TENSE AND ASPECT IN RUSSIAN

by

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SUMMARY

The main points in this thesis are as follows: -

Chapter One

There are several reasons for recognizing a class of stative verbs in Russian, the principal ones being that stative verbs (e.g. nonimot' (understand), znat' (know)) have no perfective aspect forms and may be accompanied by a subject noun in the dative case. The non-stative verbs fall into two classes, static and active. Static verbs have no perfective forms but, unlike stative verbs, are accompanied by nouns in the nominative case. Examples of static verbs are stojat' (stand) and sidet' (sit). Since the distinction between perfective and imperfective aspect is appropriate only to active verbs, and since the case of accompanying nouns is determined by the verb-type, it is suggested that a verb-dependency model is needed to handle aspect in Russian.

Chapter Two

In the deep structure of Russian two separate categories, Verb and Adjective, are not necessary. Instead, Verbs and Adjectives are treated as purely surface structure categories deriving from a single underlying category Predicator. Various pieces of evidence are adduced in support of the hypothesis that verbs in imperfective aspect derive from an underlying locative. For example, Ivan nisal pis'mo (Ivan was writing a letter) derives from a structure which can be glossed thus : 'Ivan was in a state; Ivan write letter'. It is then argued that verbs in perfective aspect derive from a structure which can be glossed thus : go into, be in, come out of state. For example,
Ivan napísal nis'mo (Ivan wrote the letter) derives from a structure 'Ivan went into, was in, came out of state; Ivan write letter'.

Chapter Three

It is suggested that sentences like V goroda xolodno (It is cold in town), Ivanu skušno (Ivan is bored) and Ivanu ponijatna teorija (lit. To Ivan understandable the theory) derive from an underlying locative. This locative may be realised as a noun in the dative case, or as the preposition у (at) followed by a noun in the genitive case, or as the preposition в (in) followed by a noun in the prepositional case.

Chapter Four

Following Lyons (1968) and Boyd and Thorne (1969), it is shown that tense in Russian is best explained by postulating a basic distinction between past and non-past, and by using mood to distinguish present and future tense. Past and present tense forms are used when the speaker is making a statement, future tense forms when he is making a prediction. The use of 'perfective future' forms in sentences like Ženěšiny vsegda naidut obščij jazyk ('Women will always find a common language') is explained by postulating a modality which is glossed as 'without fail'.

Chapter Five

The discussion of Aktionsarten takes as its starting point the account given by Isačenko (1962). In particular, Isačenko's label 'resultative Aktionsart' is unsuitable, since the examples he gives are better describ-
ed as having to do with 'thorough completion'. Isačenko's account of the inchoative Aktionsart is inadequate, since he considers only those perfective forms which have the prefixes za-, voz or vz and which have no corresponding imperfective form. This treatment fails to show that 'inchoativeness' is an important and widespread phenomenon in Russian, but does bring out the limitations of the traditional notion of 'Aktionsart' and its inappropriateness within the framework of a generative grammar.

Chapter Six

Infinitives are regarded as nominalised verbs. The aspect of an infinitive form may be determined by the same rules which determine aspect in finite forms or by a completely different set of rules. The latter apply when an infinitive is dependent on a modal predicator such as dolžen (ought), надо (must). When the predicator is not negated, the infinitive may take either aspect, but when the predicator is negated the infinitive is always in the imperfective aspect. In a sequence Verb + Neg + Infinitive, the infinitive is in the imperfective aspect unless the verb is one whose meaning reflects the speaker's doubt as to his ability to control events, e.g. starat'sja (try), боят'sja (fear).
INTRODUCTION

This thesis is an attempt to give a generative account of tense and aspect in Russian. Although the formal mechanism is that of a Chomskyan transformational generative grammar, the abstract structures postulated differ from the deep structures of the type proposed by Chomsky in *Aspects of the Theory of Syntax* (1965).

As various approaches to aspect were being explored it became clear to me that an adequate explanation could not be provided within the framework of a grammar whose deep structure categories faithfully reflected the superficial syntactic categories of English - Noun, Verb, Adjective, Determiner, Preposition. One difference between Russian and English is that Russian has no superficial morphs corresponding to the English determiners *the* and *a*. Another difference is that Russian has superficial case endings, whereas English, except in its pronouns, has none. Where English has a preposition and a noun, Russian may have a preposition, a noun stem and a case ending, or just a noun stem and a case ending, e.g. *s Ivanom* (with Ivan, *s* = with, *om* = instrumental case ending); *molotom* (with a/the hammer).

