should one of the two states
appear more often than the other, i.e., should the probabilities be unequal, the rate of
production of information becomes less than one bit per symbol, as it is possible to
predict (with a degree of success given by the degree of imbalance between the
probabilities) which state the variable will take; a time series generated by such a variable may look like this:

...0000000010000000011000000000000000010…………

Finally, the "maximally predictable," minimally entropic situation occurs when the state is absolutely certain, i.e. when one of the two states occurs with probability one and the other with probability zero (see fig. 5.1); the time series will be maximally redundant, and will look (for \( p(0) = 1, p(1) = 0 \)) like this:

...0000000000000000000000000000000000000000………….

Fig. 2.1. Entropy in bits per symbol (vertical axis) in the case of a choice between two possibilities, with probabilities \( p \) and \( 1-p \) (horizontal axis). In the general case, the entropy function peaks for equiprobable choices and attains the minimum when one of the choices occurs with probability one and all others with probability zero.

The answer to the question "how many different time series of a given length are possible" depends directly on the entropy; for zero entropy, the answer is "only one." Maximum entropy corresponds to the maximum number of possible alternative time series, or (in a communication framework) messages.
Mathematically, for $n$ possible choices, each with a probability $p_i$, the entropy of a variable $x$ is defined, following Shannon 1948, as:

$$H(x) = -\sum p_i \log p_i$$  \hspace{1cm} (Eq. 2.1)

The above equation is worth mentioning, in the context of the present work, not for the numerical determinations that it makes possible (since quantitative applications are beyond the scope of this work) but, rather, for the insight that it provides into the information theoretic concept of entropy. What it basically says is that the greater the variety of phases that a phenomenon may go through in its dynamics, and the more unpredictable their succession, the greater the rate at which information is generated and thus the greater the entropy; and that, at an adequate level of abstraction, this applies in an equal measure to the dynamics of, say, electrical or thermal phenomena as it does to the dynamics of text and speech.

2.1.2. Conditional entropy and mutual information

In addition to entropy as a measure of the intrinsic variability or unpredictability of a phenomenon, information theory also defines *conditional entropy* as a measure of relative unpredictability. When we compare two variables, conditional entropy is the measure of the independence, or "freedom" of one from the other, or in other words the extent to which what is known about the state of one does not allow a prediction of the state of the other (See Shannon 1948: 389-90). The opposite of conditional entropy, a
A parameter called by Shannon mutual information, can be seen as the measure of the correlation or "linkage" between the two variables, of the extent to which it is possible to predict the future value of one knowing the present value of the other (or post-dict the past value of one knowing the present value of the other). In an information transmission setting, "mutual information" quantifies the rate of transmission of information between a sender and a receiver i.e. the extent to which the behavior of the receiver is determined by that of the sender. For example, suppose the variable that we will consider as "independent," say x, can take values in the set \{A, B, C, D, E, F, G, H\} and the variable whose "dependence" on x we will investigate, say y, may take one of the values \{1, 2, 3, 4\}. Suppose the two variables have non-zero absolute entropies. The entropy of y given x, which is denoted with \(H_x(y)\), measures the average unpredictability of the variable y when the value of the variable x is known (the "freedom" of y with respect x). Mathematically (after Shannon), it can be written as:

\[
H_x(y) = -\sum_{i,j} p(i,j) \log p(i,j) \tag{Eq. 2.2}
\]

where \(p(i,j)\) is the joint probability of x taking value i and y taking value j, and \(p_i(j)\) is the conditional probability of y taking value j when x takes the value i.

As above, the notion can be made more accessible by looking at its "extremes" and its "means." Let the conditional probabilities for each case (zero, non-zero, and maximum relative entropy) be those given in Table 2.1.
Table 2.1. Conditional probability tables for two discrete variables in three distinct correlation modes, corresponding to zero, non-zero and maximum conditional entropy.

The variable x taking values in the set \{A, B, C, D, E, F, G, H\} is considered as independent, and the variable y taking values in the set \{1, 2, 3, 4\} is considered as dependent.

In the first case, the variable y is totally dependent on x. Each value that x takes uniquely determines the value that y will take; to each value i of x there corresponds one and only one value j of y. For example, if x takes the value A or B, y can only take the value 1; if x takes the value C or D, y will necessarily take the value 2; etc. (see also fig. 2.2 a). This situation corresponds to zero conditional entropy; everything about the state of y can be known by looking at the state of x; y is totally constrained by x so that mathematically, it is possible to define a function from the state set of x to the state set of y. In terms of time series, for example, knowing that the variable x generates, at some point, the string "HGFEDCBA" makes it possible to predict with 100% certainty that y will generate "44332211." If x generates the maximum 3 bits per symbol, there will be 0 bits per symbol relative entropy and 2 bits per symbol of mutual information between x and y.
Fig. 2.2. A graphical representation of the structural coupling of two variables for the three cases in table 2.1 (top) and the corresponding conditional entropy (bottom). Conditional entropy is represented as "the surface of y not covered by x."

Fig. 2.2. b represents a situation where the variable y is "slightly" dependent on the variable x: where all states of y are equiprobable for x=A, B or C but only 2 choices of y are possible for x=D, E, F, G or H; in this case, the state of y can be predicted to a limited extent in certain states of x, or, in other words, there is a non-random distribution of y with respect to x, or a limited amount of constraint from the values of x to the values of y. In terms of time series, given the same string for x as in example above, it is possible to predict that the first term of the string generated by y will be 1 or 4 (but not 2
or 3), the second 2 or 3 (but not 1 or 4), the third and the fourth 3 or 4 (but not 1 or 2) etc.

Finally, Fig. 2.2. c describes a situation of total independence, where it is not possible to predict anything about the variable y on the basis of what is known about the variable x. This is the case where the values that the variable x may take do not appear to have any influence, or exert any constraint, on the value of the variable y; the values of y appear to be distributed randomly with respect to x. Regardless what string of symbols the variable x may generate, it does not make it any more or less likely that y will generate a specific string of symbols rather than another. The relative entropy of y is at its maximum.

Intuitively, one can think of the individual entropies of the two variables as of two surfaces that may overlap to a greater or lesser extent (see fig 2.2); the "conditional entropy" of the event y with respect to x corresponds, then, to the portion of the entropy of y that is not "covered" by the entropy of x; it can be interpreted, in fact, as the amount of uncertainty that is left about y once x has been determined.

The total surface covered corresponds to the "joint entropy" of the two variables; the overlapping surface corresponds to what is usually called the "mutual information" of the two variables (and can be interpreted as the extent to which one can be certain about one of the variables having determined the value of the other). The relationships between these parameters can be summarized in the following basic equations of information theory:
\[ I(x, y) = H(x) + H(y) - H(x, y) \]  
(Eq. 2.3)

Mutual information equals the sum of the individual absolute entropies minus the joint entropy.

\[ H_a(y) = H(x, y) - H(x) = H(y) - I(x, y) \]  
(Eq. 2.4)

The conditional entropy of a variable with respect to another equals the joint entropy minus the absolute entropy of the other variable, or, equivalently, the variable's absolute entropy minus the mutual information.

It is worth noting that since \( H(x, y) \) is smaller or at most equal to \( H(x) + H(y) \), the conditional entropy of \( y \) given \( x \), \( H_a(y) \) is at most equal to the absolute entropy \( H(y) \); intuitively, knowing the state of one variable can only lessen, not increase, the uncertainty about the other. Equivalently, the conditional unpredictability of a variable is at most equal to its unconditional unpredictability. Also, it should be remarked that a perfect correlation can only occur if the dependent variable has at most the same absolute entropy as the independent one; otherwise, there is always a certain amount of relative entropy left. 13

2.1.3. The relationship between entropy and information

In Shannon's "Mathematical Theory of Communication" the term entropy is associated with the rate of generation of information by a stochastic process; it is a

---

13 This presentation of the information theoretic notion of entropy is, of necessity, oversimplified and condensed; the reader interested in more details may find it useful to consult, besides Shannon's classical work "A Mathematical Theory of Communication" (1948), D. McKay's Information Theory, Inference and Learning Algorithms (Cambridge UP, 2003), B. Liu's Uncertainty Theory (Springer, Berlin 2007) and R. Gray's Probability, Random Processes and Ergodic Properties (Springer, NY 1987)
statistical property of the process. To quote Shannon, it is "a quantity which will measure how much information is produced by a process, or better, at what rate information is produced" (Shannon 1948:10). The quantity of information in a message is a function of the length of the message and the entropy of the source; multiplying the length of the message in symbols, with the entropy of the source in bits per symbol, gives the amount of information in bits.

Relative entropy and mutual information are opposites in Shannon's terms (see 2.1.2); an increase in one is a decrease in the other; however, it must be emphasized that this particular choice of terms does not reflect an opposition between information and entropy; "mutual information" could just as well have been called "shared entropy" in this context (see fig. 3.2). In a communication setting, this quantity measures the rate of transmission of information between two systems, a fact which motivates Shannon's choice of terms. Also, a distinction is made between the entropy of a source, which generates the information of interest, and the entropy of the channel, which generates extraneous information (noise) and limits the ability to receive the information produced by the source.

Outside the circle of assumptions of Shannon's theory, the relationship between information and entropy is not as clear; the many different and sometimes conflicting uses of the term information in both science and everyday language make the description of this relationship a difficult task. A thorough and competent discussion of the history of the two concepts from a multidisciplinary perspective was offered by Katherine Hayles in her book `Chaos Bound: Orderly Disorder in Contemporary Literature and Science`
(Ithaca: Cornell University Press, 1990); here, I will limit the discussion of the subject to its most important aspects.

The subtlety of the concepts of entropy and information and the propensity of certain influential authors (Brillouin 1956\textsuperscript{14}, Wiener 1988) to use the terms in ways which subvert, sometimes very subtly, the assumptions and implications of the information-theoretic framework constitute a major source of terminological confusion. The best example comes, surprisingly, from one of the founders of cybernetics, Norbert Wiener. In Wiener's influential popularization book \textit{The Human Use of Human Beings}, the term "entropy" is used as the opposite of "information": "Just as entropy tends to increase spontaneously in a closed system, so information tends to decrease; just as entropy is a measure of disorder, so information is a measure of order" (Wiener 1988: 116)\textsuperscript{15}; "as entropy increases, the universe, and all closed systems in the universe, tend naturally to deteriorate and lose their distinctiveness, to move from the least to the most probable state, from a state of organization and differentiation in which distinctions and forms exist, to a state of chaos and sameness" (ibid.: 25).

It is unclear why Wiener adopted this formulation, which is counter-intuitive in the context of Shannon's information theory. It certainly does not derive from a different understanding of the mathematics of informational processes; it amounts to a choice of perspective and terms. It can be inferred, from K. Hayles' observations, that Wiener's confusing choice of terms, his insistence on opposing entropy and information, could have been a consequence of his mechanistic perspective, which prevented him from

seeing the connection between entropy and complexity and led him to conceive of entropy as a "destructive force" (see Hayles 1999: 97-99). In the context of 19th century thermodynamics, from which it is derived (e.g., Boltzmann's concept of "molecular chaos" in an ideal gas), Wiener's convention states that "information" equals "the predictability of the position/velocity of a molecule of gas" i.e., ultimately, the complement, the inverse measure of Shannon's information. Then indeed, as matter expands in space and its entropy grows, what Wiener calls "information" - the a priori knowledge about the phase of a molecule - is lost. Such a perspective, however, is incompatible with the premises of Shannon's theory, in which information is just the observable output of a stochastic process and is connected with the degree of freedom of the process, with the lack of constraints on its dynamics. Chaos and sameness, claimed to be equal by Wiener, are in light of Shannon's theory at the opposite extremes, and not at the same extreme, of entropy (see 2.1.1).

The dangers of generalizing on the basis of Wiener's argument and disregarding its contradictions with Shannon's theory can be made clearer by a thought experiment, that could go like this. Begin with a sheet of paper and a quantity of ink sufficient to cover exactly half the surface of the sheet. The ink can be distributed on the paper in many different ways. Blackening half of the sheet (say, the upper half) is one of them. A very simple binary structure is thus obtained, and a straightforward correlation between the position (the coordinates) of a point on the sheet and its color. This would correspond, in Wiener's thermodynamic metaphor, to the "maximum organization" or "least probable state." But the same quantity of ink can be used to print the sheet with a text (or maybe a

---

drawing); the distribution of the ink would be more even, a lot less obvious from the coordinates of the points, and the structural distinction "black half vs. white half" would be lost, being replaced by a multitude of more complex distinctions. Suppose now a longer text is printed on the same surface, using the same amount of ink, but smaller characters; the distribution of the ink appears now even more arbitrary compared to the half-white, half-black page, and becomes even more so if we repeat the experiment, reducing the size of the characters, cramming more and more text (or, in general, more information) on the page. Eventually, when either the limits of printing technology or the limits of visual acuity are reached, chaos appears to take over, the distinctions are lost and the page shows a uniform grey color.

This experiment shows, first, the positive correlation of entropy and information. Regardless of how we encode the information on the page, the informational capacity - the amount that can be transmitted - grows with the entropy of the distribution. It also shows that while entropy (freedom) is definitely opposed to structure and order (constraint), the opposition is relative to the power of resolution of a framework of observation. What may appear as chaos, or the lack of order, in a given framework of observation, can in fact appear to be a more complex order, or higher organization, "at a closer look"; when more variables are taken into account, what seemed initially unpredictable may become predictable; the loss of a simple distinction with the increase in entropy may result in the creation of a finer, more elaborate distinction. Chaos and the loss of all distinctions appear at the upper limit of complexity; the apparent "sameness" may as well be just the result of the inability of the observation framework to distinguish between different states, rather than the constancy (non-variability) of the state. These
facts, inherent in Shannon's mathematical approach to information and entropy, are partially lost in Wiener's "cosmic" perspective (which gains, in exchange, a certain mystical-dualistic appeal). However, a good understanding of these facts is necessary for a meaningful application of information-theoretic concepts to the study of structures in language.

2.1.4. Summary

The incursion into information theory in the preceding paragraphs yields a few basic facts of potential relevance for the next step of the exploration. They can be summarized as follows:

a) Entropy is a measure of (unconditional or conditional) variability, diversity, and unpredictability;

b) In information theory, absolute entropy is interpreted as the rate of generation of information by a stochastic process; it is a parameter which describes, basically, how variable is a variable (or a set of variables);

c) Conditional entropy is a measure of the independence of variables (an inverse measure of the structural coupling between them). Mutual information is the direct measure of the structural coupling.

d) Entropy is the opposite of structure within a given framework of observation. However in a relativistic perspective, it correlates not with the destruction or absence of structure, but with the complexity of it. What appears as disorganization in a narrow perspective may appear as a more complex organization in a wider perspective.
e) Outside the circle of assumptions of information theory, there are variations in the way "information" is defined and understood in relation with entropy. Information in a statistical sense (as in Shannon's "Mathematical Theory of Communication") does not correlate well with all the possible uses of the term "information" in everyday language and may be even construed as the opposite of some of these uses. For this reason, a consistent use of the concepts must be based in an understanding of the assumptions and results of information theory.

2.2. Entropy, predictability and structure in language

In general linguistics, structure is customarily defined as a set of interdependent elements between which relations can be defined (see, e.g. Lane 1970:24). In his Introduction to General Linguistics J. Lyons defines language structure as "a system of relations (more precisely, a set of interrelated systems) the elements of which have no validity independently of the relations of equivalence and contrast that hold between them" (Lyons 1969:70). He further states that "statistical considerations are essential to an understanding of the operation and development of language" (ibid.: 98.) Likewise, in his Введение в языкознание А. А. Reformatskii defines structure as "единство разнородных элементов, взаимосвязанных и взаимообусловленных в целом" (1967: 25, 31).

The notion of structure as formulated in linguistics is compatible with a probabilistic interpretation. Any type of structure can be associated with a constraint, a restriction on the statistical distributional variety of the observables of language - i.e.,
ultimately, with a limit on the randomness of linguistic interactions seen as dynamical processes. The characteristics or states described by the variables of linguistic behavior translate into the "elements" talked about in structural linguistics, and the correlations among variables into the interdependencies, contrasts and equivalences of the elements. (As was shown above, "correlation" corresponds to a limit on the relative entropy.) Structure, in a system-theoretic perspective, consists of the patterns, the regularities that can be discerned in phenomena that may be otherwise chaotic and unpredictable; structures exist to the extent that things are predictable, and the quest for structure in language is, in fact, a quest for regularity (see Fig. 2.3). To quote L. Hjelmslev, "a linguistic theory which searches for the specific structures of language through an exclusively formal system of premises must, while continually taking into account the fluctuations and changes of speech, necessarily refuse to grant exclusive significance to those changes; it must seek a constancy" (Hjelmslev 1961: 8).

![Fig. 2.3. Predictability as the complement of entropy (the difference between actual value and the theoretical maximum obtainable under a given framework of observation).](image)

Constancy must, of course, be understood in a relativistic sense, as absolute constancy implies non-variability and thus a non-phenomenon, whose structure is trivial (like, for
example, the identity function on the empty set). It only makes sense to speak about interdependence and correlations among variables when the absolute entropy of the variables is non-zero; and the most complex structures appear as correlations between variables that are otherwise highly entropic (see table 2.2). It is, for this reason, perhaps more accurate to state that entropy is opposed not to structure itself, but to the simplicity of structure. The upper limit of entropy - chaos - is also the upper limit of complexity, where the lack of any regularity precludes the definition of structures and the formulation of predictive models. The absolute lower limit of entropy coincides with the lower limit of complexity, where the phenomenon under the chosen framework of observation does not generate any statistical information. The absolute lower limit of conditional entropy means perfect correlation, but the correlation is only meaningful to the extent that the correlating variables manifest a non-zero absolute entropy - i.e., to the extent that they do, in fact, vary (imagine, for example, the surfaces in Fig. 2.2 a contracted to a point; mathematically, there is a perfect, but trivial correlation.)

<table>
<thead>
<tr>
<th>Entropy</th>
<th>Zero</th>
<th>Low</th>
<th>High</th>
<th>Upper limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure</td>
<td>Trivial</td>
<td>simple system of rules - few exceptions (deterministic behavior)</td>
<td>complex system of rules - many exceptions (probabilistic behavior)</td>
<td>chaotic - no rules - all exceptions (indeterminable)</td>
</tr>
</tbody>
</table>

Table 2.2. An information-theoretic interpretation of structure in terms of entropy.

Statistical distributional constraints can be studied on all levels of language. In their totality, they give an idea of what is regular and predictable about the linguistic
behavior of a given community of speakers (from a synchronic perspective), and allow structures to be abstracted from the available data; these structures in turn can be used as predictive models of linguistic behavior.

To give a few examples, starting from the top down (and without trying to exhaust all possible types of constraints), on the pragmatic level it is possible to observe that different expressions are not produced by speakers with the same probability in all contexts and tend to have predictably different effects upon the audience, in a context-dependent fashion. While the conditional entropy from utterances to pragmatic outcomes is always non-zero, the effects are not distributed entirely at random; certain types of expressions appear to be more likely to result in certain effects (or be more fit for certain purposes) than others; this non-random distribution underlies the structural oppositions that appear on this level.

On the semantic level, it is possible to observe that certain expressions or lexical items appear with predictably high frequency in certain contexts, while others are predictably rare; compare, for example, in Russian, "зеленая трава" and "зеленые идеи." The totality of positive and negative correlations for an element on this level gives shape to its semantic field; contrast and equivalence relations give rise to semantic categories and hierarchies. Correlations on any level reflect upon the other levels, too: the semantic distinction animate/inanimate, for example, functions in Russian not only in the semantic plane but also correlates with a morphological distinction (two different accusative morphemes for masculine sg.: "в лесу я видал дуб / я видал волка"). Also, semantic distinctions among verbs (e.g. transitivity/intransitivity) correlate with different syntactic patterns; their relative distribution is constrained (non-random).
Syntactical and morphological constraints describe regularities in the structure of sentences as well as in the structure of words (word formation, person, gender and case agreement, declension, conjugation). Phonotactic constraints result in a limited number of prevalent syllable structures. On the phonological level, the continuum of speech sounds can be divided into a finite number of functional equivalence classes, the phonemes, characterized by their distinctive traits; these equivalence classes are defined by the fact that the oppositions among them correlate in a non-random fashion with oppositions on a higher level of structure (e.g., semantic). Enlarging the framework of observation to take into account variables such as, for example, differences in geographic location (dialectology), social status, age, gender (sociolinguistics) allows for more complex and refined descriptions. All these types of structures can be related to the conditional probabilities of occurrence of certain values of the variables of linguistic behavior and other variables of interest. By considering structure as the expression of a (probabilistic) constraint among variables it is possible to give linguistic structures a clear dynamical and statistical interpretation, compatible with a general system-theoretic framework.

2.3. A critique of Lotman's interpretation of entropy and information

Iurii Mikhailovich Lotman was among the first to use the concepts of entropy and information in structural poetics and cultural studies (see, for example, Struktura khudozhestvennogo teksta (1971: 36 ff., 65 ff., 98 ff), Kul'tura i vzryv (2000: 102 ff.), Vnutri mysliashchikh mirov (2000:289). Researchers who have analyzed his works have

---

17 See also Lyons' considerations on statistical structure in Lyons 1969: 81-98 and especially his discussion of conditional probabilities of occurrence (p. 91-93); also, his examples of distributional analysis (144-47).
noted the "moveability" of his scientific metalanguage (Vroon 1977: ix)\(^\text{18}\), an "amalgamation of differing approaches and methodologies" (Shukman 1977: 119), a high degree of variability in terminology, resulting in contradictions and logical incompatibilities (ibid.: 122 ff.) and the metaphorical usage of quantifiable scientific notions borrowed from information theory, like entropy (ibid.: 128). However, they haven't attempted a critique based on the principles of information theory. I will, in the following, bring up a few points starting from which such a critique could be formulated. I should first note, however, that there hardly can be any detriment to Lotman's prestige in stating that there is an incongruence between his understanding of entropy and information and the concepts formulated in information theory, especially given the preexisting confusion in the literature available on the topic. This incongruence does nothing to diminish the interest of his works on the theory of literature and culture; rather, it invites other researchers to continue Lotman's pioneering efforts toward multidisciplinarity in the semiotic approach.

The goals of my critique are, then, first, to offer an understanding of the complexities and dangers of Lotmanian terminology (based on what was established in the previous section) and second, to offer a few basic examples of situations in which information theoretic concepts, taken non-metaphorically, can be used as a guide in the search for structure in a text.

\(^{18}\) Actually what we are confronted with is a composite of metalanguages borrowed from structural linguistics, information theory and semiotics as such. While their respective vocabularies often overlap, we do not always find a corresponding coincidence of meaning. Though the polysemy of the terms makes them extremely versatile, it can be a source of confusion for the readers who are unfamiliar with one or more of the metalanguages involved" (Lotman 1977: ix)
Lotman's notion of entropy can be traced to a variety of sources; in particular, he quotes Kolmogorov (with whom he collaborated in the early years of the Tartu semiotic movement, see Lotman 1977: 26ff, Shukman 1977:8ff), W. Ross Ashby (1971: 34 n.22), Norbert Wiener (2000: 289), Leo Szilard (ibid.: 350), Ilya Prigogine (ibid.: 348). Lotman's sources cover a relatively wide array of subjects, from probability theory and general cybernetics to the thermodynamics of open systems. Of these authors, it would appear that Wiener (and specifically his book *The Human Use of Human Beings*) contributed the most to Lotman's conception about information in culture and was the main source of the frustrating contradictions noticed by Lotman's Western translators. In a 1969 article, Lotman writes: "Картина мира, набросанная отцом кибернетики Н. Винером, — это колоссальная битва организации и дезорганизации, информации и разрушения («энтропии»)" (Lotman 2000:9). This conception is also reflected in his later works. Following Wiener, Lotman opposes information and entropy, and associates entropy not with statistical variability (as in information theory) but rather with the idea of noise and with the equilibrium state in which distinctions appear to dissolve (as in thermodynamics). In *Struktura khudozhestvennogo teksta*, he states: "Теория информации шире семиотики — она изучает не только такой частный случай, как пользование социальными знаками в определенном коллективе, а все случаи передачи и хранения информации, понимая последнюю как величину организации — противоположность энтропии." (Lotman 1971:77). In fact, the term "information" is occasionally used by Lotman as another name for "text," and since one of the main features of text is "strukturnost’" (see Lotman 1977:53), the dissolution of structural distinctions (the increase in entropy) equals, for Lotman, a loss of information.

40
However, this is not the only perspective that can be found in Lotman's theoretical texts. When Lotman follows Kolmogorov - whose formulations are compatible with Shannon's - the opposite point of view appears. In Struktura, for example, developing on Kolmogorov's work on rhythm and metrics, Lotman associates entropy with "гибкость," "разнообразие," "смысловая емкость," "источник поэтической информации" (Лотман 1971: 38). Later, talking about the role of improvisation in art, he admits that "Импровизация создает … необходимую энтропию. Если бы мы имели дело только с жесткой системой правил, … избыточность подавила бы энтропию и произведение искусства потеряло бы информационную ценность" (idem:351). The quote from Wiener (ibid.: 77, see above), in which "entropy" is treated as the "destruction" of information, comes in between these statements.

It is unclear to what extent Lotman was aware of the contradictions between his sources on information theory. It would seem that he tried his best to reconcile them, without critically challenging any of them, and that this came at the cost of confusion, contradictions and paradoxes.\(^\text{19}\) It is clear, however, that the distinction as adopted from Wiener could not correspond, if taken literally, with Lotman's profound intuitions about the informational circuits of culture. In order to make Wiener's formulation work for him and have entropy in the role of "destructive force," Lotman had to define entropy as its exact opposite, i.e. as order, strict organization, predictability, automatism; this is just what he did on numerous occasions, especially in his later works. For example, in

\(^{19}\) Mihhail Lotman states (Lotman M., 2002:5 ff) that Iurii Lotman's style, "пренебрегающий детальностью и заменяющий обстоятельность теоретической аргументации выразительными примерами" reflects both his preference for applied analysis and his concern that fruitless terminological debates could reflect negatively on the development of semiotics, a field of knowledge that was still in its beginnings: семиотика же является еще настолько молодой наукой, что шлифовкой деталей заниматься преждевременно."

41
Kul'tura i vzryv, describing the exchange of information between nature and culture, Lotman stated that "Это «вечное движение» не поддается законам энтропии, поскольку постоянно воссоздает свое разнообразие" (2000:102). In "О семиотическом механизме культуры" (Iu. Lotman and B. Uspenskii, 1971) the interaction between mainstream and alternative cultures results in "повышение величины структурного разнообразия, преодоление энтропии структурного автоматизма" (2000:501). In the 1987 article "Архитектура в контексте культуры" Lotman states that "по мере повышения степени упорядоченности повышается и мера предсказуемости, происходит структурное выравнивание, то есть рост энтропии." (2000, 677). None of Lotman's contemporary sources on information theory (Wiener included) would have agreed with such a use of the term; however, there is a famous precedent in Russian literature, namely in Zamiatin's 1923 article "О литературе, революции, энтропии и о прочем":


Zamiatin's metaphor - which is strictly poetic, at least in an information-theoretic perspective - is strikingly similar to some of Lotman's statements and may have played a role in his choice of terms.

---

20 Ewa Thompson has also noticed in Lotman's Struktura, "the possible contradiction between the concepts of redundancy, entropy and order" - see Thompson 1977:235
21 Zamiatin, Е. Я боюсь: Литературная критика; Публицистика; Воспоминания. Moscow: Nasledie, 1999
The terminological confusion caused by Wiener (and possibly by Zamiatin, too) occasionally leads Lotman into paradox. Talking about the relationship between text and norm (linguistic or cultural) in the same 1987 article (Lotman 2000:678) Lotman begins by admitting that "Реальный текст по отношению к коду, норме, традиции и даже к авторскому замыслу всегда выступает как нечто более случайное, подчиненное непредсказуемым отклонениям." He then proposes to address the problem of "the role of random processes in the anti-entropic growth of information" ("роли случайных процессов в антиэнтропийном приращении информации") - a paradoxical formulation, regardless of how one may choose to define entropy and information. Aware of the contradiction, but faithful to his vitalist approach to writing, Lotman dismisses it with a well-chosen quote from Pushkin:

"Последнее выражение может показаться парадоксом, если не прямой ошибкой, поскольку элементарной истиной считается, что случайные процессы ведут к выравниванию структурных противоположностей и росту энтропии. Однако сами творцы художественных текстов знают о смыслообразующей роли случайных событий. Недаром Пушкин поставил случай в ряду и других путей гения, назвав его «Богом-изобретателем»." (Lotman 2000:678)

Lotman's understanding of communication processes is based to a great extent on Roman Jakobson's model of linguistic communication (Jakobson 1960: 350-377); his interpretation of the Jakobson model constitutes another source of ambiguities. Lotman admits that a description of the functionality of a linguistic communication process must involve the "addressee" in a more tangible way than Jakobson's model allows. He proceeds, in the introductory chapter to Culture and Explosion, to remedy this inadequacy of Jakobson's model by distinguishing between the code of the addressee and that of the
addressee, and by introducing a distinction between "language" and "code," whereby language is defined by "the unity of the code and its history" (i.e., its evolution on the time scale). The dynamics of the various codes in the process of social communication is then discussed in terms of "tension" and "explosion," and the multiplicity and "conflict" of codes is postulated as a necessary condition for meaningful communication (see Lotman 2000: 14 ff.). He summarizes his point in a paragraph where "decoding" is clearly synonymous with "understanding," but the similarity of codes between addresser and addressee and the resulting "ideal understanding" unexpectedly implies the dissolution of the communication process:

"Если мы представим себе передающего и принимающего с одинаковыми кодами и полностью лишенными памяти, то понимание между ними будет идеальным, но ценность передаваемой информации минимальной, а сама информация — строго ограниченной. Такая система не сможет выполнять всех разнообразных функций, которые исторически возлагаются на язык. Можно сказать, что идеально одинаковые передающий и принимающий хорошо будут понимать друг друга, но им не о чем будет говорить." (Lotman 2000: 15).

Lotman's view of the communication process in Culture and Explosion becomes thus diametrically opposed with that expressed by Jakobson in his article "Shifters, Verbal Categories, and the Russian Verb"22; comparing the two texts gives an idea of the amount of divergence between the two researchers' understanding of basic concepts:

"A message sent by its addresser must be adequately perceived by its receiver. Any message is encoded by its sender and is to be decoded by its addressee. The more closely

the addressee approximates the code used by the addresser, the higher is the amount of
information obtained." (Jakobson 1990: 386)

Generally speaking, the term "information" is (along with "structure") central to
most of Lotman's arguments about the nature of the artistic text, and the problems related
to its use are no less complex than those encountered with "entropy." One of the most
important theses of Struktura - and one of the most questionable - refers to the
informational capacity of the artistic text. Lotman claims that the artistic text can
concentrate and transmit more information than any other sort of text. This extraordinary
capacity would be due to the complexity of the structure of artistic language:
"усложненная художественная структура, создаваемая из материала языка,
pозволяет передавать такой объем информации, который совершенно недоступен
dля передачи средствами элементарно, собственно языковой структуры." (1971: 17)

In Lotman's view the sign system that is literature is unique in this respect: "Литература
имеет свою, только ей присущую систему знаков и правил их соединения, которые
служат для передачи особых, другими средствами не передаваемых, сообщений"
(ibid.: 30-31). Even though he admits that "художественный текст выдает разным
читателям различную информацию, каждому в меру его понимания" (ibid.: 33) this
is not viewed as a consequence of the relativity of information and structure to the
framework of observation, but rather, ultimately, as another confirmation of the intrinsic
structural richness and the exceptional nature of artistic language, as opposed to "just
language" or any kind of specialized language. Since in Lotman's perspective the artistic
text is at the same time a code, the issue of the reader's competence becomes inessential:
"он же (текст) дает читателю язык, на котором можно усвоить следующую порцию
He appears, though, to contradict this statement when he addresses the issue of reader perception (see 1971: 34-42) and admits the possibility of a difference between the author and the reader's "codes"). In this respect, the artistic text is similar, for Lotman, to a living organism, capable of entering into a feed-back relationship with the reader and to instruct the reader; a short story by Chekhov, it is suggested, may relay as much as a whole psychology textbook (ibid.: 33). Lotman goes as far as to suggest that a complete characterization of the unusual informational qualities of verbal art may produce a breakthrough in information science:

"раскрытие природы искусства как коммуникационной системы может произвести переворот в методах хранения и передачи информации" (ibid.: 34).

Lotman supports his thesis by drawing attention to the multiplanarity of the artistic text, its lack of redundance, the multiplicity of its "codes" (многократное закодирование, see ibid.: 78), and the constructive conflict between "systemic" and "extra-systemic" elements on various levels of the text. All these factors, he argues, contribute to the generation of new distinctions (through a process he calls "перекодировка") and thus new meanings:23 "Взаимное напряжение различных подструктур текста... увеличивает количество структурных альтернатив, гасит автоматизм... заставляя различные закономерности реализовываться посредством их многочисленных нарушений" (ibid.: 235). The examples that he brings center, mostly, around what could be described as the semantic effects of rhythm, rhyme, alliteration and repetition in poetry. The information-theoretic relevance of the argument

23 A. Shukman has remarked that "Lotman generalizes the principle of phonological opposition (as formulated by Trubetskoï in Osnovy fonologii) to cover all language elements in a poetic text; but where for Trubetskoï the opposition differentiates meaning, for Lotman it creates meaning" (Shukman 1977:63)
is given as certain by Lotman: "Не нужно быть глубоко осведомленным в законах передачи информации, чтобы понять, в какой мере это увеличивает информационные возможности художественного текста по отношению к нехудожественному." (ibid.: 235).

It would be hard to pinpoint what Lotman understood by information in this context and even harder to ascertain to what extent his concept was inspired by information theory since, as R. Vroon has already remarked, "Lotman provides several definitions, some related to information theory, others based on the meaning of the word in common parlance" (Vroon 1977: x). In his 1975 answer (Lotman 1975) to J. Meijer's critical review of Struktura (Meijer 1973), Lotman invokes Kolmogorov's conception of information as a measure of organization, but this conception, according to Mihhail Lotman, is not being developed to the same extent in Iurii Lotman's works on structural poetics (Lotman M. Iu. 1998:684-685). Most probably, as A. Shukman suggests, he made no distinction between "information," "idea," "meaning" or "content" but implied a scientific, information-theoretic sense nevertheless (Shukman 1977: 53).

Lotman's assertions, however, cannot be supported from an information-theoretic perspective. Information theory has nothing to say (at least in the current stage of its development) about the relationship between the artistic qualities of a message and its informational capacity. But even outside information theory, it would be difficult to put an equal sign between art and informational capacity, however that is defined. At most, it can be said that the language of artistic literature tends, in certain cases, to be more complex - or to be perceived as more complex - than the language used in other spheres of human activity, but it would be hard to argue that this trait can be used to single out
literature from non-literature. Lotman's examples support the traditional view that "the resources of language are exploited more deliberately and systematically" in literature as opposed to other manifestations of language (Wellek and Warren 1956: 24). However, not all texts, currents and periods contribute to this tendency in an equal manner. Where they don't, (as well as where they do) it is usually possible to amplify the complexity of interpretation (as Lotman does in his examples) by multiplying the angles and the distinctions under which a text or an art object is observed. Thus more information and more "meaning" can always be extracted. The inclination of a reader to use a text as art may be motivated by many cultural, historical and social factors, and cannot be attached exclusively to the perceived complexity of artistic language (folktales, for example, are highly formulaic and simple in structure in comparison with many other literary genres). For this reason, the distinction between "крышовственная структура" and "собственно языковая структура" cannot be made as clear as Lotman would suggest. "Смысловая перенасыщенность" (Lotman 1971:33) may be understood as complexity, but this complexity is relational and depends as much on the text as on the framework of its perception/interpretation and on its function in society. "Смысловая перенасыщенность" is, in this sense, as much an attribute of Pushkin's "Евгений Онегин" as it is of Malevich's 1915 "Black square." While there may be ways to

---

24 A good example of text analysis where the complexity of the observation framework is taken to the extreme is the analysis of Charles Baudelaire's poem "Les chats" by Roman Jakobson and Claude Levi-Strauss (in Lane 1970:202-221).

25 "Black square" (Черный квадрат), a famous Futurist painting by Kazimir Malevich (1878-1935) exposed for the first time in Sankt Petersburg in December 1915, consists, as the title indicates, of a black square on a white background. For details, see: Katsis L. Russkaia eskhatologiiia i russkaia literatura. Moscow: OGI, 2000, p. 132-139.
demonstrate that one is more complex than the other, there is nothing in information theory to suggest that one is more artistic than the other.

The analysis of Lotman's attempts to base the description of literary texts in information theory suggests that the use of information theoretic concepts outside their area of definition may obscure far more than it clarifies, and that the quantifiable notions of information and entropy are not (at least by themselves) useful for the understanding of relational properties like artistic value and literariness. In view of the basic outline of information-theoretic concepts given in 2.1, Lotman's approach to the structure of the literary text appears characterized both by an excessive confidence in the abilities of the cybernetic framework and an insufficient understanding of its premises and especially, its limitations. However, this finding does not imply that the methods of cybernetics and the concerns of structural poetics are incompatible in principle; information theory may not have as much to say about literature as Lotman believed, but what it has to say is not to be neglected; it may not offer a global perspective on the artistic text, but it can still offer (as was already suggested in 2.2 above) an approach to its structure. The following section outlines the basic assumptions under which an information-theoretic perspective could be used to guide traditional methods of text analysis.

2.4. The text as an information-theoretic object

The parameters of information theory are quantifiable; they can be expressed as numbers. Not all of them are of equal interest to the linguist or literary theorist. In general, there is not much interest, as Lotman's experience suggests, in talking about the
quantity of information in a given verbal message, nor, for example, in talking about the quantity of noise in a verbal communication channel. The numbers of interest, where linguistic analysis is concerned, are those that account for how messages are generated, for their combinatorial structure; these numbers are probabilities - most often, conditional probabilities. As was shown in 2.2, linguistic structures can be defined on the basis of statistical correlations among the variables of linguistic behavior. The correlations among these variables allow the formulation of generative - or, more generally, predictive - models of linguistic behavior. In many cases of interest, these constraints, and the corresponding structures, rules and exceptions, appear with sufficient clarity from the available data so that a detailed numerical analysis is not necessary for their formulation; in many other cases (especially on "higher" levels of description such as semantics, pragmatics or sociolinguistics) statistical analysis is often required in order to be able to point to a trend, or a tendency (rather than a strict regularity) in the linguistic behavior of a community. In any case, an understanding of the principle of correlation is always useful, even if a numerical application is not always needed.

Basically, a perspective of the text as an informational object implies:

a) Defining the variables (parameters) of interest and the range of values that they can distinguish. For example, in a study of metrics, one of the variables of interest is stress, which distinguishes between stressed and unstressed syllables in the text. In a study of characters in a 19th century narrative, one may want to define as one of the variables of interest the "social status of the character" and distinguish, for example, among landowners, merchants, serfs and "raznochintsy."
b) Establishing what values the chosen variables actually take, across a given text or an ensemble of texts. This is, essentially, a process of interpretation or "decoding," as from the initial series of symbols that is the text, a new series of symbols is obtained for each variable that is investigated.

c) Establishing whether correlations can be found among variables (inside a text or across texts), or whether variables self-correlate. Is the colour blue associated with sadness or with peace? do nihilists tend to die young? Do feminine rhymes always alternate with masculine? The correlations found can be formulated as structural rules, or equivalently, as generative models; in their totality they account for the dynamics of the text.

One of the interesting things about a text, from an information-theoretic perspective, is how it compares, as a particular system of correlations, to language as a general system of correlations and - equally importantly - to other texts. Since the statistical correlations that underlie the structure of language are to be derived, ultimately, from actual instances of linguistic behavior - such as texts - the perspective can be reversed; just as it is possible to find out things about language on the basis of texts, it is also possible to find out things about the structure of texts on the basis of language.

In its simplest formulation, the task of such an analysis is to determine to what extent the shape of the particular text (an instance of parole in the Saussurean sense) can be accounted for by the general conventions of the langue, and to what extent (and also in which way) it goes beyond those conventions. In general, for any text, it is possible to describe differences between the way structural elements correlate in the text and the way they correlate in the linguistic background; in literary analysis, these differences can be used (to different degrees, since not all of them are as pronounced, or "meaningful") to
define the “individuality” of the text and also, to classify it together with other texts that show comparable differences. These differences offer a pathway to approach what the Formalists called the "devices" of the text.

It has to be mentioned at this point that Iurii Lotman, in Struktura, proposes a seemingly similar notion, in the section dedicated to "The Energy of Verse" (Энергия стиха, 1971: 234-242); he writes: "Текст функционирует в отношении к определенной системе запретов, ему предшествующих и вне его лежащих." He notes the existence of a tension, or conflict between the text and an external system of norms and states that the magnitude of this tension, or otherwise the "energy of verse" can be seen as a measure of the text's innovative character, originality and "courage": "Сила, активность новаторского текста определяется значимостью и силой препятствий, стоящих на его пути" (ibid.: 242). Although at times Lotman's notion of "zapret" appears to be compatible with a notion of statistical constraint among the variables of language, underlying an invariant structure, as described herein, his examples demonstrate that by "zapret" he means, in general, "prescriptive norm," or even "interdiction" in the strict sense (e.g. the type that could have been enforced by censorship). Although the relationship between a text and the prescriptive linguistic and sociolinguistic norms existing at the time of its publication is undoubtedly essential to the understanding of how the text functions in the social communication process, it is not clear to what extent the notion of social constraint can be assimilated to the information-theoretic notion of statistical constraint, or limit of variability; the former, as Lotman noted, lies outside the text, in the history of the creation/reception of the text and the history of the environment where the text was created, while the latter is to be derived
from the text (or ensemble of texts) being researched, under some formal framework of observation.

A very simple example of a correlation specific to a text is verse structure. Rhythm and rhyme can be seen as constraints on the prosodic variability of a text, which are generally not to be found in the "background"; they come in addition to the constraints specified by the prosodic, phonological and morphological structures of the language. The verse form made famous by A. S. Pushkin as the "Onegin stanza," for example, is characterized, among other things, by the fact that the first line rhymes with the third; since the meter is iambic tetrameter, the choice of its 8th and 9th syllable in the stanza induces a restriction on the choice of the 25th and 26th syllables: "И вот уже трещат морозы / И серебрятся средь полей.../ (Читатель ждет уж рифмы розы; / На, вот возьми ее скорей!)

(A.S. Pushkin, Evgenii Onegin IV: xlii). The prosodic restriction in these particular lines also influences the lexical level, limiting the choice of words to those that conform to the specified structure; "розы" can be predicted with high certainty, a fact noted with humor by the author himself. Rhyme and rhythm introduce an element of predictability that is absent from other types of texts; texts containing this additional element of structure can be said to contain a generative model of themselves on the prosodic level. Not all rhythm patterns are equally easy to describe; some have a higher degree of variability and numerical analysis is better suited to their description. Occasionally, it is possible to observe a "conflict" between the prosodic constraints specified by language and those specified by the verse form, as in F. Tiutchev's poem "Silentium":

"Молчи, скрывайся и таи
И чувства и мечты свои -  
Пускай в душевной глубине  
Встают и заходят они…"  

In the fourth line, the verb "заходят," stressed on the stem, forces a change from the  
iambic rhythm established by the three preceding lines, to amphibrach; preserving an  
iambic rhythm throughout can only be done at the cost of a "non-standard" stress pattern  
in the verb (заходять vs. заходят).

An increased combinatorial freedom on the semantic level is a feature often found  
in artistic literature, which is manifested in unusual semantic correlations. The prose of  
N. V. Gogol' offers extreme examples. “Записки сумасшедшего” is written in the form  
of a journal, and, predictably in this context, entries are accompanied by a mention of the  
date. However, as the story progresses and the main character, Poprishchin, slips into  
madness, the predictable combinations of day and month are replaced by combinations of  
ever decreasing likelihood, like "Год 2000 апреля 43 числа," "Мартобря 86 числа,"  
"Никакого числа. День без числа," “Числа не помню. Месяца тоже не было. Было  
черт знает что такое” and finally, "Чи 34 сло Мц ґдао. Февраль 349." In this case the  
text formulates its own new rule: the expressions still refer to the date, without indicating  
a valid one, but become more and more "disorganized" with respect to the standard  
extpectation. The amount of "disorganization" of the date formula becomes in this way an  
indicator of Poprishchin's own tragic "decay."

Choosing a more "specialized" framework of comparison yields a different  
assortment of facts about the text. For example, similarities and differences in  
distributional properties can be studied against the background of another text, or group  
of texts, belonging to different authors or to the same author. The results of such
investigations may be relevant to the relationship of the text to a genre or a current and to its intertextual connections, to the definition of its place in the evolution of the literary phenomenon or in the author's own evolution. (Examples are provided in the following three chapters.) Finally, as the example of "Записки сумасшедшего" shows, a similar analysis is also possible within the confines of the text itself, if a gradation or a contrast in the distributional properties of some variable can be found between different parts of the text, or if a text establishes a consistent correlation, semantic or otherwise, that is not reducible to the linguistic background. In Lotman's approach (1977:46 ff.), "meaning" is created when the "equivalences" resulting from a transcoding process between two structures establish correspondences between "expression" and "content." In an information-theoretic approach, terminological incompatibilities preclude a faithful reformulation of Lotman's theory of "artistic meaning"; however, an approach to text semantics is still possible by taking into account the fact that semantic fields can be formally characterized by the conditional statistical distributions of (syntactically correlated) lexical forms, and that the particular distributions that appear in texts can be contrasted with the statistical "norm" represented by the distribution prevalent in the linguistic background. This allows to obtain an idea of how texts may diverge from the linguistic background on the semantic level and thereby create "new semantics."

Undoubtedly, there are many things about texts that cannot be approached in this manner. The things that the comparison of statistical, distributional properties can tell about a text are rather few, and rather simple. They may point to the way the language of the text is unusual in certain contexts, or similar/dissimilar to that of other texts, or the way the text creates "new," original or ad-hoc correlations; they can give the starting
point of an analysis, but they cannot constitute a complete analysis of a text. Like any formal parameter in literature studies, distributional properties have to be adequately contextualized in order to obtain a meaningful analysis.
CHAPTER 3

"FLYING OBJECTS" IN GEORGII IVANOV'S "РАСПАД АТОМА" AND IN THE WORKS OF HIS CONTEMPORARIES: A COMPARATIVE ANALYSIS

The idea of this example was suggested by the unusual diversity of things that "fly" in Georgii Ivanov's "Распад атома" (1937). Considering the contexts in which the verbs лететь/летать "to fly" and their derivatives tend to appear, both in literature and outside of it, "Распад атома" provides an extreme example of variability. Starting from the patterns of use of the verb in Ivanov's poetry and comparing them to the patterns appearing in the poetry of his contemporaries, the following sections explore the evolution, the sources and the meaning of this unusual element of poetic language.

3.1. The verb "to fly" in the Russian linguistic background

In the linguistic background of any culture, the collocations of a verb like “to fly” are, statistically, quite restricted; there are certain contexts in which it appears with high probability, and many more other contexts in which it is statistically rare. The distributional characteristics that describe the background usage of the verb tell something about the society, culture, and natural environment associated with a given language, at a given stage of its evolution. For example, in various parts of the world one
may expect to encounter, in the context of "flying," various species of insects or birds as well as various characters of folk mythology (like, for example, the witch on her broom). In the texts produced by modern and technologically advanced societies, it is likely to encounter a higher statistical density of man-made flying devices, people flying in these devices, and even (e.g. in science fiction texts) flying objects made by alien civilizations. "Figurative" usage, emphasizing certain semantic features (e.g. "quick movement") at the expense of others (e.g. "through air") is also statistically non-random, following patterns that can be in principle described up to a certain level of accuracy.

While an accurate determination of the background usage patterns of any lexical item presupposes performing a statistical analysis on a corpus, dictionaries can also be used to obtain an idea of the contexts in which one can predictably encounter the lexical item. (In fact, modern dictionaries do use statistical analysis to guide lexicological description). The root "let-" (fly) in Russian gives two basic verbs of motion, "летать" and "лететь". A detailed 19th century dictionary, V. I. Dahl's Tolkovyi slovar' zhivogo velikorusskogo iazyka (1880-82) gives the following definition for the verb "летать" :

"ЛЕТАТЬ, летывать, мчаться или плавать по воздуху, носиться в воздушном пространстве своею, либо стороннею силою. Летают мухи, птицы, воздушные шары, пули, ракеты, пыль; летают мысли, думы; люди летают мыслями. | Он летает по балам. | Падать. Часы мои не раз летали на пол. Летать, плыть по воздуху, нести по известному направлению. [...] | Быстро мчаться по воде, по земле. [...] Ухорская тройка летит. Время летит, годы летят. [...]"

A more recent dictionary, Tolkovyi slovar' russkogo iazyka, by S. I Ozhegov and N. Iu. Shvedova (1999) gives the following definition for "лететь":

"Лететь, лечу, летишь; несов. 1. Нестись, передвигаться по воздуху. Птица летит. Самолет летит. Пыль летит. Летят ..."
восклицания, возгласы (перен.). 2. То же, что мчаться. Л. стрелой. Тройка летит. Л. в автомобиле. 3. То же, что падать (в 1 знач.) (разг.). Л. со стула. Книги летят с полки. 4. (1 и 2 л. не употр.), перен. О времени: быстро проходить. Часы, минуты летят. Лего летит. 5. (1 и 2 л. не употр.), перен. Быстро изменяться в цене, в уровне (разг.). Цены летят вверх. Акции летят вниз. 6. (1 и 2 л. не употр.). Ломаться, нарушаться (разг.). Авария: летит крестовина. Из-за командировки летят все мои планы. || сов. полететь, -лечу, -летишь (к 3 и 6 знач.)."