Such obvious facts about the surface structures of English and Russian lead one to doubt whether the categories PREPOSITION and DETERMINER have any right to be considered as basic syntactic categories in the universal grammar towards which linguists are working. It is also doubtful whether VERB and ADJECTIVE are distinct categor-
ies in the deep structure of Russian. In Chapter Two evidence is provided in support of the hypothesis that verbs and adjectives in Russian derive from a single underlying category - PREDICATOR. It further became clear that what was required was not simply a deep structure containing more general syntactic categories but one in which syntax and semantics were intermingled.

Again in Chapter Two, evidence is adduced in support of the hypothesis that superficial Russian sentences containing verbs or adjectives derive from locatives. In Chapter Four the secondary grammatical category of tense is handled by postulating a basic distinction between Past and non-Past (which can also be thought of in terms of locatives, i.e. as a there - here, remote - proximate distinction, though this point of view is not argued here) and then using mood, more specifically the distinction between statements and predictions, to differentiate between reference to present time and reference to future time.

In Chapter Five it is argued that the various Aktionsarten can be adequately treated only by a grammar equipped with a semantic component which can show how meanings can be 'built up'. In Chapter Six it is shown that aspect in the infinitive, especially in negative sentences, can be explained only by taking into account modalities such as possibility and necessity and by representing these as features on the Predicator.

From these few remarks it will be seen that I am, in principle, in sympathy with the aims of such linguists as McCawley and Lakoff, who have argued that need for a more
abstract deep structure. However, the theoretical approach adopted in this thesis is inspired not by the ideas of McCawley and Lakoff but by the general approach to linguistic theory current among a group of linguists working in Edinburgh. This general approach is a hybrid, which has assimilated on the one hand the ideas of deep and surface structure and the concept of a grammar as a system of explicit rules for generating all and only the correct sentences of a language, but which on the other hand tries to leaven the necessary, but at times not very enlightening, formalism with an infusion of the European intuitive, notional approach to grammar. At its best the latter tradition is a valuable source of data and brilliant insights, many of which remained unrecognised or obscure because linguists lacked the idea of a grammar as a set of explicit rules and did not have at their disposal the concepts of deep and surface structure.

One of the most distinguished scholars of Russian, the late André Mazon, was an exception in that he tried to draw up a general scheme of semantic criteria for explaining all uses of aspect. This scheme is not at all explicit - in the sense that he provides not a set of rules but a collection of general directions which cannot be applied without appeal to one's intuitions about Russian - and the criteria adopted give the impression that speakers of Russian can use whichever aspect they please, depending on how they view the action denoted by the verb. Sometimes, indeed, this is the case, but there are many instances where the speaker must use a particular aspect,
especially in the infinitive forms. In spite of these defects, Mazons book, 'Emplois des Aspects du Verbe Russe', is a fascinating and heroic attempt to pin down a multitude of different and sometimes very subtle meanings and reduce them to a small number of general criteria.

I acknowledge my debt to Mazon by beginning the sections on aspect in the finite forms of the verb and in the infinitive with a summary of his account. The criticisms and alternative proposals which follow each summary should not be construed as an attempt to show how mistaken Mazon was but are to be taken as reflecting the advances made by linguistic theory in the fifty-six years which have elapsed since the publication of his book. Every linguist involved in the development and application of generative grammar should preface his work with Newton's remark that he saw farther than his predecessors only because he stood on the shoulders of giants.

This study of tense and aspect in Russian is largely exploratory in nature. I have not been able to provide large numbers of rules as did Rosenbaum (1967a). My aim has been to propose some underlying structures for certain fragments of Russian, keeping in mind the ultimate goal of a fully explicit system of formal rules for generating sentences of Russian. Where I have been able to supply both rules and phrase markers, these are intended only as memory-aids, not as 'the' deep structure of Russian. In Chapter Five I have tried simply to bring some order into the chaos of Aktionsarten, and in Chapter
Six I have attempted only to determine the various factors governing the aspect of infinitives. Although the hypotheses have not given rise to sets of rules, this in no way vitiates them, since the lack of formalisation is due to inadequacies in the formal system of the Chomsky model, not to any vagueness in the hypotheses themselves. If the latter are valid, they will remain valid no matter what formal systems may be used.