The same dictionary gives the following definition for "летать":

Летать, -аю, -аешь; несов. То же, что лететь (в 1, 2 и 3 знач., но обозначает действие, совершающееся не в одно время, не за один прием или не в одном направлении). || сущ. летание, -я, ср. || прил. летательный, -ая, -ое. 26

26 For purposes of comparison, Ushakov D. N. (Толковый словарь русского языка в 4 т. Moscow: OGIZ, 1935-1940) gives the following definitions:

ЛЕТЕТЬ, лечу, летишь, несов. (ср. летать).
1. Нестись по воздуху. Журавли летят. Летят аэропланы. Звуки летят в доль. Вода с мылом летела во все стороны. Глаз. Лес рубят — щепки летят. Пословица. Летели снежные хлопья. Птицы. 2. перен. Быстро нестись, ехать, скакать, бежать, мчаться. Так думал молодой повеса, летя в пыли на почтовых. Птицы. Книжка летела по гладкому зимнему пути. Птицы. Л. сломя голову. Тройка летит. Л. стрелой. 3. О времени — быстро проходить. Начинали рассуждать, забывая всё и не замечая, как летит время. Л. Тлест. Летят за днями дни. Птицы. 4. перен. Уноситься, стремиться куда-н. (душой, мыслями; книжн., поэт.). Все думы сердца к ней летят. Птицы. 5. О деньгах, ценностях — быстро, стремительно понижаться в цене (разг.). Акции летят неудержимо.

ЛЕТАТЬ, аю, аешь, несов.
Те же знач., что у глаг. лететь в 1 и 2 знач., но с той разницей, что лететь означает движение в один прием и в одном направлении, а летать — движение, повторяющееся и совершаемое в разное время, в разных направлениях. Птицы летают. Над городом летели аэропланы. Пальцы его летали по клaviшам.

Efremova T. F (Новый толково-словообразовательный словарь русского языка. Moscow: Drofa-Russkii lazyk, 2000) gives the following definitions (note the lack of examples):

Лететь несов. непереч. 1) а) Передвигаться, перемещаться по воздуху с помощью крыльев. б) Перемещаться по воздуху или в безвоздушном пространстве (о летательных аппаратах). в) Нестись по воздуху силой ветра (о различных предметах). г) Распространяться по воздуху (о звуках). д) перен. разг. Быстро проноситься мимо. 2) перен. Устремляться, уноситься мысленно куда-л., к кому-л. 3) перен. разг. Очень быстро, стремительно бежать, идти, ехать и т.п.; нестись, мчаться. 4) перен. Быстро, незаметно проходить (о времени). 5) перен. разг. Падать. 6) перен. разг. Быстро исчезать, тратиться, расходоваться (о деньгах). 7) перен. разг. Ломаться, разрушаться, портиться. 8) перен. разг. Нарушаться, не выполнять (о графике, порядке и т.п.).

Летать несов. непереч. 1) а) Перемещаться по воздуху с помощью крыльев (неоднократно, в разное время и в разных направлениях). б) Передвигаться по воздуху или в безвоздушном пространстве на летательном аппарате. в) Нестись по воздуху с помощью силы ветра (о различных предметах). г) Распространяться по воздуху (о звуках). д) перен. разг. Быстро проноситься мимо. 2) перен. Устремляться, уноситься мысленно куда-л., к кому-л. 3) Уметь держаться в воздухе или перемещаться по воздуху. 4) а) перен. разг. Очень быстро бегать, ходить, ездить; носиться. б)
These dictionary entries capture, in the amount of space available, the contexts that the authors have judged the most typical and the most relevant. Given the constraints of space, the absence of a certain correlation from the dictionary does not necessarily mean the impossibility of such a correlation in language, but rather the relative rarity or improbability of it - at least in the view of the dictionary's authors. In any case, the examples of usage provided by dictionaries give a general idea of the semantic constraints that govern the usage of the given lexical item and thus an idea of the contexts in which it is most likely to occur. This provides the starting point in the attempt to describe how the combinatorial properties of the verb are developed in the literary text.

3.2. The verb "to fly" and its context in Ivanov's "Распад атома"

The "flying objects" in a literary work usually tell something - even if not always a lot - about the literary work. The high selectivity of the verb "to fly" with respect to context makes the context, in many cases, a rather reliable indicator of style, genre, school. Intuitively, a universe of discourse where we encounter mostly singing birds that fly is radically different from one populated with airplanes. One suggests the pastoral, the other, contemporary adventure novels. Flies and mosquitoes point to realism – see Olenin's adventures in Tolstoi’s "Казаки". Demons, ghosts and spirits recall Romanticism, bombers, bullets and other ammunition – of war memoirs, spaceships – of science fiction. The list can go on.

Передвигаться легко и быстро, едва касаясь земли, пола. 5) перен. разг. Часто менять место работы, учебы. 6) перен. разг. Падать.
A universe of discourse such as that represented by Georgii Ivanov’s Распад атома (Ivanov 1994 v.2: 6-34) defies any attempt at a similar approach. A relatively short prose work, published by the émigré author in Paris in 1938, “Распад атома” is an existentialist essay that has been compared to J. P Sartre's "La nausée" and characterized by Roman Gul' as "рискованный манифест на тему умирания современного искусства". Written as a monologue (the inner voice of "a lost man in a foreign city") and containing multiple references to both classical and contemporary Russian authors, the work is essentially an exploration of the theme of "decay." Built around the opposition between the ephemerity and futility of "universal grace" and the eternal and omnipotent character of "universal monstrosity" - both inextricably bound inside the impenetrable "atom" of the human soul, "Распад атома" develops its theme in a crescendo, while its perspective oscillates between the banks of the Neva and the banks of the Seine, between present and past, and between consciousness and dream. The passage of interest for its abundance of "flying objects" appears at the end, and it describes - in an allusion, perhaps, to the phenomenon of nuclear fission that had been just discovered at that time - the "disintegration" of the soul - atom into particles. To quote:

..".Спираль была закинута глубоко в вечность. По ней пролетало все: окурки, закаты, бессмертные стихи, обстриженные ногти, грязь из-под этих ногтей. Мировые идеи, кровь, пролитая за них, кровь убийства и совокупления, геморроидальная кровь, кровь из гнойных язв. Черемуха, звезды, невинность, фановые трубы, раковые опухоли, заповеди блаженства, ирона, альпийский снег. Министр, подписавший версальский договор, пролетел, напевая "Германия

---

должна платить,"-- на его острых зубах застыла сукровица, в желудке просвечивал крысинный яд. […] Все надежды, все судороги, вся жалость, вся безжалостность, вся телесная влага, вся пахучая мякоть, все глухонемое торжество... И тысячи других вещей. Теннис в белой рубашке и купанье в Крыму, снявшиеся человеку, которого в Соловках заедают вши. Разновидности вшей: платяные, головные и особенные, подкожные, выводимые одной политикою. Политань, пилули от ожиренья, шарики против беременности, ледоход на Неве, закат на Лидо и все описания закатов и ледоходов-- в бесполезных книгах литературных классиков. В непрерывном пестром потоке промелькнули синее платье, размолвка, зимний туманный день. Спираль была закинута глубоко в вечность. Разбитое вдребезги, расплавленное мировое уродство, сокращаясь, вибрируя, мчалось по ней."
(Ivanov 1994 v.2, 33-34)

The variety of painstakingly listed "flying objects" in this paragraph is remarkable; the list looks as if it was formulated to extinguish all imaginable categorial distinctions: concrete and abstract, spatial and temporal, objects and processes, animate and inanimate. Several questions naturally arise:

- Can this paragraph really be considered as reflecting a trait of a poetic language, an element of the artistic "code," or is it just an "accident," in other words is it an isolated fact or is it the manifestation of a consistently manifesting creative principle? When does this element of poetic language appear in Ivanov’s creation?

- Is this element of poetic language reflected elsewhere in the literary process of the time, and is it possible to establish a source for it?

- What is the literary signification of this element of Ivanov’s poetic language? What can be said about the universe of discourse in which all of these things fly?

In the following paragraphs, I will attempt to answer these questions by taking a closer look at the occurrences and functions of the verb "to fly" in Ivanov's poetry and in the poetry of some of his contemporaries.
3.3. The verb "to fly" and its contexts in Ivanov's poetry

The answer to the first question is relatively easy. Not only do many other texts of G. Ivanov contain "flying objects" from various semantic spheres, but the flight also has, in many cases, a definite direction, similar to that from "Распад атома": through cosmic space, through darkness, into eternity, or into the void. This trait shows, predominantly, in the poetry that he wrote in emigration (1922-1958), but there are traces of it in his pre-emigration works. It is possible to show not only that it evolves gradually, but also, that the process of its evolution reveals a number of connections between the poetic language of Georgii Ivanov and that of his contemporaries (see 3.4). The most important of these connections relates Ivanov's creation to that of Aleksandr Blok (see 3.5).

In Ivanov's volume of the Petersburg period Сады (1921), the root “лет” appears quite often - about 16 times in 48 poems. The distributional properties of the verb are not nearly as extraordinary as in “Распад атома," but in general not exactly "commonplace" compared to the linguistic background. The first instance of "flight" that can be encountered in the volume, in fact, is the flight of the soul to heaven, thus a metaphor of death:

"Но настанет пора и над нашей кудрявой землей
Пролетишь и не взглянешь и этих полей не узнаешь."

("Легкий месяц блеснет над крестами," 1:204)

Among the "flying objects" of the volume, the more unusual are Crimean silks ("Я разлюбил взыскующую землю...," 1:208), the constellations Perseus and Andromeda.

29 Here and in the following, Ivanov's works are quoted (in the format volume:page) from: Ivanov, G. Sobranie sochinenii v 3 t. Moscow: Soglasie, 1994
"Вновь губы произносят: «Муза»...," 1:218), the "breath" of music ("Из облaka, из пены розоватой...," 1:220) In addition to these, rather creative uses of the verb, the volume also offers more "dictionary-like" uses. In "Луны осенней таял полукруг" (1:231) it is the wind that flies; in "Нищие, слепцы и калеки" (1:237), a poem with a medieval air, troikas are flying; in "Опять белила, сепия и сажа" (1:243) it is the clouds, and in "Когда скучна развернутая книга" (1:245) it is the cranes. The flight of the soul to heaven appears again in "В середине сентября погода.." (1:213), where the elements of nature, full of theatrical melancholy in anticipation of the winter, converse:

"— Я люблю, люблю и умираю...
— Погляди — душа как воск, как дым.
— Скоро, скоро к голубому раю
— Лебедями полетим..."

In Лампада (1922) in addition to more common contexts like the flight of time or birds, the verb appears once more in the context of death; the "flying object" is the soul of a troubled youth from Petersburg, flying on silver wings toward heaven:

"В Калинкинскую больницу
Отправили тело,
А душа на серебряных крыльях
В рай улетела."
("Однажды под Пасху мальчик," 1:85).

1931 is the year Ivanov published his first volume as an émigré writer - Розы.

The volume came after a long period of silence and brings significant changes in Ivanov's poetic diction. The vocabulary of the early works is recontextualized, gaining a new meaning, and - in many cases - a tragic dimension. A sense of loss, and together with it a sense of futility, permeate the poems in the volume; the exile from Russia appears to be
at the same time an exile from the world, a state of impenetrable loneliness and isolation comparable only to the solitude of heavenly bodies:

"Хорошо что нет царя,
Хорошо что нет России,
Хорошо что Бога нет.
Только желтая заря
Только звёзды ледяные
Только миллионы лет"(1: 276).

Nothing can pierce the infinite emptiness, the "icy abyss" between the exiled poet and the lost world, save the "unearthly," "unbearable" shining (сиянье) that foretells only death:

"В глубине, на самом дне сознанья,
Как на дне колодца — самом дне —
Отблеск нестерпимого сиянья
Пролетает иногда во мне.. " (1:289)

The idea of "flight" gains new dimensions: the peculiar pattern noted in Распад атома already makes its presence felt. Out of the 11 times the root appears in the volume, in only 3 instances is its use comparable to the dictionary norm (the contexts are: голос, р. 271, журавль р. 274, экипажи р. 283). The path of the flight is not earthly space (cf. the dictionary: "воздушное пространство"), but cosmic space, void or "emptiness" - (пустота) - a motif that is uncommon in the earlier works. The earth itself becomes a flying object, as it is looked at not from the perspective of its familiar surface, as in Сады (cf. "этих полей...," 1:204), but rather from the unusual perspective of outer space:

"Слышишь, как летит земля / С бесконечным, легким звоном." ("Глядя на огонь или дремля...," 1:256) Love, when it appears in Розы, is seen from the perspective of its loss, of the inexorable separation. This too is expressed as "flight": "Самый чуткий слух / Не услышит час — / Где летит судьба, / Тишина, весна / Одного из двух, / Одного из нас." ("В комнате твоей" 1:269).
The connection between flight and death is emphasized in several different ways.

In "Когда небудь и где-нибудь..." (1:273) a flying green star appears as a harbinger of death:

"Летит зеленая звезда
Сквозь тишину.
Летит зеленая звезда,
Как ласточка к окну —
В счастливый дом.

И чье-то сердце навсегда
Остановилось в нем."

The flying green star that stops the heart liberates it at the same time from everything earthly; it can then fly freely through the "blue realm of the aether," as in "Закрой глаза на мгновенье"(1:275):

"И нет ни России, ни мира,
И нет ни любви, ни обид —
По синему царству эфира
Свободное сердце летит."

The flight away from Earth, the flight as a metaphor of death implies, in Лампала and Сады, paradise as a final destination (see the two examples above), but paradise is absent from the poetic universe of Розы; not only is there no salvation, and no happiness at the end of the flight, but there is no end to the flight. Liberation from the earthly space and from the human condition, from its passions and pains, implies just nothingness, lit by the cold, blue light of distant and indifferent stars. The idea of a paradise at the end of the cosmic flight does appear in Розы - perhaps, as an echo of Sologub's "Звезда Маир" - but it appears just as a tempting, and at the same time misleading, thought, an illusion that humans may entertain when seduced, for example, by the beauty of nature:

"Для чего, как на двери небесного рая,
Нам на это прекрасное небо смотреть, […]
Для чего этот легкий торжественный воздух
Голубой средиземной зимы
Обещает, что где-то — быть может, на звездах —
Будем счастливы мы" (1.281).

Happiness is possible in earthly space, but just as an ephemeral illusion, melting like a piece of ice, or sinking like a stone in the abyss - again, flying away, not to be stopped and not to be felt again. Happiness for Ivanov is already in Розы a manifestation, or an effect of the "universal beauty" (мировая прелесть) of Распад атома, that can be glimpsed from nature, love, art and literature30, but stands no chance against the omnipotent opposite principle of "universal monstrosity" (мировое уродство), which condemns humanity to eternal decay:

Как лед наше бедное счастье растает,
Растает как лед, словно камень утонет,
Держи, если можешь, — оно улетает,
Оно улетит, и никто не догонит (1:287).

The next volume Отплытие на остров Цитеру, a collection published in 1937 (a year before Распад атома) opens with the statement of a comparable theme: "Вьется голубок. Надежда улетает./ Катится клубок… О, как земля мала." ("О, высок, весна, высок твой синий терем…," 1:287) From the flight of hope, the focus turns toward the "smallness" of the earth - implying, again, a "cosmic" perspective, from outside it. The theme is developed in two other poems in the volume. Several of the motifs connected with the idea of "flight" - the annihilation of the human soul, the infinity of the outer space, the ephemerity of happiness - begin to coalesce in Отплытие toward a more coherent whole:

30 Cf. in Распад атома where the "universal grace" is associated with a poem by Pushkin: "Вечный вздох мировой прелести: я отцветаю, я гасну, меня больше нет. "На холмы Грузии легла ночная мгла.""(Ivanov 2:26)
The passage in Распад атома is thus clearly no accident: the first two volumes published by Ivanov in exile contain some of the premises for its development. In the context of the poems quoted above, the passage appears as the amplified expression of the same basic theme, and an extreme form of the same basic poetic device.

Looking at Ivanov's volumes that follow Распад атома, it is possible to confirm that the theme of flight continues to be developed, along similar, "existentialist" lines, throughout the later period of the poet's life. There are, however, variations and changes in perspective. One of the most interesting "variations on the theme" connects flight and art, or creativity, turning the stereotypical, triumphal "полет творческой мысли" upside down. In Стихи 1943-58, we find the theme of flight as part of an "ars poetica" emphasizing the "Aeolian" nature of poetry:

"Иллюзия относится к Эолу,
Как к белизне — безмолвие и боль.[…]
Поэзия — точнейшая наука:
Друг друга отражают зеркала,
Срывается с натянутого лука
Отравленная музыкой стрела
И в пустоту летит, быстрее звука…" (1,375)

There is no salvation to be found in art, but just a poisonous, intoxicating illusion created by a play of mirrors; like everything else, it flies away into the abyss. The poem echoes
Распад атома with its scathing critique of the "aesthets" who believe that the harmony of art can transfigure and redeem the nonsense, suffering and torment of life, that the play of light and shadows on a portrait of an old woman by Rembrandt is an universal triumph compared to which the old woman herself is insignificant (Ivanov v.2: 16). And nevertheless, as other poems in the volume would suggest, as ineffective art may be as a remedy to universal monstrosity, one cannot be totally indifferent to the consolation, however ephemeral, that it can bring. Ivanov expresses this recognition in a sarcastic tone, associating art with the torments of love and material woes, and even with suicide, and calling all this the "entertainment" of life: "Конечно, есть и развлечения, / страх бедности, любви мученья, / искусства сладкий леденец / самоубийство, наконец." (1: 329). The sarcastic tone changes, occasionally, to "serious". Flight is loss and destruction, but this is not all; it is only in the precious moments before the unavoidable flight that happiness can still be found and that makes it worthwhile to let oneself be pierced by the poisonous arrows of "music": "Стоило ли этого счастье безрассудное? / Все-таки возможное? О, конечно, да. / Птицей улетевшее в небо изумрудное …" (1: 343) The perspective thus oscillates between the recognition that art can offer, if not salvation, at least the illusion of salvation, and the recognition that there is no real salvation: "Допустим, как поэт я не умру / Зато как человек я умираю." (1: 321). It is the latter perspective that sets the tone in Ivanov's last poems, in the volume Посмертный дневник. The verb "to fly" is used here to put the finishing touch on one of

---

31 N. Mel'nikov claims that Ivanov was alluding in Raspad atoma to Vladimir Nabokov, a recognized "aesthet" whose story "Драка" from 1925 ends: «А может быть, дело вовсе не в страданиях и радостях человеческих, а в игре теней и света на живом теле, в гармонии мелодий, собранных вот сегодня, вот сейчас единственным и неповторимым образом." (Mel'nikov 1996:79)
the most synaesthetic, and at the same time one of the darkest images ever created by Ivanov:

"Сияет соловьими ночь,
И звезды, как снежинки, тают,
И души — им нельзя помочь —
Со стоном улетают прочь,
Со стоном в вечность улетают." (1:566)

The above examples show that the verb "лететь" (together with the family of morphologically related verbs) constitutes the organizing center of a number of thematically related poetic devices (they are summarized in table 3.1) These devices appear as a definitory trait of Ivanov's language, a trait which finds its most compelling expression in the final passage of Распад атома, but can be followed throughout the second (post-emigration) period of Ivanov's creation.

<table>
<thead>
<tr>
<th>Что/Кто?</th>
<th>куда?</th>
</tr>
</thead>
<tbody>
<tr>
<td>земля</td>
<td>в вечность (Распад атома)</td>
</tr>
<tr>
<td>планеты</td>
<td>в бесконечность</td>
</tr>
<tr>
<td>звезда (зеленая)</td>
<td>в беззвездное небо</td>
</tr>
<tr>
<td>душа человека</td>
<td>в ледяную пропасть</td>
</tr>
<tr>
<td>сердце</td>
<td>в сияющую пустоту</td>
</tr>
<tr>
<td>судьба</td>
<td>в никуда, ниноткуда</td>
</tr>
<tr>
<td>весна</td>
<td>в метафизическую грязь</td>
</tr>
<tr>
<td>счастье (погибшее)</td>
<td>по синему царству эфира</td>
</tr>
<tr>
<td>надежда</td>
<td></td>
</tr>
<tr>
<td>музыка</td>
<td></td>
</tr>
<tr>
<td>обреченный</td>
<td></td>
</tr>
<tr>
<td>Лирическое &quot;Я&quot;</td>
<td></td>
</tr>
<tr>
<td>Лирическое &quot;Ты&quot;</td>
<td></td>
</tr>
<tr>
<td>ВСЁ (Распад атома)</td>
<td></td>
</tr>
</tbody>
</table>

летит/летят, улетает/улетают…

Table 3.1. The environment of the root "to fly" in Georgii Ivanov's poetry
3.4. The verb "to fly" in comparable contexts in the poetry of Ivanov's contemporaries

This section explores what can a comparative perspective add to the understanding of Ivanov's "passion for flight" and the perspective on life and art that can be glimpsed from it. For the purposes of this chapter, only a small cross-section of the Silver Age of Russian poetry was taken into account; the selection was guided by V. Kreid's Петербургский период Георгия Иванова (1989) as well as the commentaries of E. Vitkovskii and G. Moseshvili to the 1994 edition of Ivanov's collected works (Ivanov 1994, v.1: 595-632). The occurrences and the contexts of лететь and related verbs were investigated in the following volumes: Zinaida Gippius’s Дневник 1911-1921, Anna Akhmatova’s Вечер, Четки, Белая стая, Подорожник, Anno Domini, Nikolai Gumilev’s Огненный столп, Osip Mandelshtam’s Tristia, Igor' Severianin’s Ананасы в шампанском, Громокипящий кубок, Aleksandr Blok’s Ante Lucem, Стихи о Прекрасной Даме, Распутия, Страшный мир, Возмездие, Ямбы, Итальянские стихи, Арфы и скрипки, Кармен, Соловьиный сад, О чем поет ветер, and Vladislav F. Khodasevich’s Путем зерна, Тяжелая лира, Европейская ночь. A synthesis of "what is flying" in these works and (if considered relevant) where to, is given in Table 3.2 below.

At a first sight, it is possible to distinguish two extremes. The contexts in which the verb "to fly" is used by G. Ivanov are remarkably similar to those that appear in Aleksandr Blok's poetry, and remarkably different from the contexts appearing in Igor'

32 Georgii Adamovich, Innokentii Anenskii, Iurii Annenkov, and Mikhail Kuzmin are some of the authors mentioned by Kreid as significant for their influence on the development of G. Ivanov's artistic personality, that were not included in the present study.
Severianin. A greater or lesser number of contexts similar to Ivanov's appear in the works of the other poets; however, their relevance as possible influences on Ivanov's poetic language is best perceived with a closer look.

<table>
<thead>
<tr>
<th>Зинаида Гинпинс, Дневник</th>
<th>Николай Гумилев, Огненный столи</th>
<th>Анна Ахматова, Подорожник</th>
<th>Анна Ахматова, Четки</th>
</tr>
</thead>
<tbody>
<tr>
<td>знать, письмо, лето, летучая птица, душа, струи (под мостом)</td>
<td>орел, ветер, девственные качели, серня, трамвай (в бездне времени), длань в железной перчатке, память</td>
<td>птица полевая, подолы (как флаги), молнии, огонь, ворона, тьма, ласточкой, походка (похожа на полет), дух суровый византийства (от русской церкви отлетал)</td>
<td>я (не могу), аист, птица (моя тоска), Анна Ахматова, Белая стая</td>
</tr>
<tr>
<td>ветер, рисунок, визг, огонь</td>
<td>я (не могу), аист, птица (моя тоска), Анна Ахматова, Белая стая</td>
<td></td>
<td></td>
</tr>
<tr>
<td>звезды</td>
<td>Анна Ахматова, Вечер</td>
<td></td>
<td></td>
</tr>
<tr>
<td>дым</td>
<td>дым (от жертвы), месяц, звезда, листы, орел Екатерины, запах московского</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ветра, снег, птицы, слова, дым, летчики, журавли, я (несней), птицы, слова, дым (от жертвы), месяцы, звезды, листы, орел Екатерины, запах московского</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Путем зерна</td>
<td>Европейская ночь</td>
<td></td>
<td></td>
</tr>
<tr>
<td>я, сердце, корабль, автомобиль, душа</td>
<td>Тяжелая лира</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Песня</td>
<td>Tristia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>мимо</td>
<td>презнание (с уст), стрекозы и жуки стальные, хлопья черных роз, любовь (крылата), смерть (окрыленная), губы, босая Делия, скрипка, бабочка, бессмертная весна, голубь (в ковчег), пчелы, зеленая звезда, чудовищный корабль</td>
<td></td>
<td></td>
</tr>
<tr>
<td>владимир, летопись</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Осень Мандельштам</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ижорец</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Игорь Северянин</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Аннанас и в шампанском</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>голубка, ветра</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Громокипящий кубок</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Воздушная яхта</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Челнок (на крыльышках)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>летун</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>моторолет</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>шантеклер</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>дрижабль</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>голубка</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Блок</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ante lucem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>незримый дух (ко мне), муза, душа, сны, сердце, мечта, ангел, журавли</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Александр Блок, Стихи о Прекрасной Даме</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>сны земные, я, слова, птицы, орлы, ликованье забытое, смерть, сны, надежды (отлетают)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Александр Блок, Рапсодия</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>слова, птицы, девь, я, мы, конь, всадник, душа</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Александр Блок, Страшный мир</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>визг, вопль, язык огня, тени, мотор, пилот, ночной летун (бомбардировщика), миру, годы, водок, планеты, ты (как камень зазубрился, в сияющуюпустоту)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Александр Блок</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Возмездие, Ямы, Разные, Арфы и скрипки, Родина, О чем поет ветер</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>дни проклятым роем, мотор, сны, птицы, музы, кометы, стада стальных стрекоз, звуки жизни, кометы, счастье (на тройке), снег, снег, летун, пух, бомбардировщика, мир - в сияющую ночь, ночь огневая, ты - птицей, мой поезд (все сны и мясо), незримая туча, мы (летим, летим над грозной бездной, среди сущающейся тьмы), &quot;летит, летит степная кобылица,&quot; журавли, лист, время</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3.2. Contexts of the verb "to fly" in works of authors contemporary with G. Ivanov
One of the most famous "flying objects" of the Silver Age is Nikolai Gumilev's "Заблудившийся трамвай." The verb "to fly" is certainly not central to Gumilev's metaphor; however, the context in which it appears is similar to that developed in Ivanov post-emigration works - death and visions of outer space. The flying street car appears to the lyrical hero in a nightmarish vision:

"Шёл я по улице незнакомой
И вдруг услышал вороний грай,
И звоны лютни, и дальние громы,

It "absorbs" its passenger without him realizing; it travels "like a storm with wings" through both time and space ("Мчался он бурей тёмной, крылатой, / Он заблудился в бездне времён"); it carries the passenger to the executioner, where his and everybody else's heads are chopped off. When the nightmare is over and the familiar features of Petersburg appear, the hero is left with the premonition of an inescapable trip to outer space:

"Понял теперь я: наша свобода
Только оттуда бьющий свет
Люди и тени стоят у входа
В зоологический сад планет.. " (ibid.: 299)33

Death, flight and heavenly bodies come together in Zinaida Gippius's Дневник 1911-1921. The cadaver of a dog, orbiting around a sphere that flies in outer space, "в мирах надзвездных," is the central image of the poem “Возня” (1912):

“Остов разложившейся собаки
Ходит вокруг летящего ядра[…] 
Всё противно в них: соединенье,
И согласный, соразмерный ход,
И собаки тлеющей крученье,”

One of Zinaida Gippius's poems from the same year, dedicated to I. Bunin, suggestively titled "Крылатое," begins as a description of the nature in spring, in southern France, but ends on a motif comparable to Ivanov's souls flying into space: "И, среди небес горящих, / Как золото, желты - / Людей, в зарю летящих, / Певучие кресты." The motif of the soul flying away from the earth can also be found 10 years later in Akhmatova's "Клевета" (1922):

"Чтоб в страшной пустоте мое осталось тело, 
Чтобы в последний раз душа моя горела
Земным бессилием, летя в рассветной мгле,
И дикой жалостью к оставленной земле."

Khodasevich, the author who wrote a scathing review of Распад атома and was one of Ivanov's most unforgiving critics (see Ivanov 1:29-31) shows a remarkably strong convergence with Ivanov in his volume Тяжела лира, preceding Ivanov's essay by 15 years (1922). What appears in the context of "flying" in this volume of Khodasevich prefigures some of the most important themes of Распад атома: the theme of Psikheia as the incarnation of the ephemeral and flawed universal grace, and the flight into nothingness of the souls, of the human heart, the flight of the absurd dreams of mankind.

In Ivanov, a GULAG prisoner devoured by lice in Solovki dreams of playing tennis in Crimea; his dreams, just like everything else, fly away into the abyss in the finale of Распад. Khodasevich's line "летите мимо, мимо, дурные сны земли" contains, besides the "flying dreams", a major leitmotif of Распад; "мимо, мимо" is used by Ivanov as a refrain, emphasizing not only ephemerality, futility and loss (cf. Blok's "что было любимо, все мимо, мимо, впереди - неизвестность пути"), but also the impossibility
of a "true", "straightforward" representation or rendition of life by words or any other means; all "human documents", photographs, books, poems, are "lying"; they are somewhere "besides" life, aside and away from some unattainable, metaphysical truth.

The image of the flying green star and its association with death in Ivanov has a certain precursor in one of Mandelshtam's most famous poems, from the volume Tristia ("На страшной высоте блуждающий огонь..." 1918):

"На страшной высоте земные сны горят,
Зеленая звезда летает.
О, если ты звезда, - воды и неба брат,
Твой брат, Петрополь, умирает."

The lyrical universe of Ivanov the émigré is thus connected, through its "flying objects," to the lyrical universe created, decades earlier, by the circle to whom Ivanov belonged in his Petersburg period. It has to be remarked, though that there are coincidences which take the connections beyond that well-defined circle of people whom Ivanov knew and read (see Kreid 1989), and well into the Soviet period. For example, an interesting coincidence relates “Обводный канал” (1928) by Nikolai Zabolotskii (1903-58) and Ivanov’s “Портной обновочку утюжит..” (1958): in both poems, the unlikely flying object is a pair of pants. In Ivanov’s poem the hand of fate, appearing suddenly from the darkness, deals sudden death to a tailor, sending both the tailor and the pants flying into the shining void: "торчит кинжал в боку портного,/ белеют розы на груди /
в сияньи брюки Иванова /летят, и вечность -впереди." (1, 355.) In Zabolotskii’s poem, a satyre directed at the materialistic Russian society of the NEP period34, it is still chaos and decay that set the pants flying, but of a different nature, social rather than

34 See I. Masing-Delic 1992:245 ff. for a complete analysis of Zabolotskii's "Columns".
metaphysical: "Маклак штаны на воздух мечет, / Ладонью бьет, поет как кречет; / Маклак - владыка всех штанов, / Ему подвластен ход миров, / Ему подвластно толп движенье, / Толпу томит штанов круженье..." The flying pair of pants becomes a symbol of the common man succumbing to his material needs (see, for a detailed analysis, Masing-Delic 1992:247).

Another remarkable coincidence connects "Raspad" with a less known poem by Daniil Kharms (1905-1942), titled "Звонитьлететь". Perhaps the closest approximation, in Russian literature, to the finale of Ivanov's "Raspad", at least in what concerns the number and variety of "flying objects", Kharms's poem was aptly characterized by J. F. Jacquard (1995:100) as "изображение распада мира":

"Вот и дом полетел.  
Вот и собака полетела.  
Вот и сон полетел.  
Вот и мать полетела.  
Вот и сад полетел."

The first part of the poem continues in a crescendo, at the end of which body parts start flying, and the intonation becomes exclamatory, as if imploring for help, for salvation from what appears like imminent destruction:

"Лоб летит.  
Грудь летит.  
Живот летит.  
Ой держите ухо летит!  
Ой глядите нос летит!  
Ой монахи рот летит!" (Kharms 2:44)

These examples point to a definite tendency, in the poetry contemporary with Ivanov, for inventive uses of the verb "to fly"; also, the examples appear to point to a specific

function of "flying objects" that manifests not only in Ivanov's poetry and not exclusively
in the poetry of the circle to whom he belonged: the "flying objects" tend to appear as
symbols of decay, or chaos, or death.

3.5. Ivanov and Blok: Dialogue in flight

Mikhail Epshtein, in his study of images of nature in Russian poetry has already
noted the special place of the verb "to fly" in Blok’s poetry, where it appears in a variety
of contexts, in memorable lines such as “летит, летит степная кобылица," "летим в
миллионы бездн," "над бескрайними снегами возлетим," "торопливый полет
комет." (see Epshtein 1990: 238 ff.) Also, Ivanov’s passion for Blok’s poetry is well
documented, not only by scholars in works dedicated to Ivanov but also, to a certain
extent, by Ivanov himself, in his own poetry. Blok's name appears time and again in
Ivanov's post-emigration volumes, testifying to a lasting influence:

"Ты еще читаешь Блока,
Ты еще глядишь в окно,
Ты еще не знаешь срока —
Все неясно, все жестоко,
Все навек обречено" (Ivanov v.1:279).

The "Blokian context" in Ivanov is Russia, with its blizzards and snows, and a sense of
loss and damnation:

"Это звон бубенцов издалека,
Это тройки широкий разбег,
Это черная музыка Блока
На сияющий падает снег.

…За пределами жизни и мира,
В пропастях ледяного эфира
Все равно не расстанусь с тобой!

И Россия, как белая лира,
Над засыпанной снегом судьбой." (1:313)

It is no surprise, therefore, that when the contexts of "flight" in Ivanov's poetry are compared to the contexts appearing in Blok’s poetry, deep correlations appear. The context of "flight" in Blok’s poetic language changes with time; the change is comparable to that occurring, with a distance of almost two decades, in Ivanov’s poetry between the Petersburg and the émigré periods. The image of the "flying soul" - one of the more common images of flight in literature - appears in Blok’s early poetry: "пусть разрушается тело, / душа полетит над пустыней" ("Муза в уборе весны застучалась…", 1898). The flight of the soul is, at this stage in Blok's creation, more of a liberation, than a painful and eternal exile: “Покидай же тлетворный чертог, / улетай в бесконечную высь,/ за крылатым виденьем гонись“ (1899, Blok 1:25). Jumping in time to 1910, a totally different perspective appears: the flight as chaos, the flight as destruction, the flight of the worlds, the flight as eternal exile into an empty universe, into nothingness:

Миры летят. Года летят. Пустая
Вселенная глядит в нас мраком глаз.
А ты, душа, усталая, глухая,
О счастию твердишь, - который раз? (Blok 3:41)

The connection between Ivanov's and Blok's poetic languages is perhaps nowhere more transparent than in the case of this 1912 poem and Распад атома. From the flight of the worlds and the danger that is avoided just to return invariably, to the desperate call for the helping hand of a friend ("Как страшно всё! Как дико! - Дай мне руку, / Товариш,
друг! Забудемся опять"), all the major motifs in Blok's poem have been meticulously recast by Ivanov in the prose of Распад атома. The Blokian roots of the existentialist discourse in Распад атома have been noted elsewhere by Andrei Ar'iev, who wrote that "Распад атома" - это пар excellence "выворачивание наизнанку" (персональный завет Александра Блока Георгию Иванову) всего "лично дорогого." Распад атома is however just one of the many examples of Blokian influence in G. Ivanov. As V. Kreid wrote in his study of Ivanov's Petersburg period, "хотя блоковские интонации в раннем творчестве Иванова сравнительно редки, начиная с 1930-х годов связь с блоковской музыкой пропустит все отчетлиевее" (Kreid 1989: 22). The theme of flight appears as one of the organizing centers of the connection between Blok's "black music" and Ivanov's late poetry. The "cosmic perspective" that was to become a leitmotif in the works of the эмигрант Ivanov appears consistently in Blok's poetry; cosmic objects like stars, planets and comets show up frequently in the context of flight:

Черный ворон в сумраке снежном,
Черный бархат на смуглых плечах.
Томный голос пением нежным
Мне поет о южных ночах. [...]
Страшный мир! Он для сердца тесен!
В нем — твоих поцелуев бред,
Темный морок цыганских песен,
Торопливый полет комет! (Blok 3:162).

A typical example of what Ivanov called "черная музыка Блока", this particular poem appears to have touched Ivanov in a special way, since he recast the theme of the "frightening world"-prison of the soul (strashnyi mir) sunk in the "snowy darkness" (sumrak snezhnyi) in one of the poems in the volume Otplytie.. (Ivanov 1:317):

"Заметает сумрак снежный / Все поля, все расстояния. / Тень надежды безнадежной
/ Превращается в сиянье." The flight through stars into emptiness is described by
Ivanov in images reminiscent of both Mandelshtam and Blok: "На грани таянья и льда/
зеленоватая звезда / ../ К невесте тянется жених / и звезды падают на них / летят
сквозь снежную фату / в сияющую пустоту" (Ivanov 1:339). The image of the
"shining void" (сияющая пустота) can be traced to the 1910 "Demon" by Blok: "И под
божественной улыбкой, / Уничтожаясь на лету, / Ты полетишь, как камень зыбкий,
/В сияющую пустоту" (Blok 3:60). Blok's Снежная маска38 appears to be not only a
major source for images of "interstellar" flight in Ivanov, but also the source of the
complex of associations surrounding the images of outer space:

И снежные брызги влажа за собой,
Мы летим в миллионы бездн...
Ты смотришь всё той же пленной душой
В купол всё тот же - звездный... (2: 212).

The infinity of cosmic space appears in Blok's Снежная маска as a prison surrounding
Earth, rather than a luminous refuge or a path at the end of which salvation beacons:

И я затянут
Лентой млечной!
Тобой обманут,
О, Вечность!

Подо мной растянут
В дали бесконечной
Твой узор, Бесконечность,
Темница мира!

38 See, for a comprehensive discussion of this cycle, Irene Masing: A. Blok's "The snow Mask". An
Interpretation, Stockholm 1970
Feeling imprisoned and hopeless, abandoned, lost, is the theme of two very similar poems: Blok's "В октябре" and Ivanov's "Смилостивилась погода". Both poems feature the theme of flight as suicide; the lyrical hero, feeling caught in the prison of the world, without escape, is yearning for the liberation that only death can bring:

Давно звезда в стакан мой канула, -
Ужели навсегда?..
И вот душа опять воспрянула:
Со мной моя звезда!...

Пожил тысячелетья
в черной пустоте
Не прочь бы умереть я
Если бы не те.

И даже всё мое имущество
С собой захвачу!
Познал, познал свое могущество!..
Вот вскрикнул... и лечу!

(Blok 2:194).

It should be possible, at this point, to approach the third question formulated in the beginning of this chapter. The metaphor of flight turns Ivanov's poetic universe into an exploding universe; a turbulent universe centered not only on the personal tragedy of Ivanov, but also on the tragedy of a whole generation and a whole culture; a tragedy that Ivanov was acutely aware of in the 1930’s. It is a world seen in the last moments of its existence, one that offers no certainties except the certainty of destruction and chaos. The flying objects in Ivanov’s poetry are a metaphor for decay; this metaphor finds its ultimate expression in Raspad atoma. Their scattering all around the lexical spectrum, the entropy of their distribution is the iconic expression of a chaotic force that brings disorder into Ivanov’s world – “the universal monstrosity” – “мировое уродство.” The angst in face of this force is a salient feature of Ivanov’s creation in his émigré years, a hallmark of the poet’s tragic worldview. The element of Ivanov's poetic
"code" that I have tried to describe here is one of the main means of expression of this "angst." At the same time, it is an important part of the connection between the poetic language of Ivanov and the languages of the other poets of the Silver Age. The motifs of the "flying objects" encountered throughout the late part of Ivanov’s creation are in fact a synthesis of the parallel motifs encountered in the Silver Age, and especially in Blok, Khodasevich and Mandelshtam, and underline the special relationship between Ivanov and the mentor and idol of his Petersburg youth, the tragic Alexandr Blok.
4.1. Theoretical remarks.

What is Bulgakov's *Master i Margarita* about? A very simple question, that someone considering reading this masterpiece of Russian literature might ask. A possible answer may be: "It's a novel about the devil on a visit to Moscow." The dialogue may continue: "And how does this devil look like? Does he have hooves, horns and a tail?" "No, he appears as a very elegant and somewhat sinister gentleman." "And what is he up to in Moscow?" "Many things, but mostly, watching people, provoking them, poking fun at their stupidity or greed, and reminding them of their mortal nature." These simple statements, of course, do not do justice to the complexity of content and style of *Master i Margarita*; however, they constitute a possible interpretation, and a possible account of certain things that can be learned from the text.

A sonnet belonging to the symbolist poet Valerii Briusov, written in 1918 (thus preceding the publication of Bulgakov's novel by 48 years) admits a remarkably similar interpretation; it features the devil, on a visit to Moscow, disguised as an elegant gentleman, watching people and uttering a "Memento mori" in their address:

"MEMENTO MORI
Ища забав, быть может, сатана"
Является порой у нас в столице:
Одет изысканно, цветок в петлице,
Рубин в булавке, грудь надушена…

Similarities of this type are usually studied in literary theory under the heading of "intertext." "Intertextuality" is one of the most talked about terms in literary analysis in the past decades. The term was coined by Julia Kristeva to refer to "the transposition of one sign system into another"; in defining it, she pointed that "since this term has often been understood in the banal sense of “study of sources,” we prefer the term transposition because it specifies that the passage from one signifying system to another demands a new articulation of the thetic – of enunciative and denotative positionality." (Kristeva 1984:59-60) A similar position was articulated by Riffaterre, who stated that "intertextuality enables the text to represent, at one and the same time, the following pairs of opposites (within each of which the first item corresponds to the intertext): convention and departures from it, tradition and novelty, sociolect and idiolect, the already said and its negation or transformation." (Riffaterre 1990:76). Thus intertextuality, as it is defined in literary theory, refers to a non-trivial similarity among texts, a similarity that points to, and contrasts with, the differences, creating a tension within the "old" and "new" structures that coexist in the text. This concept can also be related to Iu. M. Lotman's characterization, in Culture and Explosion, of the dynamical processes that underlie the evolution of literature and culture. In Lotman's view, there are two basic kinds of dynamics in the cultural process - the predictable "gradual development" and the unpredictable "explosion"; in his opinion, in any given culture, the two kinds of dynamics not only alternate with each other in time, but even coexist synchronically in the different
layers of culture.\textsuperscript{39} Lotman's notion of explosive development in culture, emphasizing conflict and dialogue, can be seen as a generalization of Kristeva's notion of intertext.

Similarities such as that between the novel and the sonnet quoted above have, on the other hand, a definite communication-theoretic relevance; the two texts, seen as informational objects, can be said to be related by a transformation. The important question to ask about such transformations is: to what extent do they preserve the information in the message? To what extent can we say, in the general case, that a text A is related to a text B, or, in the case of the example above, to what extent does the text of the sonnet describe, represent, or model the text of the novel (or vice-versa)? A simple answer is: to the extent that structures (viewed either as an ensemble of probabilistic correlations or an ensemble of opposition/equivalence relations) that can be defined on the "input" text can also be defined, at least partially, on the "output" text. (The types of structures that can be taken into account in a text range from metrics, vocabulary and syntactic patterns to style, narrative motifs and elements of plot.) The preservation of structure in a transformation between two categories of objects, in the most general sense, involves mapping objects to objects in such a way that the relationships among objects in the first category can also be put in correspondence with the relationships among objects in the second category. Establishing a relationship between two texts involves thus defining a perspective on the texts in which the preservation by one of (at least certain

\textsuperscript{39} "До сих пор мы обращали внимание на соотнесение моментов взрыва и постепенного развития как двух попеременно сменяющих друг друга этапов. Однако отношения их развиваются также и в синхронном пространстве. В динамике культурного развития они соотносятся не только своей последовательностью, но и сущевствованием в едином, одновременно работающем механизме. Культура как сложное целое составляет из пластов разной скорости развития, так что свой синхронный срез обнаруживает одно-временное присутствие различных ее стадий. Взрывы в одних пластах могут сочетаться с постепенным развитием в других. Это, однако, не исключает взаимодействия этих пластов." (Lotman 2000, p.21)
elements of) the other's structure can be demonstrated. The more closely "related" the two texts, the more structural correlations among elements are preserved, and the more independent the relationship appears to be with respect to the specific angle of observation chosen (the texts will appear "similar" regardless of which method of description/interpretation is chosen). Symmetrically, it is possible to talk about "loose" relationships when structural coincidences appear only in a "narrow" perspective, i.e. when just a limited number of parameters are taken into account, or when out of the total number of possible structural coincidences that may be manifested under a given framework of observation, only a limited number are actually manifested. As always, it is useful to have an idea of the extremes of the concept. Exact reproduction is the trivial transformation, which results in an identical copy of a text and therefore in a full coincidence of structures independent of the angle of observation. At the other extreme, where no "transformation" can be defined, the "output" text appears to be totally independent from the "input"; supposing that it is possible to establish that the two texts in question are written in the same language, the only coincidences will be those given by the preservation of language-specific structures. Considering the texts as sources of information, the amount of "independence" of the "output text" from the "input text" (under some given framework of observation) is given by the relative entropy (see 2.1.2). The extent to which the structures of the second text can be "accounted for" or predicted from the structures of the first - or, equivalently, the extent to which the "input text" can be seen as a generative model of the "output text" - gives the "mutual information" of the two texts. Of course, there is no theoretical limit on the complexity of the relationship between "input" texts and "output" texts; output texts may materialize as transformations
of not just one input texts, but of several; also, very importantly, it is not always possible
to distinguish, just by looking at structural properties, between relationships that are due
to a direct influence from one text to another, and relationships that are due to a common
source, or to mere coincidence; the structural relationship, the "shared information", is
just an indicator of a possible historical relationship, a measure of the likelihood of such a
relationship, rather than a proof of its existence.

The perspective delineated above would imply that texts may, in a certain sense,
"communicate" among themselves. Texts, like any other cultural objects, can be (and are
usually) seen as channels of social communication; channels through which senders
(speakers, writers) may communicate with, and thereby influence the behavior (in the
most general sense) of receivers (listeners, readers). However by taking into account that
the behavior of receivers may consist in the generation of new texts that reach society in
their turn, it is possible to describe a duality in the social communication process. On one
hand, texts mediate the interactions of minds, of individuals. But in a similar manner,
minds mediate the interactions of texts; if the text is a channel through which the
behavior of an individual influences the subsequent behavior of other individuals, then, to
a certain extent, the minds of individuals can be seen as channels through which texts in
circulation at a certain time in the history of culture influence the genesis and ultimately
the structure of texts appearing at a later time.

To the researcher facing the problem: what influenced the genesis of a text,
historical data provide a solution, when it can be found. Quite often though it is
impossible to establish with any degree of certainty what a certain author may have read,
let alone the historical details of a conscious process of incorporation of structures from
existing works into a new work. Lacking historical information, or with just enough information to ascertain the plausibility of a certain development, issues of "inter-textual communication" can still be approached from a structural perspective, in which the (presumed) morphogenetic process is reconstructed by a comparative analysis of the source and destination texts - seen as tokens of the process at various stages of its development. This method, similar in many respects to the linguistic reconstruction of forms, amounts in practice to a systematic description of the modelling relation between the destination text and its presumed sources.

Starting from the modelling relation between Bulgakov's novel and Briusov's sonnet, I shall investigate, in the following sections, how far does their structural similarity go, and to what extent it supports the hypothesis of a genetic relationship between the two texts.

### 4.2. Background: Mikhail Bulgakov's *Master i Margarita*

Universally acknowledged as a book of "cult status" (Iablokov 2001:7) and "one of the few truly great masterpieces of modern Russian fiction" (Barratt 1987:1) Bulgakov's *Master i Margarita* continues to generate interest in both academic and non-academic circles, decades after its initial publication in the literary journal *Moskva*, and despite the fact that this initial publication occurred almost 3 decades (1966) after the death of the author (1940). A great deal of this interest is due to the synthetic nature of

---

40 *Moskva* 11 (1966) p. 6-130; 1 (1967) p. 56-144. See Barratt 1987, p.11, for details surrounding the first publication of *Master i Margarita* and the ensuing controversy in Soviet literary circles.
the novel, its "connectedness" with various strata of Russian and world culture. A
dictionary entry characterizes it as an "итоговое произведение, вобравшее в себя […]
многие мотивы предшествующего творчества [Булгакова] […] а также
художественно - философский опыт русской классической и мировой
литературы."\(^{41}\) The multitude and diversity of sources that have been identified, starting
with obvious ones like the New Testament gospels, the apocryphal Gospels, Goethe's
Faust. Gounod's opera Faust and ending with less well known works by authors
contemporary to Bulgakov,\(^ {42}\) position the novel at an intersection of informational
circuits, some well anchored in Russian and Soviet culture, and others relevant far
beyond the Soviet or Russian cultural context. The following is an exploration of one of
the less investigated connections of Bulgakov's "novel about the devil": the connection
with symbolism, and more specifically, with the works of Valerii Briusov.

4.3. A sonnet and a novel

The reason for the choice of our subject lies in the following sonnet by Valerii

for a review of opinions on intertextuality in Bulgakov.
\(^ {42}\) See Chudakova 1988, 295 ff. for a description of the circumstances surrounding Bulgakov's early work
on Master i Margarita and possible sources.
Ища забав, быть может, сатана
Является порой у нас в столице:
Одет изысканно, цветок в петлице,
Рубин в булавке, грудь надушена.

Но встретится, в толпе шумливо-тесной,
Он с девушкой, наивной и прелестной,
В чьих взорах ярко светится любовь..

И вспыхнет гнев у дьявола во взоре,
И, исчезая из столицы вновь,
Прошепчет он одно: memento mori!

It is immediately apparent that this sonnet offers a likely influence on the genesis of Master i Margarita, a fact that so far appears to have escaped the attention of Bulgakov scholars (to the extent I have been able to ascertain this in the available literature); there are perhaps few cases where two literary works differing so much in their genre and scope share so much structure. All the motifs that Briusov was able to include in the 14 lines of his sonnet are reflected, in some form, in Bulgakov's novelistic masterpiece; not only that, they also appear to be largely functionally equivalent, interacting to form similar meaning-generating structures. Briusov's Satan, just like Bulgakov's Woland, is on a visit to the capital: "Ища забав, быть может, сатана / Является порой у нас в столице." The date on the sonnet, rather close to the date of the October Revolution, requires a precise answer to the question: Was Moscow the capital at the time Briusov wrote his sonnet? According to Bol'shaia Sovetskaia Entsiklopediia, the official change of capital from Petrograd to Moscow had taken place just two months before; that is, on March 12, 1918; given the social significance and public resonance of the event, it
appears quite likely that Briusov referred to Moscow, and not to Petrograd, in his May 14 poem.