A word of caution needs to be addressed to readers who may know Russian but be unacquainted with generative grammar. I have not explained the principles behind this approach to the study of language because such an exposition would take up too much space and because a concise account is already available in, e.g. Langendoen's book, 'The Study of Syntax' (Chapters 1 - 3).

I wish to thank all those who have helped in the preparation of this thesis. My supervisors, John Lyons and Dennis Ward, painstakingly read and criticised the draft version. I am indebted to John Lyons for making me aware of the value of the older notional approach to grammar, and to Dennis Ward for many insightful comments and suggestions concerning the Russian examples. Any ideas about how to combine the notional and generative approaches I owe to John Anderson (though we seem to have arrived independently and by different routes at the conclusion that a verb dependency model is needed to handle certain phenomena). Many fruitful ideas have sprung from conversations with John Christie and Keith Brown. Finally, I must record my gratitude to the many
Russian informants who endured list upon list of sentences, especially Igor' Fomenko and Viktor Sovkun, students at the Moscow State University, and Mrs. N.V. Bunak and Mrs. E.F. Merčanskaja, Russian Language Assistants in the Department of Russian at this university for the periods 1967-69 and 1969-70 respectively.
# CONTENTS

<table>
<thead>
<tr>
<th>Chapter One</th>
<th>Stative Verbs</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1.2</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>1.3</td>
<td></td>
<td>11</td>
</tr>
<tr>
<td>1.4</td>
<td></td>
<td>16</td>
</tr>
<tr>
<td>1.5</td>
<td></td>
<td>18</td>
</tr>
<tr>
<td>1.6</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>1.7</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>1.8</td>
<td></td>
<td>24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Two</th>
<th>Aspect in Past and Present Tense Verb</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Traditional explanations of aspect</td>
<td>32</td>
</tr>
<tr>
<td>2.1.1</td>
<td>Mazon's account of aspect</td>
<td>34</td>
</tr>
<tr>
<td>2.1.2</td>
<td>Isaenko's account of aspect</td>
<td>44</td>
</tr>
<tr>
<td>2.2</td>
<td>Verbs and adjectives in Russian</td>
<td>45</td>
</tr>
<tr>
<td>2.2.1</td>
<td>Some similarities between verbs and</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td>adjectives in Russian</td>
<td></td>
</tr>
<tr>
<td>2.2.2</td>
<td>Sapir on verbs and adjectives</td>
<td>50</td>
</tr>
<tr>
<td>2.2.3</td>
<td>Philosophical treatment of verbs and</td>
<td>51</td>
</tr>
<tr>
<td></td>
<td>adjectives</td>
<td></td>
</tr>
<tr>
<td>2.2.4</td>
<td>Lyons and Lakoff on Verbs and Adjectives</td>
<td>56</td>
</tr>
<tr>
<td>2.2.5</td>
<td>Lakoff's evidence from English which</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>also holds for Russian</td>
<td></td>
</tr>
<tr>
<td>2.2.6</td>
<td>Additional evidence from Russian</td>
<td>63</td>
</tr>
<tr>
<td>2.3</td>
<td>Adjectives, verbs in imperfective aspect</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>and some locative constructions</td>
<td></td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
<td>Page No.</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>2.3.1</td>
<td>A possible source for adjectives and verbs in imperfective aspect</td>
<td>80</td>
</tr>
<tr>
<td>2.4</td>
<td>Verbs in perfective aspect</td>
<td>85</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Bě (already) and ēšē (still)</td>
<td>86</td>
</tr>
<tr>
<td>2.4.2</td>
<td>The underlying structure of verbs in perfective aspect</td>
<td>91</td>
</tr>
<tr>
<td>2.5</td>
<td>How these proposals explain some of Mazon's data</td>
<td>95</td>
</tr>
<tr>
<td>2.5.1</td>
<td>Some remarks on interrogatives</td>
<td>99</td>
</tr>
<tr>
<td>Chapter Three</td>
<td><strong>Stative Constructions in Russian</strong></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Stative verbs once more</td>
<td>110</td>
</tr>
<tr>
<td>3.1.1</td>
<td>A special type of stative construction</td>
<td>112</td>
</tr>
<tr>
<td>3.1.2</td>
<td>A possible deep source for such stative constructions</td>
<td>115</td>
</tr>
<tr>
<td>3.1.3</td>
<td>Superordinate locatives and stative constructions</td>
<td>119</td>
</tr>
<tr>
<td>3.2</td>
<td>Realisation of predications as verbs or adjectives</td>
<td>124</td>
</tr>
<tr>
<td>3.2.1</td>
<td>Static predications</td>
<td>126</td>
</tr>
<tr>
<td>3.2.2</td>
<td>Active predications</td>
<td>129</td>
</tr>
<tr>
<td>3.3</td>
<td>Some possible base rules</td>
<td>131</td>
</tr>
<tr>
<td>Chapter Four</td>
<td><strong>Aspect in Future Tense Verb Forms</strong></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td>'Future Tense' in Russian</td>
<td>138</td>
</tr>
<tr>
<td>4.1.1</td>
<td>Mazon's treatment of future tense</td>
<td>139</td>
</tr>
<tr>
<td>4.1.2</td>
<td>Šaxmatov's treatment of future tense</td>
<td>145</td>
</tr>
<tr>
<td>4.1.3</td>
<td>Isačenko's treatment of tense</td>
<td>148</td>
</tr>
</tbody>
</table>
4.2  'Past' and 'non-past'  157
4.2.1 Statements and predictions  161
4.2.2 Prediction and necessity  165
4.2.3 'Statement/prediction' analysis and the accounts of Mazon and Isachenko  171
4.2.4 Jespersen and Renou on 'future tense'  175
4.3 Statement and prediction in a generative grammar  
Appendix  190