In the capital, Briusov's Satan is a casual visitor (Является порой...) exactly like Woland: "А мы, как изволите видеть, путешествуем и в данное время находимся в Москве" (Ch.1). And, despite the shortness of the description of the Devil's physical appearance in Briusov's sonnet ("Одет изысканно, цветок в петлице, / Рубин в булавке, грудь надущена.") one can easily identify the same elegance and attention to detail in Bulgakov's description of Woland: "Он был в дорогом сером костюме, в заграничных, в цвет костюма, туфлях. Серый берет он лихо заломил на ухо, под мышкой нес трость с черным набалдашником в виде головы пуделя." Foreignness ("словом - иностранец") is an attribute that fits both descriptions well. Bulgakov's description preserves Briusov's image of an out-of-the-ordinary, exquisitely elegant gentleman, adding just a few sinister traits: "с левой стороны у него были платиновые коронки, а с правой -- золотые. […] Правый глаз черный, левый почему-то зеленый. Брови черные, но одна выше другой." (Ch. 1.)

According to Briusov, this special visitor is "perhaps looking for entertainment"; a fact, which in Bulgakov corresponds to Woland's black magic séance at the Variete and the grand ball in Apt. No. 50. Both Briusov and Bulgakov make it quite clear that the Devil is not looking for "amusement" in any ordinary sense, but rather "tracks" the

43 This Faustian motif of the traveling Devil, who occasionally reaches Moscow in his travels, also harkens back to Briusov's Ognennyi Angel: ". . .объезжая страны и осматривая города ... [...] Из Константинополя пробрались мы в Московию, и доктор Фауст показывал свою учёность при дворе княгини Елены, но остаться там не пожелал из-за лютых морозов. Теперь же объезжаем мы города немецкой земли; были в Вене, Мюнхене . . ." (Briusov 1974:217)
44 Here and further, references to Master i Margarita will be given by chapter only; the edition used in this article is Bulgakov, M. A. Master i Margarita. Paris: YMCA press, 1967
entertaining spectacle of human lives, which he looks upon with a cynical and critical eye. Woland for example acknowledges, after the black magic séance: "Я открою вам тайну: я вовсе не артист, а просто мне хотелось повидать москвичей в массе, а удобнее всего это было сделать в театре. Ну вот моя свита, -- он кивнул в сторону кота, -- и устроила этот сеанс, я же лишь сидел и смотрел на москвичей." (Ch. 12.) We find the same contemplative attitude in Briusov's Satan, who "reads" into humanity from the city's streets, as from a book:

"И улица шумит пред ним, пьяна;  
Трамваи мчатся длиной вереницей  
По ней читает он, как по странице  
Открытой книги, что вся жизнь - гнусна."

Besides the motif of the traveling devil as an observer and critic of humanity, there are two other motifs in the stanza just quoted that deserve attention in the context of Master i Margarita. The first that we will discuss is that of the tram; its reflection in Bulgakov's text is to be found both in the famous episode of Berlioz's death under a tram in Chapter 1, and also in another episode, from Chapter 12, where Woland remarks to Fagot – Koroviev in front of the audience at the Variete: "Горожане сильно изменились, внешне, я говорю, как и сам город, впрочем. О костюмах нечего уж и говорить, но появились эти... как их... трамваи, автомобили..." The tram in Chapter 1 is the instrument of Berlioz's fortuitous death, while the trams mentioned by Woland in Chapter 12 are an indicator, or a token, of the state of humanity, which is exactly the role they fulfill in Briusov's poem. In both texts, the motif of the tram is correlated with a second motif, which in Briusov's sonnet is expressed laconically as:
"жизнь - гнусна" (life is abominable). Moreover, both motifs are correlated with a distinction between exterior and appearance versus interior and essence. In Briusov’s poem, the insight of Satan, the cynical observer, penetrates beyond the surface of material progress, to discover a society whose inner life is as abominable “as usual”; this insight applies in equal measure to Woland at the Variete theatre (Ch. 12):

"- Но меня, конечно, не столько интересуют автобусы, телефоны и прочая...
- аппаратура! - подсказал клетчатый.
- сколько гораздо более важный вопрос: изменились ли эти горожане внутренне?"

It takes Woland just a few "magic tricks" before the citizens of Moscow, gathered in front of him at the Variete, reveal their greed and their lack of integrity - their “abominable” inner life. His conclusion is that of someone, who has known humanity too well and for long enough not to be amazed or shocked, by this finding; L. Ianovskaia compared his musings to those of the Ecclessiastes (1, 9-10), with a touch of biting satire added at the end (see Ianovskaia 2002:100-101):

"Ну что же, - задумчиво отозвался тот, - они - люди как люди. Любят деньги, но ведь это всегда было... Человечество любит деньги, из чего бы те ни были сделаны, из кожи ли, из бумаги ли, из бронзы или из золота. Ну, легкомысленны... ну, что ж... и милосердие иногда стучится в их сердца... обыкновенные люди... в общем, напоминают прежних... квартирный вопрос только испортил их... "

The structural correspondences of the two texts do not end here. In fact, the next three lines of Briusov's sonnet correlate with what is arguably the core structural

45 Compare Mephistopheles' musings in Briusov's Ognennyi angel: "объезжая страны и осматривая города, мы, кстати, убеждаемся, что вино всюду пьютно и мужчины везде бегают за женщинами." (Briusov 1974:217)
opposition of Bulgakov's novel: the duality between the two central characters - the Master and Margarita - and the rest of the world. Most of the novel's narrative structure is built around the semantic spheres created by this opposition. In a world consumed by "kvartirnyi vopros," the Master and Margarita are consumed by love for each other, and their passion for a common project - a novel about Pontius Pilate and Yeshua Ha-Notsri. Their fate parallels that of the philosopher Yeshua Ha-Notsri, who ends up crucified for the guilt of speaking of love, peace and mutual understanding in a world dominated by greed, hatred and power struggles. The Master, persecuted and put under extreme psychological pressure by the literary establishment because of his ideologically provocative writings, ends up as a lunatic in the madhouse; his beloved, suffering and stranded without him, with no idea of his whereabouts, tormented with the thought that he might be dead.

There is no "Master" in Briusov's poem; however, there is an equivalent of Margarita: a naïve and beautiful girl, with love shining in her eyes, appears in Satan's field of view as a counterpoint to the "abominable life"; the third stanza, flanked by the adversative conjunction "но" and the main constituent of the semantic sphere attached to the image of the girl, "любовь," creates a powerful contrast with the preceding second:

"Но встретится, в толпе шумливо-тесной,
Он с девушкой, наивной и прелестной,
В чьих взорах ярко светится любовь.."

Remarkably, no less than four motifs that can be discerned in Briusov's 18 words long third stanza of his sonnet appear consistently in Bulgakov's first mention of Margarita (in chapter 13, where the Master recounts his adventures to Ivan Bezdomnyi in
Dr. Stravinskii's clinic): the encounter in the crowded street (on Tverskaia, amid thousands of people), the beauty of the woman, her eyes, through which she speaks without words, and the love that she is ready to give and that makes her stand out from the crowd: "Она повернула с Тверской в переулок и тут обернулась. Ну, Тверскую вы знаете? По Тверской шли тысячи людей, но я вам ручаюсь, что увидела она меня одного и поглядела не то что тревожно, а даже как будто болезненно. И меня поразила не столько ее красота, сколько необыкновенное, никем не виданное одиночество в глазах! [...] Любовь выскоцила перед нами…" The beginning of Chapter 19 firmly establishes love for the Master as the main element of the semantic sphere of Margarita: "За мной, читатель! Кто сказал тебе, что нет на свете настоящей, верной, вечной любви? Да отрежут лгуну его гнусный язык! За мной, мой читатель, и только за мной, и я покажу тебе такую любовь!" Just a few lines further, Bulgakov develops the structural opposition between Margarita and the rest of the world, adding a few elements to the character's semantic sphere which define her clearly against the background of "abominable life" and complete the structural parallelism with Briusov's sonnet: "Что нужно было этой женщине, в глазах которой всегда горел какой-то непонятный огонечек [...] не знаю. Мне неизвестно. Очевидно, она говорила правду, ей нужен был он, мастер, а вовсе не готический особняк, и не отдельный сад, и не деньги." To be sure, Bulgakov's Margarita is not an innocent girl; she is a married and experienced woman; her purity stems from her selfless love for the Master alone; this difference in the depth of characterization, which, assuming there is a historical connection between the two works,
can be attributed to the fact that the two authors wrote under constraints of form that are not comparable, does not destroy the functional equivalence of the two characters.

At least two additional very important structural coincidences between Briusov's sonnet "Memento Mori" and Bulgakov's novel *Master i Margarita* can be derived from the sonnet’s last stanza as well as from the title, which is echoed in the last verse. One of them refers to the attitude of Satan toward human society; the other refers to Satan's message to society:

"И вспыхнет гнев у дьявола во взоре,
И, исчезая из столицы вновь,
Прошепчет он одно: memento mori!"

"Memento mori" can be immediately recognized as Woland's main message to humans in Bulgakov's novel and as his reaction to the “abominable” behavior of humans. Woland makes his triumphal entrance, in Chapter 1, reminding the powerful and arrogant literary critic and editor Berlioz that "человек смертен, но это было бы еще полбеды. Плохо то, что он иногда внезапно смертен, вот в чем фокус! И вообще не может сказать, что он будет делать в сегодняшний вечер." Berlioz's sudden, violent death under a tram has a powerful effect on his acolyte Bezdomnyi; the proffessed atheist and author of anti-religious literature ironically turns into a Christian mystic, using an icon and a candle (see Ch. 3) to protect himself against the "impure force" that he encountered at the Patriarshie Prudy. Along with Berlioz and Bezdomnyi, Likhodeev, Nikanor Ivanovich, Rimskii, Varenukha, Bengal'skii, Berlioz's uncle Poplavskii, the Variete bartender Andrei Fokich, Aloizii Mogarych and a number of other characters are
reminded, in one way or another, by Woland himself or by one of the members of his suite, of the fragility of their life. The methods include violent beating, horrifying threats or predictions of death, and even supernatural-comic punishments (like Likhodeev being instantaneously transported to Yalta, or Prokhor Petrovich becoming invisible inside his suit.) The devil's anger is complemented, in Bulgakov's novel, by a healthy dose of sarcasm, black humor and malicious irony. In a most memorable scene, the show host of the Variete, Bengal'skii, is decapitated by Begemot in front of the horrified audience at the Variete theatre. A very graphical "memento mori," with blood gushing out of the victim's neck, the decapitation of Bengal'skii has a powerful effect not only on the shallow audience, which suddenly becomes compassionate toward the host and begs Woland to restore him, but also on Bengal'skii himself, in whose subsequent (post-resurrection) lamentations one can discern a radical "re-evaluation of values": "Квартиру возьмите, картины возьмите, только голову отдайте!" (Ch. 12.) Another scene from the novel, that can be put into structural correspondence with the sonnet, is that of the departure of Woland and his suite from Moscow - accompanied, as in Briusov, by a "memento mori" addressed to humans. But if Briusov's Satan only whispers his "memento mori," Bulgakov's delivers it in an outspoken, theatrical manner: Woland's departure (Ch.31) is heralded by Koroviev-Fagot with a whistle so loud that it causes a catastrophic landslide and wrecks a passenger boat ('rechnoi tramvai') on the Moscow River.

46 A remarkably similar scene appears in Briusov's Ognennyi angel where Mephistopheles appears to swallow whole one of the waiters in the Zwei Schloessel inn, as a punishment for being late with the food, and then restores him at the pleas of the innkeeper.
47 See Bulgakov, The Master and Margarita, ch. 31: "с корнем вырвало дубовое дерево, и земля покрылась трещинами до самой реки. Огромный пласт берега, вместе с пристанью и рестораном,
In *Master i Margarita*, most of the time we can identify the reasons that made Satan angry and brought him to deliver a sarcastic "memento mori": greed (especially in relation to "kvartirnyi vopros"), undeserved social and material privileges obtained through unjust means, lack of moral or intellectual integrity, lying. Why does Briusov's Satan become angry? The answer is not explicitly formulated in the sonnet, but can be retrieved from the sonnet's structure. The anger is preceded by the strong contrast between "gnusnaia zhizn'" and the image of the naïve girl with love in her eyes; thus it can be explained by a sense of justice and compassion that is comparable to that demonstrated by Woland in the face of the contrast between the two faithful lovers, Master and Margarita, and the corrupt and greedy social environment that encroaches upon them.

To conclude the comparison, the devil's attitude toward humans appears to be similar in both Bulgakov's novel and Briusov's poem, testifying to a common, Augustinian (in Lotman's terms)\(^{48}\) conception of the devil, or perhaps one similar to that which can be derived from the Book of Job in the Old Testament, where the Devil acts as God's servant and tests people in order to reveal their ultimate stances and choices. The epigraph of Bulgakov's novel, the Goethean "Я - часть той силы, что вечно хочет зла и вечно совершает благо," may, in fact, apply to Briusov's poem too. Both works feature a devil who is primarily a critic of society, a sarcastic one in Woland's case but in

---

\(^{48}\) "Согласно манихейскому пониманию, дьявол - это существо, обладающее злонамеренностью, т.е. сознательно и целенаправленно обращающее против человека свою силу. Согласно же августинскому пониманию, дьявол - это слепая сила, энтропия, которая направлена против человека лишь объективно, в силу его (человека) слабости и невежества" Lotman 1992 - 1993, t.3, p. 337 - 338
every way someone who researches and reveals, rather than causes, the evils that plague humanity and humanity's moral decay, and, last but not least, someone who appears to be touched by love and able to show both anger and compassion.

The quantity and depth of structural correspondences suggest quite strongly a genetic relationship between "Memento mori" by Briusov and Master i Margarita by Bulgakov and open the hypothesis of a privileged, special, albeit one-sided, relationship between Bulgakov and Briusov; a relationship that may have been strong enough to determine Bulgakov to formulate his masterpiece as a response to Briusov, as a development of his 1918 improvisation. But before turning to what else there is to support such a claim, it would be interesting to review some of the other contemporary sources that have been identified for Bulgakov's novel.

4.4. Contemporary influences on Master i Margarita

On the subject of the genesis of Master i Margarita, various critics have collected a large amount of facts. Chudakova, for example, mentions Erenburg's novel Neobychainyie pokhozhdeniia Khulio Khurenito i ego uchenikov, which appeared in 1922, and Alexandr Grin's story "Fandango" (1927) as possible sources of the idea for a demonic narrative; both of them contain diabolic characters under the guise of "strangers," comparable to Woland (Chudakova 1988: 298; Krugovoy 1991: 76). Other stories of the period like "Oblomki" by A. Sobol', featuring a character named Trech (1923), and "Inostranets iz 17-go" by O. Savich (1922) contain descriptions of demonic characters which coincide with Bulgakov's description of Woland in a significant number
of ways (see Chudakova 1988: 299-300). Finally, she mentions "Venediktov, ili Dostopamiatnye sobytia zhizni moei" by A. V. Chaianov, a book Bulgakov is known to have received from a friend at some point in the mid-20's, in which the main character, named Bulgakov, encounters the Devil one night at the theater in Moscow (Chudakova 1998: 300). L. Fialkova, quoted by A. Barratt (1987: 43) mentions a striking similarity between Sergei Gorodetskii's 1923 review of the play "Yeshua Hanotsri: An Impartial Revelation of the Truth" (1922) by S. M. Chevkin, and Berlioz's comments on Bezdomnyi's poem in the first chapter of Master i Margarita.

Another possible source is revealed in Viacheslav Vs. Ivanov's analysis of Vladimir Nabokov's story "Skazka" (1926). In Nabokov's story, the devil, in the guise of a coarse, but worldly woman by the name of Mrs. Ott, demonstrates his (her) powers by causing an old man to fall (without dying, though) in front of a passing tram in Berlin. There are a number of significant details that coincide with those related to Berlioz's death at the Patriarshie Prudy, and which Viacheslav Vs. Ivanov sees as proof of a genetic relationship; however, as Miron Petrovskii demonstrates, it is quite likely that the motif of the devil inflicting, or threatening death by tram can be attributed, in both Nabokov's and Bulgakov's narratives, to an earlier influence from Kuprin's story "Kazhdoe zhelaniie" (subsequently "Zvezda Solomona"), first published in 1917 and

---

49 Zvezda 11/1996 p. 146-147. Quoted from Petrovskii 2005 (see note below)
51 Nikolai Gumilev's poem "Заблудившийся трамвай" (1919) in which an out of control tram becomes a metaphor for Russia in times of historical turbulence, is worth mentioning as one of the most widely known literary works of the time where the tram and death are associated and thus as a possible influence on some of the works referenced above.
featuring a demonic character by the name of Mefodii Isaievich Toffel'. (Petrovskii 2005).

There are many other findings, which account for a significant number of motifs present in Master i Margarita (see, for example, Sokolov 1996 for influences from Amfiteatrov, Kuprin, Belyi etc.).\textsuperscript{52} Taken together, they create the picture of an impressive "critical mass" of contemporary literature that, together with the works of classics like Faust and Gogol\textsuperscript{53} and with the scholarly sources on demonology which Bulgakov is known to have researched,\textsuperscript{54} could have impacted, directly or indirectly, the genesis of the demonic motifs in Master i Margarita. As Chudakova (1988: 297) notes, "Появление дьявола в первой сцене романа было гораздо менее неожиданным для литературы в 1928-м году, чем через десять лет - в годы работы над следующей редакцией. Эта сцена и вырастала из текущей беллетристики, и полемизировала с ней." The relative abundance of coinciding details that can be found in the texts mentioned above argues for a definite amount of influence on Bulgakov's novel; however, the coincidences are largely restricted to a number of themes that occur mostly in the first chapter, and functional equivalences appear weak compared to those that can be found in Briusov's sonnet. Could Briusov have been, among Bulgakov's contemporaries, the main inspirer of the "novel about the devil"? The following is a look at possible clues from Briusov's own "novel about the devil," Ognennyi angel.

\textsuperscript{52} Sokolov B. Bulgakovskaja entsiklopediia. Moscow: Lokid, Mif: 1996
\textsuperscript{54} See Ianovskaia 1983: 250 ff. for details
4.5. Valerii Briusov's symbolist novel *Ognennyi angel*

Set in 16th century Germany, *Ognennyi angel* follows the adventures of Ruprecht, a landsknecht returning from the New World, who encounters Renata, a young woman who appears to be possessed by demonic forces. Already in childhood, Renata began having visions of a "fiery angel," Madiel, who told her she could become a saint, if she upheld her lofty ideals of spiritual love. Renata, however, fell in love with Madiel and tried to persuade him to enter into a carnal union with her, which the angel refused. In answer to her prayers, he promised to comfort her by coming back to her in human guise. After a while Renata met Graf Heinrich von Ottersheim, whom she took for her "fiery angel" and with whom she lived happily for a while; he abandoned her, however, and left her a prey to the demons that were possessing her at the time when Ruprecht met her. Ruprecht joins Renata in a search for the fiery angel incarnate. The search takes them into the realm of black magic and occultism; in trying to help Renata, Ruprecht dedicates himself to the study of the occult sciences and for a while even joins Dr. Faustus and Mephistopheles in their travels through Germany. After many grotesque adventures, he escapes unharmed but she ends up burnt at the stake by the Inquisition for her dealings with the "impure force."

Andrew Barratt\(^{55}\) and George Krugovoy\(^{56}\) have already revealed some common themes and motifs between *Ognennyi angel* and *Master i Margarita*, besides that of the itinerant devil. In particular, both Renata and Ruprecht describe the experience of a witches' sabbath. Though this is quite different from Bulgakov's "Great Ball at Satan's,"

\(^{55}\) See Barratt 1987:228, 317.
\(^{56}\) See Krugovoy 1991:3, 43, 76, 105, 280.
the preparations for it include anointing the body with a magic salve and flying on the back of an animal or an object, details that correspond almost exactly with Margarita's story (Barratt 1987:228). Renata's answer to the Inquisition, specifically to the question "What is your name?" is "My name has been taken from me, I have no name," which is the same answer the Master gives to Ivan Bezdomnyi in Dr. Stravinskii's clinic in Ch.13. (ibid.: 317). In both works demonic presence is connected with experiencing a strong headache (Krugovoy 1991: 43). Mephistopheles swallows and then releases a waiter at an inn, while Begemot decapitates and then restores the show host Bengalskii at the Variete Theatre (ibid.: 92). On a closer look, there are even more points of convergence. In Ognennyi Angel, shortly after meeting Ruprecht, Mephistopheles performs a "magic" trick not unlike those performed by Woland's suite at the Moscow Variete and makes fresh grapes in the beginning of spring appear, and then disappear, to the great amazement of the public in a Cologne tavern. Later, at the castle of Graf von Wellen, he stages another "black magic" show in which he purports to summon Queen Helen of Troy in front of the audience.

For that matter, Master i Margarita may not be the only work by Bulgakov to have been influenced by Ognennyi angel. E. A. Iablokov, for example, has written about the relationship between Ognennyi angel and Bulgakov's play Rytsar' Serafimy, and also the early stories "Morfii" and "Ognennyi zmei."57

These coincidences between Master i Margarita and Briusov's symbolist novel Ognennyi angel (a few of which were already referenced in the analysis of "Memento mori") are rather punctual; Bulgakov's novel shares just a limited number of the most spectacular motifs of Briusov's novel (the itinerant devil exploring society; his staging of magic shows; the witches' sabbath). However, in the context of the sonnet "Memento mori," which contains, in a condensed form, a large part of the structure of Master and Margarita, they can hardly be taken as mere coincidences and appear to argue in favor of the hypothesis of Briusov as one of the main inspirers of Master i Margarita.

4.6. Why Briusov?

I have examined, so far, correspondences between Briusov's literary output and Bulgakov's novel Master i Margarita. They are intriguing, because one would expect that the close (one-sided) relationship that the texts suggest existed between the two writers would have left more tangible traces in the history of literature, in Bulgakov's memoirs, diaries, letters, where, however, Briusov's name is conspicuously rare. They confirm the established opinion that Bulgakov's art bears a special affinity to the Symbolist heritage (see Krugovoy 1991:3, Barratt 1987:316, Iablokov 2001:18), but at the same time they reveal the necessity for a reconstruction of the substrate of this affinity, about which little is known (Barratt, for example, writes: "the precise nature of Bulgakov's acquaintance with the symbolist movement seems destined to remain a mystery. Chudakova reports with regret that nothing has come to light regarding Bulgakov's reading of Symbolist works," 1987: 316).
To shed light on the full impact of Symbolism on Bulgakov is a task that lies outside the scope of this dissertation; I will, however, undertake a little part of it, and attempt to clarify what aspects of Briusov's work, his personality and his behavior as a public figure could have made him important to Bulgakov and may have played a role in the genesis of *Master i Margarita*. At a first approximation, these aspects can be organized in three main categories: Briusov's influence on the literary scene, his relationship with the political establishment, and, last but not least, his penchant for demonism.

Briusov became famous on the Russian literary scene with his volume *Urbi et orbi* (1903) and gained even more influence after 1906, the year when he published his volume of verse *Stephanos* to wide critical acclaim (see Sviatopolk-Mirskii 1992:672). He preserved and developed his influence until his death in 1924, over a period, which overlaps both Bulgakov's teenage years and the first half of his literary career. A towering figure, the leader and the public face of the Symbolist movement and a very active editor and publisher throughout the years up to the Revolution, Briusov took Gor’kii's side in 1917, embraced the October Revolution and joined the Bolsheviks in 1919 (ibid.: 673). An indefatigable collaborator of the new regime, he held at various times offices in Knizhnaia Palata (the government's censorship body), Narkompros, Gosizdat, the Communist Academy, Moscow University, Institut Slova, and toward the end of his life, he headed the Vysshii Literaturno-Khudozhestvennyi Institut that was later to bear his name (Tiapkov 1990:120-121). Each of these institutions held considerable power over

---

58 "К 1903 г. он стал признанным главой большой и энергичной литературной школы; к 1906 г. его школа выиграла битву; символизм был признан как русская поэзия, а Брюсов как первый поэт России."
all things literary in Russia at the time, and had decisive influence in promoting and publishing writers and in setting the ideological and aesthetical trends.

Briusov's subservient attitude toward the regime appeared justified not as much by his ideological affinities (see Tiapkov 1990:121 for details on his position), as by his desire to lead; Victor Erlich called Briusov "a power and success worshipper" (Erlich, 92). For the leader of the Symbolists, a recognized erudite and aesthete, a man of considerable intellectual sophistication, to turn into an ally of the Bolshevik regime and promote its "proletarian culture" and its raw, materialist ideology in exchange for power may have appeared to many as a deplorable compromise with the present and betrayal of the past. N. Rabotnov implies that Briusov's collaboration involved intellectually or morally doubtful acts ("В девятнадцатом году Брюсов вступил в РКП(б) и стал видным деятелем Наркомпроса, где успел позаведовать тремя отделами и заслужить похвалу Л. Каменева, который назвал его "молотобойцем и ювелиром." Некоторые из документов [Наркомпроса], к которым Брюсов приложил руку, тяжело читать") and adds, ironically, that "Брюсов с полной серьезностью относился к издательствам и альманахам под названиями “Кузница,” “Горнило,” “Паяльник” и к таким произведениям как “Весенний завод,” “Электрификация” и “Машинный рай” (Rabotnov 2002). Since Bulgakov was working hard to be recognized as a writer in the early 1920's, these facts could not have escaped his attention; in fact, he must have been painfully aware of them, as Briusov was one of the people whose choices and decisions could impact his life and literary career in a decisive manner. To complicate matters, there is one more facet of Briusov's personality that manifested itself in the early
1900's and is an integral part of the history of Symbolism in Russia: Briusov's penchant for spiritualism and demonism. Kristi Groberg's discussion of Briusov in the context of occultism in Russian culture (in Rosenthal 1997, p. 177 ff.) leaves no doubt that the public image he cultivated for himself in the early 1900's was indeed that of a demonic figure, steeped in occult practices, and that he was portrayed by friends as a black magician (mag, chernoknizhnik). She mentions Bal'mont dedicating a cycle of poems to him, titled "Khudozhnik-Diavol"; one of the poems in the cycle is even titled "Shabash" and describes a witches' sabbath in tones not far from Bulgakov's "Velikii bal u Satany" (Master i Margarita, ch. 23), and certainly worth further research in the context of Master i Margarita. Another fact worth mentioning is the relationship between the triangle Ruprecht - Renata - Heinrich in Ognennyi angel and the historical love triangle V. Briusov - Nina Petrovskaja - A. Belyi; Khodasevich, in his memoirs, gives an account of this triangle's history which supports Groberg's findings by stating that at the time of his relationship with Petrovskaja, Briusov was practicing (probably, without believing in it in the strict sense of the word) occultism, spiritism and black magic and

---

60 "Briusov began in his teens to mold himself into the image of the decadent magus. He went on to create a powerful personal image, the personal aura of mystery being enhanced by the Baudelairean statement that God and the Devil were the same to him, the frequent seances of his spiritualist circle, and his contributions to the spiritualist journal Rebus. … Belyi, whose poem Mag (1903) portrays Briusov as a seer, believed that he practiced demonology and black magic and referred to him as the Fiend (Vrag). Bal'mont dedicated a cycle of 15 poems to him, titled "Khudozhnik-Diavol." The memoirs [of Petrovskaja] treat Briusov as a competent practitioner of the "dark sciences" and her relationship to him as a "pact with the devil." Briusov, she metaphorically wrote, offered "a chalice of dark, astringent wine and said, Drink!" Briusov did nothing to dispel these impressions and his public image and demonic behavior led others to perceive of him as a Chernomag".

61 See also A. Belets'kiyi's introduction to Ognennyi Angel in Briusov 1993.

that Petrovskaya herself perceived his relationship with him as a "pact with the devil" that
would help her regain Belyi's love.63

Presumably, all these facts about Briusov would have been widely disseminated,
especially in literary circles; the intertextual links discussed before would suggest that
Bulgakov took a great deal of interest in them. The next part of this paper is an
exploration of how they could have contributed to the genesis of Master i Margarita.

4.7. The figure of Briusov in Master i Margarita

According to Barratt (1987:43), Kataev believed 1923 or 1924 to be the year
when the idea of the "novel about the devil" started taking shape in Bulgakov's mind. One
of the cultural trends particular to this period is the "large output of anti-religious works
devoted to the subject of Jesus and Christianity," a phenomenon in which Bulgakov
apparently took some interest. Chevkin's play Yeshua Ha-Notsri and Gorodetskii's
comments to the effect that it was too "soft" by admitting even the existence of Christ
belong to the same trend and period (idem). An important event in the midst of this anti-
religious campaign, was the death of a high-ranking member of the system. On October
9th, 1924, quite unexpectedly, aged only fifty, Valerii Briusov died of pneumonia.
Bulgakov witnessed the burial and made the following note in his journal:

63 "Брюсов в ту пору занимался оккультизмом, спiritизмом, черною магией, не веря, вероятно, во все это по существу, но веря в самые занятия, как в жест, выражающий определенное душевное движение. Думаю, что и Нина относилась к этому точно так же. Вряд ли верила она, что ее магические опыты, под руководством Брюсова, в самом деле вернули ей любовь Белого. Но она переживала это как подлинный союз с дьяволом. Она хотела верить в свое ведовство."
Ходасевич 1976. p. 7-26
1924 12 октября. Воскресенье.
Сейчас хоронят В. Я. Брюсова. У Лит(ературно)-худ(ожественного) института его имени на Поварской стоит толпа в колоннах. Ждут лошади с красными султанами. В колоннах интеллигенция. Много молодежи -- коммунист(ический) рабфак -- мейерхольдов(ского) типа. (Bulgakov 1991:38)

About a month later, Bulgakov made note in his journal of a memorial lecture for Briusov, given by Andrei Belyi, a lecture which he says to have found unbearably nonsensical: "На меня все это произвело нестерпимое впечатление. Какой-то вздор символиста." (ibid.: 42) Still, he found worth noting, in that lecture, the mention of a conversation about Christ that Belyi and Briusov had once on Arbat street:

-- Шли раз по Арбату. Он вдруг спрашивает (Белый подражал, рассказыв: ... Брюсов): "Скажите, Борис Николаевич, как по-Вашему -- Христос пришел только для одной планеты или для многих?" Во-первых, что я за такая Валаамова ослица-вещ(ая), а, во-вторых, в этом почувствовал подковырку..." (ibid.: p.42)

It may be just a coincidence that the composer Hector Berlioz wrote the "Fantastic Symphony," the fifth movement of which is titled "Dream of a Witches' Sabbath." And undoubtedly, there are many historical characters besides Briusov who could have contributed to the figure of Bulgakov's character Berliz - the president of the literary institution "MASSOLIT" and the editor of a leading literary journal. Previous critical works bring powerful arguments in favor of the hypothesis that Berliz was constructed as a collective figure. Chudakova, for example (1988: 304), gives V. I Blium, L. Averbakh, M. E. Kol'tsov, and especially A. Lunacharskii as possible prototypes, guided by their position as journal editors or leaders of cultural institutions. Bulgakov's Berliz,
however, is more than an influential editor or leader. He is, in addition to that, an erudite: in his discussion about Christ with Ivan Bezdomnyi and later with Woland in Ch. 1 of Master i Margarita, he mentions Kant, Schiller and a number of ancient historians, and demonstrates familiarity with the religious practices of the Aztecs. This points to a broad education, comparable to that which Briusov had demonstrated not only in his literary works (abounding in titles and quotes in Latin and mentions of historical facts and characters) but also in his scholarly articles; incidentally, one of his articles dedicated to ancient Armenian culture, "Сфинксы и вишапы" (1917), demonstrates expertise in Aztec culture. Also, in both the case of Berlioz and Briusov, erudition is associated with professed atheism; Briusov had produced, just before his death, in 1924, a short autobiography in which he said he had been educated as a materialist and atheist "from the cradle". Both have conversations about Christ with fellow writers on the streets of Moscow - one on Arbat, the other at the Patriarshie Prudy -- at the time when atheistic propaganda was at its peak. Finally, Berlioz's power and privileges, just like Briusov's, are taken away by sudden death; both are then given splendid official funerals accompanied by large crowds of sanctioned admirers from the literary establishment (see Master i Margarita, Ch.19). All these facts not only position Briusov as one of the main real-life prototypes of Berlioz, but also, in the light of Briusov's sonnet "Memento mori" (which his death and funeral would have recalled to anyone familiar with his poetry),

65 Bulgakov's well-documented interest (see Sokolov 1996) in Amfiteatrov, who was himself a prominent researcher of Armenian culture, could have, plausibly, brought this article to his attention.
point toward a hypothesis worth further research: that of Briusov's death as the starting point of Bulgakov's creative endeavor which resulted in Master i Margarita.

Another possible reflection of the real-life Briusov can be found in Bulgakov's Pontius Pilate, the Roman procurator of Judea. For one thing, the unparalleled prominence of Roman themes in Briusov's oeuvre (manifest in the poetry volume *Urbi et Orbi* (1903), the historical novel *Altar' pobydy* (1911), and the story "Rhea Sylvia" (1916) to name just the most important works in the “Roman” genre) as well as the writer's travels to Rome and his in-depth knowledge of Roman culture, history and mythology and of Latin language and literature, made him as close to a "Roman" as a Russian writer of the period could be. It is perhaps not by chance that Don-Aminado, in his 1954 memoirs *Poezd na tret'em puti*, referred to him not only as "Первый консул" - emphasizing Briusov's political power and his connection with Roman culture, but also as "самоуверенный и недоступный Каменный Гость, великолепнейший Валерий Брюсов," i.e. in terms rather close to Bulgakov's "сын короля-звездочета, жестокий пятый прокуратор Иудеи, всадник Понтий Пилат." Another connection, even more important in the context of Bulgakov's novel, may be derived from Briusov's position in literary life and his moral and intellectual compromise with the powers that be, which parallels Pilate's compromise in a number of ways.

In Bulgakov's novel, Pontius Pilate confirms the Jewish Sinhedrion's sentence and sends the peaceful philosopher Yeshua Ha-Notsri to his death, despite being initially in favor of releasing him and not finding any criminal evidence against him. He changes his mind, or at least his verdict, when he finds out that Yeshua Ha-Notsri had spread ideas

---

67 See: Дон-Аминадо. Поезд на третьем пути. Мемуары. Москва: Вагриус, 2000
that could be deemed subversive from a political standpoint. The statement by Yeshua that brings about Pilate's change of attitude is this one: "всякая власть является насилием над людьми и что настанет время, когда не будет власти ни кесарей, ни какой-либо иной власти. Человек перейдет в царство истины и справедливости, где вообще не будет надобна никакая власть." (Ch.2). Pilate's confirmation of the death sentence can be seen, from this perspective, as a brutal act of political censorship - paralleled, in the Moscow story line, by the censorship and persecution that the literary establishment enacts upon the Master. Pilate wields political power and is a servant of political power; his decision to send Ha-Notsri to death is driven, it is suggested, not as much by his own worldview (he finds Yeshua's ideas interesting, even congenial) as by the fear of losing his position in society and maybe also his life: "Ты полагаешь, несчастный, что римский прокуратор отпустит человека, говорившего то, что говорил ты? О, боги, боги! Или ты думаешь, что я готов занять твое место?" He regrets his decision immediately (as can be ascertained from his conversation with the high priest Kaifa, from which he tries in vain to obtain a pardon for Yeshua) and then, post-factum, tries to avenge his own injustice by ordering the secret agent Afranii to assassinate Iuda of Kiriaf, the man who turned in Ha-Notsri to the Sanhedrion, and also by showing benevolence to Levii Matvei, one of Ieshua's followers. This does not save him, however, from moral torment. He is aware, and Yeshua's last words, as reported to him by Afranii, remind him, that by sending the innocent philosopher to death he has committed an act of cowardice ("В числе человеческих пороков одним из самых главных он считает трусость," ch. 25).
The confirmation of Ieshua's death sentence by Pontius Pilate thus reminds us, in a broader perspective, of an issue of lasting interest to Bulgakov: that of the Russian intellectuals and writers who jumped, in the aftermath of the October Revolution, on the militant-atheist bandwagon and contributing to the anti-religious propaganda of the time, crucifying Christ, as it were, for a second time by denying his existence. Undoubtedly, Bulgakov's take on the subject is not that of a pious man, who embraced the doctrines of Orthodoxy (although Christianity may have played an important role in his upbringing, see Ianovskaia 1983, 5); his position has nothing in common with religious dogma - as is obvious from the totally un-canonical "Gospel" found in his novel. Bulgakov's Christ - Ieshua is a symbol of love, kindness and naïve belief in the goodness of fellow humans, a symbol that the Master and Margarita share and treasure and that the rest of the society is trying to destroy. The phenomenon of interest and the object of social criticism in Master i Margarita is not the lack of piety in contemporary Communist society, but rather the moral and intellectual decay of society in the aftermath of the October revolution (of which the anti-religious propaganda of the 20's was just one manifestation), a decay for which a number of prominent intellectuals and writers (notably Briusov) were responsible, in virtue of their collaboration with the regime.

There is one more plausible reflection of Briusov's personality in Master i Margarita, a reflection, which in light of what was stated above, appears both intriguing and contradictory. It can be found in the character of Woland, who makes his appearance in Moscow in the guise of a "black magician" and master of the occult -- much like Briusov would have been perceived by his contemporaries in the early 1900's (see section 68

68 See Barratt 1987:43 for a history of Bulgakov's interest in the topic of anti-religious propaganda.
4 above). There is, up to a point, some similarity between Nina Petrovskai'a's relationship to Briusov and their exercises in black magic, as described in Ognennyi angel, and Woland's relationship to Margarita. Both Margarita and Petrovskai'a make a pact with the devil for the sake of love; however, while Briusov and Ruprecht fail to bring back Belyi/Heinrich to Petrovskai'a/Renata, the omnipotent Woland keeps his part of the deal and restores her beloved Master to Margarita. There is, also, some slight evidence to suggest that not only Briusov's demonic and spiritualist past, but also, ironically, his later works may have contributed to Woland's figure: Fagot's explanation to Margarita that the apartment no. 50 was turned into a huge ballroom by a manipulation of the "fifth dimension" of space (ch.22) brings to mind Briusov's poem "Мир N измерений" (1924). This poem and others from the period like "Мир электрона" or "Принцип относительности" (1922) were regarded (not with entire justification) by Soviet critics as examples of poems that testified to a materialist, science-oriented worldview (see Tiapkov 1990:123) when in fact they were not devoid of a certain mystical component. In any case, to the extent that we can argue for a connection between the turn-of-century Briusov and Woland, the connection was crafted by Bulgakov in such a manner that the historical Briusov appears as a caricature of the fictional Satan - Woland, rather than the other way around.

4.8. A complex relationship

We have found, so far, that there appear to be consistent structural coincidences between "Memento mori" and Ognennyi angel on one hand and Master i Margarita on the
other; also, we have found that the conjectures that can be reasonably made about Briusov's "presence" in *Master i Margarita* reveal a rather critical attitude toward Briusov on Bulgakov's part. A contradiction is apparent, and a number of questions legitimately arise: if Bulgakov's intention was to criticize and even ridicule Briusov, as may be inferred from his portrayal of Berlioz, why would he simultaneously pay homage to Briusov by connecting *Master i Margarita* to "Memento mori" and *Ognennyi angel*? Why associate this recognition of Briusov with the opposition between the tragic character of Pontius Pilate, or the demonic Woland, and the ridiculous Berlioz? And, more generally, why did affinity coexist with rejection and how could a critical, even demeaning attitude toward Symbolism (see, for example, Iablokov 2001: 18 and the chapter on Belyi in Sokolov 1997) result in a work which later was characterized as "a quintessentially symbolist novel" (Barratt 1987: 319), "a work which occupies an honorable place among the best esoteric and occult novels, such as Sologub's *Petty Demon*, Briusov's *Fiery Angel* and Bely's *Silver Dove* and *Petersburg*" (Krugovoy 1991: 3)?

To give an answer, one must first take into account the fact that, as Barratt (1987: 316) noted, "The writer was in his impressionable teens when the [Symbolist] movement enjoyed its heyday." This fact not only makes Symbolists and especially their leader, Briusov, likely targets for Bulgakov's "anxiety of influence," but also justifies a certain amount of intellectual affinity. Formulating *Master i Margarita* as a response to Briusov's sonnet and his *Ognennyi angel* can be seen, from this perspective, as an effect of that anxiety, as an attempt to demonstrate artistic maturity by literally taking over the means of artistic expression and developing them in a new and original direction. Leaving the connection in place by re-using the structures may, in fact, have been a way of ensuring
that comparison would be possible, and that readers would be able to judge Bulgakov's work against that of the predecessors that were important to him. The critical attitude toward symbolism can be thus interpreted as a projection of the writer's anxiety, rather than his aesthetic dissatisfaction.

Another aspect of the complexity of the relationship between Bulgakov and Briusov centers around the duality between Briusov the author and Briusov the public figure. To the extent that it can be ascertained from reading Master i Margarita against both Briusov's related works and his biography, Bulgakov appears to have had a great appreciation for the author Briusov, at least up to some point in time, while at the same time being very critical of Briusov the collaborator of the Bolshevik regime, as of someone who betrayed a great intellectual legacy out of fear for his position and the powers that be. This duality can account for the apparent contradictions in the novel if we assume that it was treated by Bulgakov in the symbolist manner, that is, by assigning the public figure (as Berlioz) to the Moscow plane and the author (as the "Roman" Pontius Pilate), to the "l'au delà" of Iershalaim. In Moscow, the self-assured, corrupt and power-greedy Berlioz, in-between his Bolshevik atheist propaganda work and his plans for a vacation in Kislovodsk, ends up under the tram and is buried without his head, in a city still under the impression of the scandalous black magic show at the Variete. On the higher plane, in Iershalaim, the fifth procurator of Judea commits a tragic mistake, out of cowardice, and sends to death, against his own conscience and to his subsequent great remorse, an itinerant philosopher who was preaching love and peace - Ieshua Ha-Notsri. The Muscovite is ridiculed and then relegated to nothingness, in accordance with his own
professed beliefs; the Roman, though, is forgiven in the end (after his death), and paid homage to.

There remains still the question of what specific traces of Briusov's personality are identifiable in Woland. Woland is a character that, through his status of messenger between the plane of phenomena and that of symbols, and his function of observer and critic of society, becomes clearly associated to the authorial persona (the other, earthly reflection of the authorial persona being the helpless and persecuted Master). However, Woland can also be seen as a reflection of the symbolist poet Briusov whom Bulgakov must have admired in his young years; of that demonically inspired Briusov, who wrote in 1907 in his poem titled "Поэту": "Ты должен быть гордым, как знамя; / Ты должен быть острым, как меч; / Как Дантэ, подземное пламя / Должно тебе щеки обжечь."
The allusion to Briusov in Woland appears to be not only a means for Bulgakov to amplify the ridicule of the "Muscovite" Briusov-Berlioz by making his demonic past haunt him, but also an expression of "taking over" the Dantesque tradition, of reincarnating the Demon, the Messenger from the "other side" of reality, that Briusov once was. It is at the same time a recognition of the deep affinity of Bulgakov with his Symbolist predecessor, an affinity catalyzed by Lucifer, their common inspirer and point of convergence, and, maybe, indirectly a recognition of the origins of Master i Margarita in the Briusovian "Memento mori."
4.9. Conclusions

The significant structural correspondences between a 1918 sonnet by Valerii Iakovlevich Briusov, titled "Memento mori," and Mikhail Afanas'evich Bulgakov's novel Master i Margarita open the hypothesis of a special, albeit one-sided, relationship between Bulgakov and the head of the Symbolist school; a relationship which may have been, in fact, one of the major factors in the genesis of Master i Margarita. Evidence to support the hypothesis can be found in both Briusov's works (notably, his novel Ognennyi angel which has already been identified by researchers as one of Bulgakov's sources of inspiration) and in Briusov's biography, and it appears to indicate that Bulgakov's position was not only that of a severe critic of his Symbolist predecessor, but also that of a dedicated admirer and follower of the artistic principles of Symbolism. The hypothesis opens new avenues for interpretation, especially in what concerns the genesis of some of the main characters of Master i Margarita (notably Berlioz and Woland).

It would be too much to claim that Master i Margarita can be read as a "roman à clef" starting from Briusov's sonnet as the key. The polyphonic nature of Master i Margarita and its multi-layered symbolism preclude such a statement. The multitude of alternative readings published so far, without reference to Briusov's sonnet, but with multiple other references, is a powerful argument that Bulgakov's novel supports many "keys" besides the one used here, and that the process of discovery of the text's connections is not going to end soon (as Iablokov (2001:18) puts it, "целостное исследование и систематизация булгаковского интертекста остаются дело будущего.") More than that, it argues for a large degree of freedom of the text, for its
ability to fascinate the reader in conditions of relative "independence" from a specific context of interpretation or with a minimal, almost universally accessible context; a quality which explains, at least to some extent, the worldwide popularity that the novel enjoys.

Still, the exercise of reading Bulgakov through Briusov is useful in that it confirms a number of things that were known or hypothesized about the genesis of the novel and its relationship with the literary environment of the time, and in that it reveals a few others. First of all, it provides support for the idea that Bulgakov is more indebted to his contemporaries than previously believed; as Iablokov (2001:18) intuited, "Предположительно можно утверждать, что подверженность писателя влиянию современной ему литературы была высокой и включала даже тех авторов, к которым, по устоявшемуся мнению, Булгаков относился скептически или прямо негативно (А. Белый, Б. Пильняк и др.)." Also, it supports the idea that unlike some of the writers of his generation, Bulgakov was more open to the influence of his immediate predecessors, or, as Barratt (1987:327) puts it, Bulgakov's work represents "a vital bridge to the Silver Age." The complexity and refinement of the intertextual connections that Bulgakov creates is apparent from the non-trivial treatment of Briusovian motifs and confirms Iablokov's intuition that the abundance of intertext in Bulgakov does not result in an effect of "bricolage" or in a museum-like collection of cultural objects: "в пренасыщенности Булгаковского интертекста содержится предпосылка к его самоотрицанию."(2001:17)

In the context of Briusov's sonnet "Memento mori," the novel Master i margarita appears involved more deeply, and in a more tangible manner, in the social
communication process, than could have been told outside this context. It appears, more than before, as a text taking a clear intellectual and moral stance with regard to the political and cultural evolutions of the 20's; a "memento mori" uttered not in a whisper, but with a diabolic laugh, expressing a rejection of the models of social behavior that were becoming prevalent in that period and drawing the attention to the compromises of the pre-Soviet intellectual elite. The Briusovian context clarifies aspects of the novel's social content that may have been partially obscured by the enormous time span between the novel's inception and its publication. From a poetics standpoint, the context reveals the novel as a remarkable synthesis of the artistic principles of Symbolism and the satire of the early Soviet period, the innovative combination of styles defining the artistic personality of the author both against his predecessors and his contemporaries.
CHAPTER 5

CODE AND INTERPRETATION: BUNIN'S SHORT STORIES AND THE LANGUAGE OF MYTH

5.1. The Relationship Code-Text

In an information-theoretic perspective, a code is essentially the specification of a transformation, on the basis of which new series of symbols can be obtained from existing ones. Since the interpretation of a text amounts, basically, to generating a new text (the text of the interpretation) from an existing text (or ensemble of texts), the process of interpretation can be seen as an operation involving a code; and one of the interesting questions to be asked about the relationship code-text is, to what extent is a given code "fit" to interpret a given text? The task of establishing whether a certain code is involved in the structure of a text amounts, basically, to establishing the degree of similarity between the structures that can be defined on the text with the (presumed) invariant structures of the code. This can be sometimes far from trivial, even if we are talking about a primary code, i.e. about language. It is easy to say, considering the observable structures of Bunin's "Antonovskie iabloki," for example, that the primary code is specified by the Russian language: the congruence of the morphological and
syntactical structures that we observe in the text with the known invariant structures that
define the (contemporary, standard) Russian language allows to state this without a
doubt. However, it is not so easy to assert, based on text observables, that the primary
code of the well-known poem "Dyr bul shchyl..." (1912) by the Futurist Aleksei
Kruchenikh is Russian (despite the fact that the author claims that there is more of the
Russian national spirit in this poem than in all of Pushkin). An attempt to apply the
"code" specified by the structure of Russian to create an interpretation of this poem
results in a reading where, for example, the first word of the poem is interpreted as the
genitive plural of the feminine noun "dyra," and the first word of line 4 ("vy so bu...") as
the second person plural nominative form of a pronoun. However, the congruence stops
here; it cannot be established, with any degree of precision, what parts of speech are
there, or what is the syntactic structure; the low degree of compatibility of the structure of
the given text with the structure of Russian argues that a reading using Russian as the
code, although marginally possible, is not within the intention of the text. (The author's
introductory remarks, in fact, make it clear that the poem is written in a "private"
language, "na sobstvennom iazyke"). The lack of an obvious primary code, as well as the
lack of any appropriate, primary or secondary, code for the "remainder" left after the code
"Russian" exhausted its interpretive capabilities invite the reader to create his or her own
ad-hoc code for interpreting such a text; to practice, in other words, "creative reading."70
A phrase such as "Глокая куздра штеко будланула бокра и курдячит бокрёнка"

---

phenomenon of "zaum" in Russian literature. See also Bogomolov 2005.
70 Kruchenykh did clarify some of the principles of his "transrational" writing in later works (Faktura slova,
Deklaratsii. Kniga 120-a: Moscow, 1923) in which he provided a few elements of a "code" that can be
applied to the interpretation of poems like the one quoted above.
(attributed to the linguist L. V. Scherba) falls somewhere in-between; everything is in place except for the root morphemes, which do not belong to the set of roots characteristic of Russian; otherwise, the syntactic and morphological structure, and the semantics of the recognizable morphemes, can be easily "decoded".