Chapter Five

5.1 Aspect and Aktionsart  199
5.1.1 History of the notion 'Aktionsart'  201
5.2 'Resultative' Aktionsart  204
5.2.1 'Genuine resultative meaning'  207
5.2.2 Terminative meaning  218
5.2.3 Perdurative meaning  221
5.2.4 Finitive meaning  224
5.2.5 Total meaning  227
5.2.6 Saturative meaning  228
5.3 Ingressive Aktionsart  230
5.3.1 Some ways in which [+Inchoative] may be realised  235
5.3.2  236
5.3.3  239
5.3.4  241
5.3.5 Some problems in the realisation of cases  244
5.3.6 A lexicalist or transformationalist approach?

5.3.7 Some causative verbs in Russian

5.3.8 Inchoative verbs, stative verbs and static verbs

5.3.9 Participles formed from inchoative verbs

5.4 The 'delimitative' and 'semelfactive' Aktionsarten

5.5

5.6

Chapter Six Aspect in the Infinitive and Imperative

6.1 Mazou's account of infinitives

6.1.1 Some comments on Mazou's account

6.2 Infinitives dependent on mox'

6.2.1 Obligation and volition

6.3 Possibility

6.4 Obligation once more

6.4.1 A technical problem

6.5 Some phrases modal and non-modal

6.6 Negated infinitives

6.7 Imperatives

Conclusion
This chapter deals with the problem of selectional restrictions in a generative grammar of Russian. In "Aspects of the Theory of Syntax" Chomsky discusses selectional restrictions and subcategorisation rules. The latter ensure that a verb such as *kick* which requires both a subject and an object is inserted into a string consisting of a noun, a slot for a verb, and a second noun. Conversely, they would also ensure that a verb such as *snore* which never takes an object is inserted into a string consisting of one noun and a slot for a verb and not into a string containing two nouns. The selectional restrictions ensure, for instance, that a verb which requires an animate subject does not occur with an inanimate subject. In other words, they prevent the generation of sentences like *The rock is thinking* or *The flower is masterful*.

Selectional rules may be incorporated in a formal grammar in two ways: either nouns are assigned features such as \( [\text{Animate}] \), \( [\text{Concrete}] \) etc. independently and verbs selected with reference to nouns or verbs are assigned features and nouns selected in terms of verbs. Chomsky demonstrates that, within the framework available at that time, there is no alternative to selecting verbs in terms of nouns because the selection of nouns in terms of verbs leads to a considerable complication of the grammar. Chomsky’s decision is based on considerations of formal simplicity, since the linguistic facts do not appear to force either of the possible solutions. Implicit in Chomsky’s treatment of selectional
restrictions is the assumption that nouns and verbs are of equal status in the deep structure, that there is no 'governing' constituent.