The same perspective also applies to the relationships between a given text and (what Iu. Lotman calls) the secondary codes, or languages, that are present in a given culture, but the determination of a relationship text-code presents a much higher degree of difficulty. "When a writer chooses a certain genre, style or artistic school," writes Lotman, "he is also choosing the language in which he intends to address the reader; this language enters into the complex hierarchy of the artistic languages of a given epoch, a given culture, a given people" (Lotman 1977, p. 18). The task of defining the place of a text or a corpus of texts in the complex hierarchy of "secondary codes" of a culture - which is one of the fundamental tasks of literary scholarship - is complicated not only by the multiplicity of secondary encodings within the text (as described in Lotman) but also by the fact that secondary codes (that in literature can be defined as invariant structures over genres, styles, schools) are less "stable" objects and harder to define than primary codes. (A classical example of this instability, concerning Realism, is given in Roman Jakobson's article "What is Realism?" Jakobson 1973, 35-56). Leaving aside the question of the (conscious or unconscious) choices of the writer, "secondary codes" viewed from the reader's side still pose the following problems:

- Not all secondary codes defined in a given culture are equally accessible to all the members of that culture; some of them can only be defined as invariant for specific groups of readers, or for specific periods; this translates into significant variations in the
way these codes function in that culture (differences in reader response, variability of aesthetic judgments, etc.);

- Not all "secondary codes" are well-defined, even for a well-defined spatial or temporal cross-section of the culture in which they occur; in fact, as R. Jakobson shows in his article about Realism (Jakobson 1973), some of them are actually quite ill-defined and this also translates into significant variations in their function, i.e. in the reaction to, and interpretation and description of, artistic texts.

- The exact role of each of the various secondary codes in the "economy" of a particular artistic text is not always clear (even if the codes are well-defined); we often speak, in such situations, of a mix of genres, styles, ideological stances etc., and may find it difficult to define the "dominant" secondary code for the given text, and perhaps easier to define a new secondary code starting from that text;

- Last but not least, if we view the texts as the phenotypes, and the totality of literary codes as the genotypes of a given literature, we can describe the evolution of the literature in the same way that we describe the evolution of a language (or for that matter, any complex system): successful innovations in phenotypes translate into a change in the genotype. Successfully innovative texts start lasting evolutionary trends, which effect structural changes both in the "primary modelling system" (the natural language) and the "secondary modelling systems" (literary genres, schools, styles). Since the more appropriate examples of the influence of, say, Pushkin or Gogol's texts on the subsequent literary schools and the Russian literary language would take too long to develop, I will just mention here the fact that a search for the phrase "dyr bul shchyl" in the Russian World Wide Web reveals a number of documents where the phrase "dyr bul shchyl"
appears not as part of the original text and not as a quote, but as a common noun denoting either "nonsensical babbling," or "incomprehensible poetry." Codes and texts form a complex system, akin to organisms or natural ecosystems, where the relationship from part to whole is circular; while the meaning of a text is decoded on the basis of existing codes, it is equally true that every new text, to the extent that it reaches an audience, contributes to the definition and redefinition of codes in a given cultural context and thus influences its own reception and the reception of other texts.

In an attempt to answer, on a semiotic basis, the difficult question "Which is the source of wonder and enjoyment in an artistic text?" Iurii Lotman came to the conclusion that the "multiple encoding" of the text must play an important part (see Lotman 1971:78); in his opinion, the multiplicity of codes, or languages involved in an artistic text, and which opens the possibility for a multiplicity of readings, is an essential part of what makes the artistic text "artistic," pleasurable to the senses and at the same time difficult to describe in a systematic way. In other words, artistic texts offer the reader a multitude of ways of interaction; each application of a code to the text results in a partial understanding of the text and a "remainder," which entices the reader on a new semiotic adventure, in a process quite similar to play: "The game principle becomes the basis for the semantic organization [of the artistic text]" (Lotman 1977, p.65). The idea of the present chapter was inspired by the observation that one of the multiple codes identifiable in the short story "Грамматика любви" by I. A. Bunin is the code of folk literature, of myths and fantastic tales, and that the relationship between Bunin's text and the code can be described as a correspondence of the code and text structures. The presence of mythological and folktale elements in Bunin's prose has been noted before. Boris Briker
has demonstrated the existence of a folk tale substrate in Bunin's "A Cold Autumn" (see Briker 1998); however, no attempt was made to generalize the investigation to other works by Bunin. In the following, after a discussion of the archetypal, mythological structures in Bunin's short story "Грамматика любви," I will attempt to evaluate, on the basis of other stories by Bunin, to what extent the "code" of myths and folktales is relevant to the understanding of Bunin's creation.

5.2. Mythological structures in "Грамматика любви" (1915)

Every text defines its own poetic language, whose affinities with pre-existing languages and influences on subsequent languages can in principle be described in a structural manner. To state that a text "speaks" a certain language - which is equivalent to saying that it supports decoding by a certain code - means to establish a modelling relation between two structures: one, defined on the basis of the text, and the other, defined by the code. The responses obtained by challenging the text with various codes - existing or invented - define the poetic structure of the text, in which various modalities of encoding meaning play different, more or less important roles.

Bunin's "Grammar of Love" is a story about a nobleman, Ivlev, who travels the Russian countryside and stops to visit first a countess, and then the estate of a deceased acquaintance, Khvoshchinskii, whose fanatic love for a peasant woman on his estate, Lushka, had become the subject of local gossip. From Khvoshchinskii's personal library Ivlev obtains a book, titled “The Grammar of Love." The text structure thus characterized

---

is consistent with the "short story" code, in the sense that it fits the well-known definition of the genre: it has a small number of characters, a simple plot structure, the action spans a relatively short period of time and concentrates on a limited number of events, or focal points (other possible examples would be Pushkin's “Станционный смотритель” or Chekhov's “Смерть чиновника.”) Taking into account other structural elements, like the prevalence of narratively "unmotivated" details, it is possible to argue for further connections with the Realist tradition. But this relationship with the short story code, as is already obvious, can only reveal so much about the story: almost all it reveals can be found in the above plot summary. The "short story" code is just one of the multiple codes involved in the text; with its broad coverage and weak resolution power, it leaves after its application, in Lotman's terms, a significant remainder of structure unaccounted for.

Making the next move in the game with the text, trying to obtain more meaning from it, we are trying to read it now in another (secondary) language: the language of myth.

The various definitions and typologies of myth proposed so far, such as those of Mircea Eliade (1957), or Bronislaw Malinowski (1945) agree on the fact that the myth fulfils a sacred function, revealing something of “a wholly different order in the ordinary profane world” (Eliade 1957:11). Another point of agreement is that myths are narratives that refer to a primary, sacred time and a sacred space, that they form the basis for understanding reality (archetypal thinking) and that they are the basis for rituals and religious beliefs. On the level of the narrative structure, myths show a number of common traits, some of which, proper to a specific class of folk narratives (fantastic tales), have been described by Propp in his “Morphology of the Folk Tale”(1968). I will be thus looking, in "Грамматика любви," for signs of the sacred, for rituals and
archetypes, and for the narrative structures characteristic of folk literature, and investigating to what extent a rebuilding of Bunin's text on the structure of myth (substituting archetypal plot elements to actual plot elements) is possible.

An important objection that can be brought at this point is that mythological, archetypal subtexts subsist in most literary texts, and that the possibility of discovering mythological structures in Bunin's text does not in fact say too much about the text. However, it cannot be ignored that the phylogenetic relationship is mediated by a chain of morphogenetic events, which means that the codes defined by, for example, the Russian folk tale and the Russian panegyric ode of the 18-th century have qualitatively different structures. If some sort of archetypal code can be applied to the decoding of literary texts most of the time, still there are various degrees of congruence of the code and text structure, various degrees to which the text "responds" to the application of a certain code. In many cases, a mythological reading, even when based not on myth invariants but on a specific myth, chosen for maximum congruence with the structure of the analysed text, can only account for a very limited part of it, leaving behind an important remainder; in such cases it can be said that a mythological, archetypal reading is not part of the intention of the text. In the following, I will try to show that, to the contrary, the response of Bunin's "Грамматика любви" to the mythological code goes beyond the unavoidable phylogenetic relationship of literature and myth, and that from among the languages of Russian culture, the language of myth accounts for a significant part of the text structure.

A first striking feature of the story "Грамматика любви," which hints, but does not yet demonstrate that a mythological interpretation is possible, is that the characters'
identity is poorly defined. All we get to find about Ivlev is that his name is Ivlev, and that he's a nobleman rather than a peasant. His carriage driver doesn't even have a name, he is just a "malyi" (fellow), son of a wealthy peasant. Even the detail about the driver's father is not compositionally motivated; it just serves to create what R. Barthes calls an "effect of reality." The countess, whom Ivlev visits first, also has no name and no past. In what concerns the couple Khvoshchinskii - Lushka, all the information that we get is that he was a local nobleman, and she - a peasant girl. None of them has a background or is placed in context and they all appear highly schematic, much like folktale characters. In fact, as I will show, they embody quite closely the invariant functions of folk tale characters, as described by Propp in his Morphology of the Folktale.72

In a reading using the fantastic story code, Ivlev is the protagonist, or seeker (iskatel’, in Propp’s terms); the novice, on the way to initiation in the secret of love. Malyi, the carriage driver, is the helper, similar to the horse of the folktale hero; he can also be seen as a psychopomp, the carrier that, much like Charon, helps the protagonist pass from one realm of being to another. The countess is the sender, who shows the hero the path to initiation, and also a helper. The position of the antagonist is filled by the son of the deceased acquaintance, Khvoshchinskii: he is the gatekeeper of the sacred place that the protagonist must fight and defeat in order to become initiated. The object of the search, and token of initiation, is Khvoshchinskii's book, the Grammar of Love. Khvoshchinskii senior, although not present in the story, is the sacerdote, or wise man,

72 I am replicating here Boris Briker's approach to "Cold Autumn" (see Briker 1998): "Although there are no fantastic or supernatural elements in Bunin's story, the archetypal motifs of the heroine's quest make it possible to present this plot as a fairy tale. The model of fairy tale quest (i.e., Propp's "functions") underlies the plot of this retelling of Bunin's short story, though in reduced form."
who will share the secret, the key to initiation with the novice, after the novice has passed all tests.

The mythological plot can be described quite accurately with the help of a subset of folk tale functions (namely, 12 to 19) as defined in Propp’s study “The Morphology of the Folk Tale.” It unfolds as follows:

- The protagonist meets the sender;
- The sender shows the protagonist the way, and he leaves for his goal;
- The protagonist, with the help of his carrier, overcomes obstacles and adversities to reach the destination;
- The gatekeeper tries to divert the protagonist; they have a final confrontation, the protagonist wins;
- The protagonist obtains the object of the quest, the token of his initiation.

In the beginning of the story, the protagonist is already on the road to an unknown destination. The text provides no clue to the initial destination of Ivlev's travel: we only find out that it is in a distant corner of the county. The visit to the countess and then the visit to the estate of Khvoshchino are not part of his initial plans; on the contrary, it is the driver who takes him to each of these places, under the pretext of having to rest and feed the horses. Ivlev, apparently traveling without a precise goal, is in fact passively, hesitantly seeking the mystical experience, leaving it up to the carrier and the helper to show him the path to the life-changing initiation.

The path takes Ivlev first to the estate of the young countess. The encounter has many attributes which bring it close to a mystical encounter between a novice protagonist and a folktale sender or helper: the protagonist receives a gift and an advice, or clue, to
what he has to do further. The gift is the tea and the pastry which are brought by the young barefooted servant on an "old silver tray": "на старом серебряном подносе стакан крепкого сивого чая из прудовки и корзиночку с печеньем, засиженным мухами." The silver tray is a typical prop for a protagonist-helper encounter, and the tea looks like a magic potion, coming from an old samovar, fuming green: "густо плыл мимо окон зеленый дым самовара." The ancient pastry and the almost alchemical samovar create a slightly grotesque atmosphere. The countess herself reminds one vaguely of Baba Iaga; she makes a sloppy appearance: "Графиня была в широком розовом капоте, с открытой напудренной грудью; она курила, глубоко затягиваясь, часто поправляла волосы, до плеч обнажая свои тугие и круглые руки." She not only suggests physical love, but also introduces love in her discussion with Ivlev: "она все сводила разговоры на любовь и между прочим рассказывала про своего близкого соседа, помещика Хвощинского, который, как знал Ивлев еще с детства, всю жизнь был помешан на любви к своей горничной Лушке, умершей в ранней молодости." This story, which she mentions just "by the way," exerts a powerful fascination on Ivlev and sets him on the path to the sacred place of initiation. It is, as he himself recognizes, a story that he knew since childhood, and, most likely, Lushka had become for him the archetype of the lover: "я в молодости был почти влюблен в нее, воображал, думая о ней, бог знает что." He finds from the countess that Lushka’s lover, count Khvoshchinsky, the person who held the secret to initiation is dead, and leaving, he thinks about going there, with the faint hope that even if Khvoshchinskii is dead, some clues to initiation can still be gained: "Надо непременно заехать, хоть взглянуть на это опустевшее святилище таинственной Лушки." But although he
initially makes a decision to go there ("nado nepremенно заезжать") he does not ask the driver to take him to Khvoshchinskoе; his thoughts reveal more fear and hesitation: "Но что за человек был этот Хвошинский? Сумасшедший или просто какая-то ошеломленная, вся на одном сосредоточенная душа?." Further intervention from the magic carrier is needed at this point to keep the protagonist on the path to his goal:

"— А нам опять надо заезжать... в это, в Хвошино-то... Ишь как лошади-то уморились!

— Сделай милость, — сказал Ивлев."

Before the encounter with the gatekeeper the protagonist has to face a series of obstacles. After he leaves the countess’s estate, the landscape becomes more and more inhospitable as he approaches the destination: "Места становились все беднее и глуше. Кончился рубеж, лошади пошли шагом и спустили покосившийся тарантас размытой колдобиной под горку; в какие-то еще не кошенные луга, зеленые скаты которых грустно выделялись на низких тучах. " The impression is one of a deserted place, of isolation: "Объехали какую-то старую плотину, потонувшую в крапиве, и давно высохший пруд — глубокую яругу, заросшую бурьяном выше человеческого роста...",".."ни души не было кругом," and the road itself becomes more and more difficult: "Потом дорога, то пропадая, то возобновляясь, стала переходить с одного бока на другой по днищам оврагов, по буеракам в ольховых кустах и верболозах..." The atmosphere becomes even more somber as they approach their destination: clouds hanging low and a sky full of rain form a sad canopy over the road.

The peasant house (izba) at the edge of the Khvoshchinskoe estate is another obstacle; its desolate appearance suggests emptiness and destruction: "На бугре, куда
In front of the house, the protagonist is suddenly attacked by a pack of huge furious dogs that appear from nowhere: "откуда-то вырвалась целая орава громадных собак." A sudden thunderbolt ("оглушительный удар грома") sets the horses running, and at the same time, by "cracking the sky open" ("небо раскололось") signals the passage from the worldly dimension to the mythological dimension, from profane space to sacred space, to the realm where the protagonist is to become part of the mysteries.

The final destination, the Khvoshchino mansion, is described as having some unusual features: it sits atop a small hill which is a usual location for a sacred place, like a temple, and it is isolated, which is also typical for sacred spots ("стоял на совершенно голом месте. Не было кругом ни сада, ни построек"). It doesn't have a real gate, but rather a symbolic one - ("только два кирпичных столба на месте ворот да лопухи по канавам") - two pillars next to one another, between which the protagonist has to pass before he can encounter the two protagonists of the myth, the man and the woman bound by love. The small windows give the house a desolate look, however the walls are thick and the porches are big and somber ("огромны были мрачные крыльца"). Like a temple, it is filled with cult objects: icons, candles, glasses with golden rims. Ritual sacrifices are suggested by an empty bird cage and a live bird in a bag on the floor; two wedding candles look like "dead bodies"; the floors are covered with dead bees.

The gatekeeper, Khvoshchinsky’s son, seems rather unworthy of his function; the young man lets Ivlev into the house, shows him the rooms, then he lets him into the altar.
of the temple – Khvoshchinskii’s room, the sancta sanctorum. To underline that this is a key point in the story, the text emphasizes the ritual quality of the gesture of opening the door to the sanctuary: "молодой человек остановился возле низенькой двери и вынул из кармана брюк большой ключ. С трудом повернув его в ржавой замочной скважине, он распахнул дверь, что-то пробормотал." Khvoshchinskii’s son only offers some faint resistance when Ivlev wants to see his mother's jewels; he has the impulse to stop Ivlev, but then desists. He becomes more reluctant to unveil the secrets of the house when Ivlev wants to take away the most sacred object in the temple, the book "Грамматика любви," but somehow - maybe by offering the young man a sum of money, a "profane" detail conspicuously absent from the story - Ivlev manages to overcome his opposition.

In fact, it could be argued that the big obstacle that Ivlev has to overcome, his real antagonist, is not the resistance of Khvoshchinskii junior, but rather his own inhibitions, his own fear of being ridiculous in his pursuit of legendary love and the resulting sense of shame. The text insists on this inner struggle, which is expressed on a number of occasions. Expressions such as “overcoming his awkwardness” (or “shame”), “stealthily looking around” become increasingly frequent as the protagonist approaches his goal. Ivlev manages to overcome this sense of shame and discomfort, however, and he does encounter both heroes of his myth about love, as he obtains access to the symbols that stand for their lives, for their existence, even if they are now in another dimension. One can judge the power of their message and the transformation that they bring in him by his strongly emotional reactions: "И такое волнение овладело им при взгляде на эти шарики, некогда лежавшие на шее той, которой суждено было быть столь любимой
Ivlev's triumph – the success of his quest -- is marked by the light of the sunset coming in through the clouds and into the house; he is illuminated simultaneously by nature and by the secrets he has discovered.

The text leaves no doubt as to the esoteric, religious quality of Ivlev's perception of Lushka's story. The marks of the sacred, the supernatural, the divine, of the religious ecstasy before the powerful myth about love are there ever since Khvoshchinskii is first mentioned, and become more intense toward the end of the story. "Sacred" vocabulary abounds: "Этот чудак обоготворил ее," "святилище таинственной Лушки," "бедный приют любви, любви непонятной, в какое-то экстатическое житие превратившее целую человеческую жизнь," "ее ожерелье... оставило в нем чувство сложное, похожее на то, кекое испытал он... при взгляде на реликвии одной святой."

Ivlev's mythological worldview, extremely sensitive to everything that is "of a wholly different order in the ordinary, profane world" is strongly echoed in in the titles of the books in Khvoshchinskii's library, abounding with esoteric references: "Заклятое урочище, Утренняя звезда и ночные демоны, Размышления о таинствах мироздания, Чудесное путешествие в волшебный край, Новейший сонник." In these books, and especially in "Грамматика любви," Ivlev finds a common point with his initiator; he understands him ("Так вот чем питалась та одинокая душа.."."но может быть она, эта душа, и впрямь не совсем была безумна?") The understanding of the dead man's world is the moment of initiation, underlined by the lines remembered from Baratynskii: "Есть бытие, но именем каким ее назвать? Ни сон оно, ни бдение, меж них оно, и в человеке им с безумием граничит разумение." As a result of the process
of initiation, Ivlev will exclude madness as an explanation for Khvoshchinskii's behavior and will become capable to relate to it in a way that other people (who consider Khvoshchinskii mad) cannot. He takes with him the book both as a token of his initiation into the mystery of love and as a guide, a sort of spiritual inheritance from the hero of his myth of love. He is now empowered to build his own temple of love.

The structure of the story "Грамматика любви" by Ivan Bunin closely follows that of an initiation journey. Features like the schematic functional characters, the motif of the journey and the quest, the gradual increase of the difficulty of challenges that the main character has to face, the motif of the sacred space as point of destination and the climax with the initiation, illumination and transformation of the hero make it possible to state that the structure of the code of myth is compatible with the structure of the text; in other words, that a mythological, archetypal reading is within the intention of the text.

The sacred content has a layered structure, where the initiation story is built upon a myth of eternal love (Khvoshchinskii's love story) which in its turn has roots in the general esoteric tradition (Khvoshchinskii's library). The reader discovers a sacred text in Ivlev's story, who discovers a sacred text in Khvoshchinskii's story, who in his own turn discovers a sacred text in his book "Грамматика любви." The exhortation in the quatrain of verses that ends the story, "В преданьях сладостных живи," creates a parallel mirror effect as all the three layers of myth in the story can be identified as "сладостные предания."

The story’s mythological content brings it close to the poetics of symbolism. A number of the objects that are important in the economy of the narrative (the sun ray, the thunderbolt, Lushka's jewels, Khvoshchinskii's book, the wedding candles) have a double
signification: one related to the material world, where trivial explanations for phenomena such as Khvoshchinskii's passion can be found easily, and the other one, in a "superior dimension" which the protagonist apparently values infinitely more than the material world. The house at Khvoshchino, the objects that belonged to the two lovers, the book, the poem at the end act as gateways through which the protagonist is allowed to reach the sacred dimension, meet his inspirer, and receive the esoteric knowledge of the mystery of love.

5.3. Mythological codes in Bunin's prose

Preceding "Грамматика любви" by a few years, "Суходол" (Bunin 1965 v.3: 183-197), dated 1911, offers another example of a text whose structure incorporates mythological elements. The story, on the surface about the tragic fate and decline of a landowners family, has been given different interpretations in the literature; J. Woodward sees it as part of a "serialized epitaph" of the Russian traditional culture, while D. Peterson interprets it as an instance of "Gothic romance" (Peterson 1987:37). In an archetypal reading, Bunin's story about the Khrushchevs can be seen as a story about an accursed space, a space dominated and ruled by mysterious dark forces. A realm of tragedy and madness, whose grotesque symbol is an icon of the decapitated Saint Mercurius, holding his own head in his arms, the estate of Sukhodol - The Dry Valley - brings unhappiness and death to those who inhabit it. The story is narrated alternatively by a servant of the family, a peasant woman, Natalia, who embodies the living memory
of the place, and a young descendent of the Khrushchevs, who seems to be at once horrified and fascinated by the history of his family.

The grandfather of the family, Piotr Kirillovich, falls into apathy after the death of his beloved wife and becomes a lunatic after being hit by a great number of apples falling suddenly from an apple tree; treated with disrespect, dishonesty and even plain violence and hostility by his servants, he ends up being killed by one of them, Gervas'ka, who is in fact his illegitimate son - an echo of the Dostoevskian motif of the paricide (The Brothers Karamazov) by the illegitimate son. His daughter, Tonia, falls ill after a failed love relationship and the death of her father, and believes herself to be possessed by the devil, wherefore she seeks the help of local exorcists. Natalia, the servant, commits hubris by falling in love with the son of her master, Piotr Petrovich, and is temporarily exiled to another estate of the family, where the criminal Gervas'ka comes to frighten and threaten her. Totally committed to her impossible love, she never finds happiness in life again. On the contrary, she has to endure more suffering: she is repeatedly, violently raped by a "strannik," or religious pilgrim who takes shelter at the Khrushchev estate. Finally, the mansion is destroyed by fire and later the heir of the estate, Piotr Petrovich, already married and with children, is killed by his horse on a stormy winter night, on his way back home from an adulterous encounter.

Mythological motifs in "Суходол" are arranged into a narrative structure that is not so easily recognizable as in "Грамматика любви"; a consistent structural correlation of the narrative as a whole with a mythological invariant is harder to demonstrate. The extraconjugal relation of Piotr Kirillovich resulting in the birth of Gervas'ka, a motif which could fill the position of the "original sin," the root of all evils, in the mythological
code, would be perhaps a good starting point in such an investigation; Суходол can then be seen as a retribution story, describing the dire consequences of this original sin.

At a higher resolution level, that of particular motifs, more congruences can be obtained. Both Gervas'ka and the pilgrim Iushka who rapes Natalia are unequivocally, transparently portrayed as demonic characters. In the rendition of the parricide theme, the mythological code interferes strongly with the Dostoevskii code: Gervas'ka, through the fact that he is a parricide, an illegitimate son, a servant in the house of his father, and on top of that is beardless and a balalaika player, is clearly connected with Dostoevskii's Smerdiakov (who plays guitar rather than balalaika, but otherwise matches exactly the description given above). The old Khrushchev, Gervas'ka's father, reminds Fedor Karamazov by his habit of hiding money throughout the house (just as an aside, there is even mention of a village named Chermashnoe - not Chermashnia - in the story). The other "representative" of the forces of evil, Iushka, emerges as a less clearly delineated character when seen through the "Dostoevskii code" but corresponds quite well to the impostor character of Russian fairy tales: he is beardless, just like Gervas'ka, red-haired, has a hunchback, appears out of nowhere and through ruse, manages to obtain undeserved favors: "И так поразил своей прямотой барыню, что на другой же день мог перебраться в лакейскую и стать совсем своим человеком в доме." Just by his demonic appearance, he arouses in Natalia atavic, archetypal fears and forebodings of rape and fire, which despite her prayers and attempts at exorcism, all come true in the end.