Chomsky's proposals can be rebutted in two ways. Either one can devise an alternative formulation in which the selection of nouns in terms of verbs involves less complicated rules than the selection of verbs in terms of nouns, or one can look for phenomena in English or other languages which can only be explained if the verb is taken to be the 'governing' element in the sentence. In this paper it will be argued that the class of stative verbs in Russian and their syntactic behaviour can be adequately handled only by a theory of grammar in which the verb is the governing element in the sentence, determining what types of nouns and adverbial phrases may occur in a given sentence.

Before the Russian data is presented, the phrase 'types of nouns' requires some explanation. In 'Aspects', Chomsky maintains that grammatical functions such as 'Subject - of (a verb)' and 'Object - of (a verb)' can be defined as respectively the relations between the Subject - of a Sentence and the Main - Verb of the Predicate - of the Sentence, and between the Main - Verb of - and the Direct - Object - of a Verb Phrase. Given a sentence of the form NP Aux VP 'Subject - of - a - Sentence' is defined as the relation holding between the NP and the whole sentence. Given a VP of the form V NP, 'Object - of' is defined as the relation holding between the NP and the whole VP.
The inadequacy of these definitions of grammatical functions purely in terms of syntactic categories is brought out by a comparison of the sentences The player kicked the ball and The soldiers saw the town stretched out before them. It is intuitively obvious that the relation holding between the noun player and the verb kicked is different from the relation holding between the noun soldiers and the verb saw. Player is Agentive, ball referee is non-agentive. Ball is the 'object' of kicked in the sense that the action denoted by kicked affects the object denoted by ball. However, the object denoted by town is not affected by being seen by the soldiers. These intuitions are supported by the different syntactic behaviour of verbs like kicked and verbs like saw, which will be described later.

In an attempt to overcome these inadequacies, Fillmore has suggested that in the deep structure each sentence should consist of a verb and one or more cases - case being used to refer to the kind of syntactico-semantic relationships described in the previous paragraph and case form being used to refer to the expression of a case relationship in a particular language. Among others, Fillmore uses the cases Agentive, Instrumental, Dative, and Objective. The various cases are expanded into a case element $K$ plus a noun, $K$ being realised as a case ending or as a preposition. In Fillmore's case-grammar the verb is not the governing constituent, since Fillmore talks explicitly of the lexical entries for verbs indicating the various 'case frames' into which a
given verb may be inserted. (Fillmore, p.27). In this paper sentences in the deep structure will be assumed to consist of a verb accompanied by various cases, but it will be argued that the verb governs the introduction of cases into the sentence.¹

1.2 What, then, is meant by the term 'stative verb'.

Jespersen notes that some verbs denote actions (kill, speak), some denote processes (grow, die), and some denote states or conditions (sleep, suffer). Jespersen's classification is notional, but Lakoff has recently provided syntactic evidence for stative verbs. Lakoff's main criteria are set out below, with a corresponding Russian example where appropriate.

1. a. Stative verbs, like most adjectives, do not occur in the imperative.

Look at the picture - Posmotrite na kartinu
*Know that ... - *Znai, ćto ...
*Don't be tall - *Ne bud' velik rostom.

b. Stative verbs do not occur in cleft sentences.

What I'm doing is looking at the picture/ being noisy.

*What I'm doing is knowing that Bill went there/is being tall..

In Russian there is no construction corresponding morph for morph to the English cleft-sentence construction, but there is a related criterion.
b1. The question Čto on delaet? (What is he doing?) cannot be answered by On znaet knigu (He knows the book) or On vladeet domom (He owns a house) or On ponimaet rešenie (He understands the solution). It can be answered by On igraet v šaxmaty (He is playing chess) or On stoit na ugлу (He is standing on the corner).

c. Stative verbs in English, like most adjectives, do not occur in the progressive form.

I'm looking at the picture/being noisy
*I'm knowing that Bill went there/being tall.

There is no construction in Russian corresponding to the English progressive construction.

d. Stative verbs do not occur with certain kinds of manner adverbials, e.g. cleverly, with great enthusiasm, masterfully, industriously, carefully (These examples are Lakoff's)

He carefully wrote the letter: On ostorožno pisal
dis'mo
*He carefully knew the solution: On ostorožno znal
rešenie.

During a study of aspect in Russian it became clear that certain syntactic-semantic phenomena could be explained only if one assumed that Russian too has stative verbs. The particular verbs concerned are ponimat' (understand), verit' (believe), dumat' (think), znat' (know), ljubit' (love), vladet' (own), pravit'sia (please). These verbs differ from other verbs in Russian in several ways.

1. They have no perfective aspect forms. This state-
ment might seem rather implausible at first sight, since *noniat', *noverit', *podumat', *nonravit'sia are usually described as the perfective forms of *nonimat', *verit', etc. However, there is good evidence that *noniat' and *ponimat' are not related in the same way as *napisat' and *pisat' in the sentences used above as examples. *On napisal pis'mo implies a sentence *on bol'še ne pišet pis'mo (he is no longer writing the/a letter) or *on konšil pisat' pismo (he has finished ...) / Strictly speaking, it could also imply *on bol'še ne pisal ... (he was no longer writing ...), since napisal can mean 'had written'. For the sake of simplicity only the first implication will be discussed.

An interesting feature of verbs like *noniat' - *ponimat' is that a sentence *on ponjal knigu (he has understood the book) cannot imply *on bol'še ne ponimaet knigu (he no longer understands the book) - even if it is the case that he no longer understands the book. But, *on ponjal knigu may definitely imply *on ponimaet knigu. *On napisal pis'mo cannot imply *on pišet pis'mo (he is writing the book). The same relations of implication hold between sentences containing *noverit', etc. and sentences containing *verit', etc. The so-called perfective forms are more accurately described as ingressives, whose meaning may be rendered as 'get to understand', 'get to believe', and so on.

Unfortunately, the distinction between statives and ingressives is not always clear-cut in the surface structure. The sentences *on bystro ponimaet etot факт (he
quickly understands this fact) and *\textit{on} \textit{bystro verit} v \textit{kommunizm} (he quickly believes in Communism) are not acceptable whereas the sentences \textit{on} \textit{bystro nonimaet problemy} (he understands problems quickly) and \textit{on} \textit{bystro verit} v \textit{novye idei} (he quickly believes in new ideas) are acceptable. The explanation of this apparent confusion lies in the fact that \textit{nonimal} and \textit{veril} are sometimes realisations of underlying statives and sometimes of underlying ingressesives. When \textit{veril}, for example, is stative it cannot co-occur with \textit{bystro} (quickly), cf. *\textit{on vsegda} \textit{bystro veril} v \textit{boga} (he always believed quickly in God.) That the form \textit{verit}' represents two different underlying structures is made clear by its syntactic behaviour, but for some of the stative verbs the difference between the stative form and the related pair of ingressesives is reflected in the existence of separate lexical items. The verb 'possess' - \textit{vladet}' - has as its ingressive \textit{zavladet}' - 'to take possession of'. \textit{Zavladet}', a perfective form, has an imperfective form \textit{zavladevat}'. \textit{Znat'} (know) has several pairs of ingressesives, among them \textit{poznat'} - \textit{poznavat'} (take cognisance of something) and \textit{uznat'} - \textit{uznavat'} (find out by making inquiries).

2. \textit{On zanijat} and \textit{on zanimaetsja} are translated into English as 'he is engaged (in doing something)'. The following sentences are acceptable: \textit{on zanijat tem, čto igraet} v \textit{šaxmaty} - he is busy/engaged in playing chess. \textit{On zanijat tem, čto pišet} \textit{pis'mo} - he is busy/engaged in writing a letter. (Note that while \textit{on stojat} na \textit{uglu} is
a possible answer to čto on delaet?, the sentence on zanijat tem, čto stoit na uglu is unacceptable. Note also the sentence: on nićevo ne delaet; on prosto stoit na uglu (he is not doing anything: he's simply standing on the corner) which indicates that stoit is not to be classed with pišet and igrat.

The next examples, however, are completely unacceptable.

*on zanijat tem, čto ponimaet knigu - *he is busy/engaged in understanding the book.

*on zanijat tem, čto znaet rešenja - *he is busy knowing the solution.

*on zanijat tem, čto владeet domom - *he is busy/engaged in owning a house.

At this point the appropriateness of the label 'stative' becomes apparent since the two features mentioned apply equally well to adjectives.

1a. The distinction between perfective and imperfective aspect is no more relevant to verbs such as znat' than it is to constructions like on ščastliy (he is happy), on byl tolstyi (he was fat), on byl bednyj (he was poor), and so on.

2a. *on zanijat tem, čto on tolstyi (he is busy being fat) and *on zanijat tem, čto on bednyj (he is busy being poor) are unacceptable.