Natalia's mistress, Tonia, becomes at the end of the story a folktale character herself: from the educated, sensitive, piano-playing and French-speaking nobleman's
daughter, she transforms into Baba Iaga, spending her old days without light nor heat, smoking her pipe "like a Siberian shaman," in a peasant hut serving as a dump for the broken, burnt, dusty symbols of her forgotten youth and happiness. Her first appearance in the story is remarkably similar to the encounter of Ivlev and the countess in "Грамматика любви"; she meets her young nephew on the road to the mansion, dressed in the same type of wide gown that - again - barely covers her chest: "И вдруг, у самого поворота в Суходол, увидали мы...высокую престранную фигуру в халате и в шлыке... Не сама ли это Баба Яга?...На голое тело ее был надет рваный и по пояс мокрый халат не закрывавший тощих грудей...Кричала она так, точно мы были глухие... И по крику поняли; это тетя Тоня." (cf. "в широком розовом капоте, с открытой напудренной грудью" in "Грамматика любви.")

Natalia is not only the observer and narrator of the tragedy of the Khrushchevs; she is herself the protagonist of another myth, similar to Khvoschinskii's, a myth of impossible (but eternal) love. This type of myth seems to be one of Bunin's favorites; in his rendition, it usually involves a nobleman and his female servant. Natalia's powerful, mystical love for Piotr Petrovich, for the sake of which she sacrifices her entire life, is remarkably similar not only to that of Khvoschinskii and Lushka in "Грамматика любви" but also to that of Nadezhda and Nikolai Alekseevich in "Темные аллеи." On another plane Natalia, as the storyteller and the bearer of the memory of the place, is also the vehicle of transparent references to folk traditions (demonism, incantations, rituals for healing, for protection against the forces of nature) and the Christian traditions.

If "Суходол" is the story of the doom of a family, "Господин из Сан Франциско" (1915) is a story of personal doom, reminiscent of Tolstoy's "Смерть Ивана
Ильича." The plot is unusually simple: an unnamed elderly gentleman, a businessman from San Francisco, dies suddenly from a stroke while on a pleasure trip to Europe, in a hotel on Capri Island, and his body is returned home. However, the epigraph, a line from Revelation (18:10, "Горе тебе Вавилон, город крепкий") hints that more "meaning" can be extracted from the text by reading it through the code defined by the Christian sacred writings.

The interrelated binary oppositions rich-poor, material-spiritual, earthly-heavenly, passing-eternal, oppositions of great importance in Christian theology, are mirrored in Bunin's text, forming a basic layer of compatibility with the Revelation code. Throughout his life, the Gentleman from San Francisco had been driven by materialist goals: "до этой поры он не жил, а лишь существовал... работал не покладая рук." His wealth and power were obtained not only through his own work, but also through the exploitation of thousands of other people: "китайцы, которых он выписывал к себе на работы целыми тысячами, хорошо знали, что это значит." Even deciding to rest and go on a pleasure trip, he cannot get his mind off business: the trip is not only an opportunity to enjoy the luxury of the cruise ship and European spas, something that he believes he deserves, but also an occasion to find a rich husband for his daughter. The Gentleman from San Francisco is a "sinner"; his sin is materialism, greed, and the rejection of everything spiritual - and divine punishment awaits him, like once the ancient, rich, immoral and materialistic city of Babilon.

The description of the captain of the ship - "рыжего человека чудовищной величины и грузности, всегда как сонного, похожего в своем мундире... на огромного идола," from the very beginning of the story points to the fact that the
Gentleman is already in the power of demonic forces. The role of the harbinger of death, played in "Суходол" by the night owl, is taken over in this story by the ship's horn: "на баке поминутно взвывала с адской мрачностью и неистово взвизгивала сирена." The Gentleman's death comes a few days after his arrival, suddenly, from a stroke, as in the Biblical continuation to the epigraph, "ибо в один час пришел суд твой." His body, neglected and mistreated, is brought back to America by the same demonic captain, on the same ship. Having arrived to Europe on the upper deck of the ship, in comfort and luxury, the Gentleman returns in a wooden box, on the lower deck, a place which in Bunin's rendition becomes unequivocally hellish: .."подводная утрьбпа парохода,та, где глухо гоготали исполниснке топки, пожирающие своими раскаленнымпн зевами груди каменного угля, с грохотом ввергаемого в них облитыми едким, грызным потом и по пояс голыми людми, багровыми от пламени."

The code of the Christian tradition is strongly dominant in "Господин из Сан Франциско"; however, it does not exhaust the structure of the text. Bunin's story references, for example, the story of the Roman emperor Tiberius, who, "запутавшийся в своих жестоких и грязных поступках," spent his life in isolation on Capri, afraid of being murdered; this offers yet another perspective on the Gentleman's story. The name of the passenger ship, "Atlantida," is a mythological reference to doom and destruction, coming from the ancient Greek tradition; the ship's features, the luxurious decks bathed in blinding electric light, the restaurants, the music bands, remind a similar, modern story of doom - that of the Titanic, the famous ship that went down just a few years before Bunin wrote "Господин из Сан Франциско."
Mythological components can also be found in the poetic language of "Легкое дыхание" (1916) (Bunin 1965-66, 4: 355-60). The story describes the tragedy of an unusually beautiful highschool girl, Olia Meshcherskaia, who is seduced by a friend of her father. After her seduction she embarks on a promiscuous life (out of despair, perhaps, and also out of what appears like a desire to inflict emotional damage upon men) and has several affairs. She ends up killed by one of her lovers, a young, plebean-looking Cossack officer, whom she had promised to marry and then ridiculed for believing her.

Olia Meshcherskaia has all the superlative attributes of a fairytale princess: she grows "не по дням, а по часам" to become a rare beauty: "В четырнадцать лет у нее, при тонкой талии и стройных ножках, уже хорошо обрисовывались груди и все те формы, очарование которых еще никогда не выразило человеческое слово; в пятнадцать она слыла уже красавицей." Her unusual beauty and her "ветренность" turn into her nemesis. The motifs appearing in the theme of her initial seduction parallel closely easily recognizable folktale motifs: the absence of the parents, the naivete of the child who opens the door of the house to the villain (a friend of her father), the ruse of the villain who uses deceitful methods to attain his goal. The congruence stops here: there is no positive hero coming to the rescue and no intervention of magic helpers; she falls pray to her seducer and her path goes downhill from that moment on. The fatal moment comes, like for Anna Karenina, at a train station, where the jealous Cossack officer, about to leave the town, hears from Olia that all her promises to him were just cruel deceit and, in an access of fury, kills her with his gun.

However, just as for Lushka in "Grammatika liubvi," this is just the beginning of another story. The tragic heroine, dying, reuniting with nature, leaves behind her a myth
of feminine beauty and grace, originating - like Khvoshchinskii's myth of eternal love - from an old book in a library: "Я в одной папиной книге - у него много старинных, смешных книг - прочла, какая красота должна быть у женщины..." Olia's school teacher, a lady for whom love is destined to remain just a myth, "немолодая девушка, давно живущая какой-нибудь выдумкой, заменяющей ей действительно жизнь" becomes captivated and fascinated by Olia's story: "Смерть Оли Мещерской пленила ее новой мечтой. Теперь Оля Мещерская - предмет ее неотступных дум и чувств."

The memory of Olia's "graceful breath" becomes for her a sacred symbol of universal grace, an object of ritual worship: "Она ходит на ее могилу каждый праздник, по часам не спускает глаз с дубового креста, вспоминает бледное личико Оли в гробу и то, что однажды послушала: ...-Главное, знаешь ли что? Легкое дыхание! А ведь оно у меня есть - Ты послушай, как я вздыхаю, ведь правда, есть?"

An important point of convergence with the mythological tradition, common to all these stories, is the correspondence of the states of nature with the states of the heroes and the direct intervention of nature in the life of the heroes. The coalescence of man and nature into an inseparable whole, echoing the primitive man's animistic and pantheistic beliefs, is both an invariant element of myth and one of the recurring themes in Bunin's prose. In Жизнь Арсеньева, the autobiographical character, in reply to a remark that "there are too many descriptions of nature in Fet's poetry," tries to defend the point "что нет никакой отдельной для нас природы; что каждое малейшее движение воздуха есть движение нашей собственной жизни" (Bunin 1965-66, 6: 214). The principle thus formulated becomes a structural element in Жизнь Арсеньева and, arguably, most of Bunin's writings. Nature is Bunin's favorite, omnipresent character, communicating in a
variety of forms with all other characters. In "Антоновские яблоки," a good apple crop predicts a happy year. In "Суходол," the life of the trees and plants in the garden around the Khrushchev mansion reflects the life of the Khrushchev family. In "Господин из Сан Франциско" the deceased, unnamed traveler is mourned by the ocean: .."над гудевшим, как погребальная месса, и ходившим траурными от серебряной пены горами океаном." In "Легкое дыхание" the main character, Olia Meshcherskaia, is reunited in death with the sky and the wind: "Теперь это легкое дыхание снова рассеялось в мире, в этом облачном небе, в этом холодном осеннем ветре."

Investigating to what extent the mythological code applies to other texts by Bunin, I found that most of the stories belonging to Bunin's early period, like "В деревне" (1897), despite their concern for nature and the life of the peasant folk, do not in general invite mythological interpretations. Stories from the late 1930's onward ("Темные аллеи," "Кавказ," "Муза" etc.), do respond to mythological codes but generally not with the same intensity as, for example, "Грамматика любви" (1915). The turning point in Bunin's creation, from the standpoint of its relationship to the mythological tradition, appears to be represented by a cycle of stories, written between 1907-1909, the time of Bunin's voyage to the Orient: Turkey, Greece, Egypt, Palestine, Lebanon. The titles of these stories, which are in fact fragments of an Oriental travelogue ("Пустыня дьявола," "Страна содомская," "Море богов," "Свет зодиака," "Храм солнца") are of the same substance with the titles of the books in Khvoshchinskii's library (see above); and that the whole volume Тень птицы (1911) is in fact a long and fascinating journey of initiation, or, to use one of Khvoshchinskii's titles, a "Чудесное путешествие в волшебный край." The traveler meets Legendary historical figures and
their deeds from the pharaohs to the Arab Caliphs to the Turkish Sultans, the writers of
the Latin, Greek, and Persian antiquity, the sacred places and monuments of the antique
world, from Greek temples to the Gizeh Pyramids, and all the gods of the antique world,
from those of the Greeks and and Egyptians to Islam and Christianity at every step of the
journey; every place, every city brings to mind histories, legends, verses from the Bible
and the Koran. Three major codes compete for dominance: the modern travelogue, the
archetypal initiation journey and the specifically Christian pilgrimage to the holy sites, or
"хождение," rendering the structure of the cycle extremely dense and polyphonic, replete
with correspondences and resonances.

The cycle Тень птицы apparently marks the beginning of a period in Bunin's
prose, to which "Грамматика любви," "Суходол," "Господин из Сан Франциско" and
"Легкое дыхание" also belong, a period that is characterized by a prevalence of elements
which respond to mythological "codes." While they do not always form coherent and
easily identifiable tertiary structures as in "Грамматика любви," they appear with
enough consistence to justify the label of stable, invariant elements of Bunin's poetic
language. At a first approximation, they center around :

a) A holistic, animistic worldview, characterized by an "inseparable cosmic unity"
of everything in nature (see Losev, 449); nature is personified and takes a very active part
in the life of man;

b) An acute awareness of the sacred-profane distinction, complemented by an
association of Romantic love with the sacred.

c) Character "functions" and chronotopic distinctions paralleling those in myths
and folk tales.
Besides these elements, that demonstrably appear throughout Bunin's prose post-1907 and to a lesser extent before, certain stories also feature transparent, direct references to the Russian and world folk literature and traditions (in linguistics terms, these would perhaps qualify as "direct borrowings" from the language of myth.)

To conclude, among the variety of "generative models" applicable to Bunin's short stories, enough elements were found to support the hypothesis that the specificity and uniqueness of Bunin's language is partly due to its special relationship with the language of folk literature, and that to the extent that invariant structures in Bunin's prose can be defined, their connection with myth goes beyond the unavoidable phylogenetic relationship of myth and literature.
CHAPTER 6

CONCLUSIONS

The overarching goal of this dissertation was to approximate an answer to the question, to what extent the formalism and the concepts of information theory can be of interest to the researcher concerned with the analysis of literary texts? Simply stated, the answer to this question, as suggested by the previous chapters, is to be found not in the terminology itself, and, also, not always in the possibility of quantitative determinations (which can be useful in many cases but are superfluous in many others), but rather, in the approach to structure that lies behind the concepts of information theory. The elements of the formalism of information theory can be made relevant to the study of texts by considering that the text can be described not only as a series of characters chosen from a given alphabet, but also as a series of grammatical forms, a series of lexical forms, a series of prosodic units, or elements of plot, or any other series obtained through the application of some coherent framework of observation, able to distinguish consistently throughout the text among a set of possible values. The various such series that can be derived from a text or group of texts can be used to detect structures, and thus to characterize the specifics of the language of a text and its relationships to other texts. If found, statistical correlations among the variables that can be defined on a text (or group of texts) are directly relevant to the definition of structures (in the classical sense) in the
text. The information-theoretic discourse, to the extent that it can be applied to the
description of texts, appears to be, primarily, not a discourse about information, entropy
and noise but a discourse about distributions and correlations. In a shell, the difference
between an information theoretic approach and classic Structuralism is the difference
between structure as statistical correlation and structure as opposition/equivalence;
depending on the goal of the investigation and the particularities of the text, either
approach may be found preferable; the possibility to describe the process of interpretation
as the generation of a new series of symbols from an existing one, on the basis of a
system of rules (a "code") appears to be an advantage of the information-theoretic
approach. The technique of "close reading" - the finely detailed exploration of the text -
emphasizes patterns, parallelisms, connections and polarities in a manner that converges
naturally with what can be defined as the information-theoretic perspective on the text.

There are of course limitations in approaching the text as an informational object -
i.e. as an ensemble of parallel series of symbols characterized by their statistical
properties. Of the things that one may find interesting about a text, just a small part can
be revealed in this perspective (just as in classic Structuralism). In particular, aesthetic
theories cannot be supported, since intra- or inter-textual correlations hold (or not)
regardless of the artistic or non-artistic status of the text under investigation. Aspects of
the social function of the text are also out of reach. Therefore, if something is to be
ultimately learned from texts about the society which creates them, textual variables -
grammatical, lexical, narratological etc. - and their relationships can only be seen as part
of a more comprehensive method of investigation. I have tried to demonstrate, in the
applications part of my thesis, how these parameters can be used to guide, and add coherence to, the application of traditional approaches to the text.

The starting point of this dissertation were the terminological problems arising in Iurii Lotman's semiotic theories. Taking a cue from Lotman's Western translators and critics who have pointed to the terminological incongruences in Lotman's discourse (Shukman 1977, Matejka et al. 1977) I have looked at Lotman's statements on the informational properties of texts in the context of Claude Shannon's communication theory. This made it possible to attribute the main cause of the terminological polysemy to the incongruence between Lotman's main sources on information theory (Kolmogorov and Wiener), but also, partly, to Lotman's tendency to use the scientific terms in a metaphorical fashion, outside their area of definition, or to adapt them dynamically to the necessities of the current argument.

Theories of the text are seldom clear (in the sense that scientific theories, like the theories developed in the natural sciences, can be considered "clear"). Science is usually considered to be objective, atemporal and independent of considerations of cultural differences or taste while literature is seen as subjective, strongly anchored in history and expressing the "particular" and "unique" rather than what is "general" or "universal". Therefore, it could be argued that too much clarity may work against, rather than in favor of, a comprehensive theory of the text. In some cases, it is the very lack of clarity that results in an increased applicability. It is, nevertheless, paradoxical that this should be the case with Iurii Lotman's theory of the artistic text, which was formulated, in the spirit of the time, with the clear intention to bring more "scientific precision" to the study of literature. I have to repeat, though, that information-theoretic considerations constitute
just a small part of what Iurii Lotman has to say about literature and culture, and that in virtually all cases of interest, his intuition and (most of all) his erudition do prevail over his terminology. Also, I concur with R. Vroon that "Lotman would be the first to admit that a metalanguage does not spring fully armored from the head of the scholar; it is forged gradually; each piece must be examined, tested for vulnerability and perhaps even replaced." (Vroon 1977:xiii) I hope that my findings will help those scholars who read, apply or teach Lotman's texts navigate through the terminological maze of his theories and distinguish between the "safe" and the "dangerous" spots.

A final set of remarks is dedicated to the possible avenues of further investigation in the interdisciplinary area between cybernetics and semiotics. Information, the central notion of the present dissertation, is just one of the problematic notions in the semiotic field. Another notion, at least as important, and far more problematic, is that of communication. Although communication is regarded as one of the central notions of general semiotics, the relationship of the various models of communication in use at this point in semiotics, as well as the relationship between semiotic models and information-theoretic models is rather unclear. Communication constitutes, in the view of the major theoreticians of the field, the very basis of the definition of sign systems. Lotman, in his Structure of the artistic text, writes: "Every system whose end is to establish communication between two or more individuals may be defined as a language" (Lotman 1977:7). Lekomtsev, one of the theoreticians of the Moscow-Tartu school, in his programmatic article "Foundations of General Semiotics" states that "semiotics is the science of sign systems transmitting information inside some social group; it is the science of communicative sign systems" (Lekomtsev 1977:39). Communication together
with signification appear as the two fundamental concepts underlying Umberto Eco's Theory of Semiotics (see Eco 1976:4); Thomas Sebeok, in his definition of the "Doctrine of signs" states that "The subject matter of semiotics, it is often credited, is the exchange of any messages whatsoever - in a word, communication. To this it must at once be added that semiotics is also focally concerned with the study of signification." (Sebeok 1991:13). If the notion of signification is attached to the structure of a sign system, that of communication describes its function: "There is... a communication process when the possibilities provided by a signification system are exploited in order to physically produce expressions for many practical purposes." (Eco 1976:4).

Although its primary purpose was to define engineering principles allowing to build more effective telecommunication systems, Shannon's theory of communication (together with Weaver's introduction to it) was adopted into semiotics by a number of authors as a framework for the modelling of communication processes in culture and nature. V. Ivanov and V. Toporov, for example, used the Shannon model as a theoretical basis for devising a theory of text and language reconstruction (Ivanov and Toporov 1966, 3-25). T. De Mauro reformulated Shannon's model, devising a simple model of a finite-state signalling automaton that U. Eco later used as a starting point for his general theory of codes (Eco 1977: 32-47). The best known, and most influential reformulation of the Shannon model belongs to Roman Jakobson (Jakobson 1960: 353); several authors, Lotman included, have noted its central place in the circle of ideas that defines the semiotic approach to communication: "Ставшая уже традиционной модель коммуникации [...] усовершенствованная Р. О. Якобсоном легла в основу всех коммуникационных моделей" (Lotman 1992: 12). However, cybernetic models of
communication (such as Shannon's) and their semiotic equivalents (such as Jakobson's) show differences substantial enough to raise the question whether a unified understanding of communication processes is possible at all. The functional behaviors involved in the dominant semiotic model appear to depend in an essential manner upon certain properties of the interacting systems, assumed but not explicitly formulated by Jakobson – namely, intelligence and purposefulness, or goal-orientedness – whose characterization in a formal framework raises important conceptual difficulties. In the wider framework of biosemiotics (see Sebeok 1991:83-96 for a detailed discussion), the functional behaviors of systems involved in the exchange of information depend on an eminently unformalizable property - life itself. These and other differences between the mathematical and semiotic models have been noticed and emphasized by a number of authors, who have used them as arguments to maintain, in one form or another that mechanical communication – as that of telecommunication systems – and meaningful communication – as that of humans – are two mutually exclusive domains of discourse and belong to different fields of knowledge, with incompatible methodologies. For example, referring to the application of the Shannon model to linguistic interactions, R. Losee concluded that “the model of information transmission proposed by Shannon has been heavily abused by scholars who have applied the theory in domains distant from the electrical communication environment in which it was developed. By this, we mean that it has been frequently used to characterize situations that do not meet the assumptions and constraints of the model as proposed by Shannon” (Losee 1997:262). Anatol Rapoport concluded that “the question of whether, and to what extent, concepts of formal information theory can be utilized in a theory of social communication cannot be
answered with any degree of assurance" (Rapoport 1986:142). Walter Ong (1988:27) remarked that the Shannon model "obviously has something to do with human communication, but, on close inspection, very little, and it distorts the act of communication beyond recognition." In the perspective defined by these affirmations, there is no clear connection between the engineering model and the semiotic model; and the fact that we can speak in both cases about “transmission of information” can be explained just as a consequence of the flexible nature of the concept of information; admitting that both models represent "the transmission of information" between two entities, is merely shifting the incompatibilities from one concept to another, i.e. from "communication" to "information". This perspective implies that no unitary understanding of communication processes can be achieved. The question of a unified understanding of communication processes cannot be adequately dealt with in any of the particular disciplines traditionally concerned with communication processes. Its treatment most likely will require a wider interdisciplinary framework, capable of describing the structure and organization of the most diverse phenomena in a consistent, formal fashion, such as the framework offered by the circle of ideas that came to be known as "general systems theory".
BIBLIOGRAPHY


Akhmatova, A. Собрание сочинений в 6 т. Moscow: Ellis Lak, 1998


Ar'iev, A.  "Виссон. Георгий Иванов и Владимир Сирин: стихосфера" in Звезда 2/2006


Bogomolov, N. "Дыр бул цыв" в контексте эпохи" in: Новое литературное обозрение 72/2005

Briker B.  "Time, history, and fairy tale in Ivan Bunin's "A Cold Autumn"" in Canadian Slavonic Papers, Mar-Jun 1998


Собр. соч. в 7 т. Том 7: "Огненный ангел." Moscow: Khud. Lit, 1974

Под пятой. Мой дневник. Moscow: Pravda, 1991

Bunin, I. A. *Собрание сочинений в 9 т.* Moscow: Khudozhestvennaia literatura, 1965-66

Господин из Сан Франциско и другие рассказы. Moscow: Khudozhestvennaia literatura, 1959

Chudakova, M. *Жизнеописание Михаила Булгакова*. Moscow: Kniga, 1988


Dal', V. I. *Толковый словарь живого великорусского языка* (т. 1-4, 1863 - 66)

Don-Aminado *Поезд на третьем пути. Мемуары*. Moscow: Vagrius, 2000


Efremova T. F. *Новый толково-словообразовательный словарь русского языка*. Moscow: Drofa-Russkii Iazyk, 2000


Edel'shtein, M "100 лет журналу, прожившему 6 лет." Znamia 9/2004


Epshtein, M. "Природа, мир, тайник вселенной..." Система пейзажных образов в русской поэзии. Moscow: Vysshaia Shkola, 1990


Gumilev, N. Сочинения в 3-х томах. Moscow: Khudozhestvennaia literatura, 1991


Художественный мир Михаила Булгакова. Moscow: Iazyki slavianskoi kul'tury, 2001


Ivanov, G. V. Собрание сочинений в 3-х томах. Moscow: Soglasie, 1994

Ivanova, N. "Точность тайн. Поэт и Мастер." Знамя 11/2001


Janecek G. ZAUM': The Transrational Poetry of Russian Futurism. San Diego, 1996


Kreid, V. Петербургский период Георгия Иванова. Hermitage, Tenafly, NJ 1989


Kruchenykh, A. Избранное. München, 1973


Kuzina N.V. et al. eds. Тезисы международной научной конференции "Поэтика прозы." Smolensk: SGPU, 2003

Lane, M. ed. Introduction to Structuralism. Basic books: NY, 1970


Структура художественного текста. Providence: Brown UP, 1971

Анализ поэтического текста. Leningrad: Prosveshchenie, 1972


Семиосфера. Культура и взрыв. Внутри мыслящих миров. Статьи. Исследования. Заметки. Sankt-Petersburg: Iskusstvo-SPB, 2000


Nabokov, V. Собрание сочинений русского периода в пяти томах. Т.2. 1926 -1930: Машенька. Король, дама, валет. Защита Лужина.


Piaget, J. Le Structuralisme, PUF Paris 1968


Pomerantsev, K. "Сквозь смерть" Литературное обозрение, 1989, no. 11, p 79-81


Reformatskii, A. Введение в языкознание. Изд. 4-ое. Moscow: Prosveshchenie, 1967


Ross Ashby, W. An Introduction to Cybernetics, NY, 1956


Sebeok, T. A Sign Is Just a Sign, Indiana UP, Bloomington, 1991

Semenova S. "Two extremes of Russian existentialist consciousness - The prose of Georgii Ivanov and Vladimir Nabokov (Sirin)," Новый мир, no. 9 (SEP 1999): 183-205

Severianin, I. Сочинения в 5 т. Sankt Peterburg: Logos, 1995


Sokolov B. Булгаковская энциклопедия. Moscow: Lokid, Mif: 1996

Struve, G. Русская литература в изгнании. New York, 1956

Thom, R. Stabilite structurelle et morphogènes, 2-nd ed. Intereditions, Paris, 1977


Zamiatin, E. Я боюсь: Литературная критика; Публицистика; Воспоминания. Moscow: Nasledie, 1999