3. A further feature of stative verbs is that they do not occur in sentences of the type 'He V x instead of Ving y', where V is a verb and x and y are nouns, e.g. on čital
knigu vместо того, чтоб играт' в шахматы (he read a book instead of playing chess). Вместо того, чтоб means 'instead of'. Also acceptable is он пошёл домой вместо того, чтоб стоять 'на углу (he went off home instead of standing on the corner).

Sentences of this form with a stative verb in one clause and an active verb in the other clause, or with stative verbs in both clauses are not acceptable. E.g. *он писал письмо вместо того, чтоб знат' решение (he wrote a letter instead of knowing the solution): *он любил музыку вместо того, чтоб понимать' проблемы (he loved music instead of understanding the problems).

4. The most interesting phenomenon involving stative verbs is the possibility of paraphrasing sentences containing stative verbs in a way which is not possible for sentences with other types of verbs. Consider the following pair of sentences:

la. он понимает теорию : he understands the theory.
lb. теория ему понятна : (lit) to him the theory is understandable.

The crucial fact is that the animate noun он (he) which is in the nominative case in la, turns up in the dative case (ему) in the paraphrase lb. The inanimate noun теорию, which is in the accusative case in la, occurs in the nominative case in lb. The present tense, 3rd person singular verb in la. понимает turns up in lb. as the feminine form of an adjective agreeing with теория in gender, number, and case. Sentences with знат' can be similarly paraphrased:
2a. *vse znajut, čto on president*: everybody knows that he is the president.

2b. *vsem izvestno, čto on president*: (lit) to everybody is known that ...

Sentences with *dumat' or verit'* followed by a sentence complement retain the conversion of nominative to dative in their paraphrases but differ from the above examples in that the verb which agrees in person and number with the animate noun in the nominative appears in the paraphrase as a reflexive verb, third person singular.

3a. *ja dumaju, čto tak budet lučše*: I think that it will be better thus.

3b. *mne dumaets ja, čto tak budet lučše*: (lit) to me thinks that ...

4a. *ja ne veriu, čto delo tak obstoit*: (I do not believe that the situation is thus.

4b. *mne ne veritsja, čto delo tak obstoit*: (lit) to me not believes that ...

Sentences with *ljubit'* can be paraphrased either by sentences with *nravit'sja* or by sentences with an adjective. The nouns change case as above.

5a. *on ljubit kartinu*: he likes the picture.

5b. *kartina emu nravitsja*: (lit) the picture to him pleases.

6b. *on ej ljub* : (lit.) he to her dear.

Sentences with *vladet'* can be paraphrased by sentences with *prinadležat'* (belong) or with an overtly locative construction.

7a. *on vlastet domom* : he owns a house. *(Domom is instrumental case.)*

7b. *emu prinadležit dom* : (lit) to him belongs house.

7c. *u nego dom* : (lit) at him a house.

1.3 Although this paper is concerned mainly with providing evidence for stative verbs in Russian, the five points discussed above indicate two other classes of verbs. The stative verbs are not just those which refer to states rather than actions but specifically those verbs which are involved in the paraphrase relations described in (5) above. Verbs such as *stojat'* (stand), *ležat'* (lie), *sidet'* (sit) also refer to states but sentences containing these verbs and an animate noun in the nominative case cannot be paraphrased by sentences in which the animate noun appears in the dative case. These verbs may be called 'static'. Note that they are also separated from statives by point (b1) above. The third class of verbs, which is by far the largest class, are 'active' verbs like *pisat'* (write), *igrat'* (play), *citat'* (read), and so on. These verbs are separated
from both static and stative verbs by points (1), (2) and (U). These three classes correlate with various classes of adverbs.

An active verb may co-occur with adverbs of manner referring to speed, e.g. **bystro** (quickly), **medlenno** (slowly). Neither static nor stative verbs can co-occur with such adverbs.

- **on bystro čital knigu**: he quickly read the book.
- **on medlenno pisal pis’mo**: he slowly wrote the letter.
- **on bystro stojal/ležal/sidel na stole**: *he was quickly standing/lying/sitting on the table.

(The Russian sentence has no morph corresponding to the English *was...ing*. **Stojal** is morphologically comparable with **cital** and **pisal**. Only its syntactic behaviour brings out the difference in class.)

- **on bystro znal fakt**: *he quickly knew the fact.

**Note also the unacceptability of the paraphrase—**

- **fakt bystro byl emu izvesten**: (lit) *the fact quickly was to him know/*

Active verbs can co-occur with adverbs of manner like **energično** (energetically) but not static or stative verbs.

- **On energično igral v futbol**: he played football energetically.
- **on energično ležal na stole**: *he lay energetically on the table.
- **on energično vladel domom**: *he owned a house energetically.*
cf. the paraphrase
*dom energično prinadležal emu: *a house belonged energetically to him ...

Adverbs referring to instruments may co-occur with active verbs only.

* on pisan pismo karandajom: he wrote the letter with a pencil.
* on stojal na uglu odnoj nogoj: *he stood on the corner with one leg.
* on ponimal problemu mozgami: *he understood the problem with his brains.

Note the paraphrase -
* problema byla emu pon'atna mozgami: (lit)*the problem was to him understandable with his brains.

(The term 'adverb' is being used in the widest sense as 'modifier of a verb'. Mozgami, etc. are nouns in the instrumental case.)

Some types of manner adverbs (including those mentioned by Lakoff) can co-occur with active and static verbs but not with stative verbs. To one such type belong
lovko (skilfully), nebrežno (carelessly).

* on lovko igral v šahmaty: he played chess skilfully.
* on nebrežno pisan pismo: he wrote the letter carelessly.
* on lovko stojal na zabore: he stood skilfully on the fence.
* on lovko dumal, što tak lučše: *he skilfully thought that it was better thus.
* emu lovko dumalos', što...: (lit.)*to him skilfully thought that ..
Adverbs of place also co-occur with active and static verbs but not stative verbs. A short aside is necessary at this point because two apparent adverbs of place with the same formal pattern may come from very different deep structures. Examples of this are provided by the English sentence 'He lived in Moscow' and 'In Moscow he believed in Communism'. These sentences seem to contain occurrences of the adverbial phrase 'in Moscow'. The difference between the sentences is brought out only by a consideration of the questions to which they might be the answers. One can sensibly ask 'where did he live?' but not 'Where did he believe in Communism?'. However, one can ask 'Where was he when he believed in Communism?'. These considerations show that the second example above means 'When he was in Moscow he believed in Communism', i.e. it is the reduced form of an adverbial clause of time. To use a Russian example, this explains why, although one cannot ask* gde on znal fakt? (where did he know the fact?), one can say v biblioteke on ešče znal etot fakt, doma že uže zabyl. (in the library he knew the fact but at home had already forgotten it - i.e. when he was in the library....). The following are examples of acceptable and unacceptable pairs of question and answer.

**gde on pisan roman?**  
Where did he write the novel?  
**He wrote the novel in London.**

**Gde on sidel?**  
Where was he sitting?  
**He was sitting on the second bench.**
The first five phenomena described in this chapter, together with the various selectional restrictions, justify the setting up of three classes of verbs - active, static and stative. The class of active verbs consists of two sub-types, those verbs which are agentive, e.g. write, read, and which can co-occur with adverbs like energetically and with an instrument, and those verbs which are non-agentive, e.g. topple, slip, die, and which do not co-occur with these adverbs.

One last phenomenon should be mentioned involving the coordination of sentences by \( \text{and} \) (and, - the simultaneous, not the sequential, \( \text{and} \)). This conjunction can coordinate two sentences containing stative verbs, two sentences containing active verbs, a sentence with a static verb and a sentence with an active verb (in that order), a sentence with a stative verb and a sentence with an active verb (in that order). The conjunction cannot coordinate (a) two sentences containing static verbs (b) a sentence with a static verb and a sentence with a stative verb. (c) a sentence with an active verb and a sentence with a stative verb. The various acceptable and unacceptable combinations are exemplified below.
On znal eto i veril v novju politiku - He knew this and believed in the new policy.
On el jabloko i čital knigu - He was eating an apple and reading a book.
On stojal na skamejke i smotrel - He stood on the bench and watched the parade.
*On smotrel na parad i stojal - He watched the parade and stood on the bench.
*On prišel na pomoč' - He came to help and understood this.
*On stojal na skamejke i sidel na zemje - He stood on the bench and sat on the ground.
*On ležal na krovati i ponimal problemu - He was lying on the bed and understood the problem.

1.4 In the Russian data presented above there are certain phenomena which not only are handled awkwardly by 'noun-dependency' rules but actually compel one to adopt 'verb-dependency' rules. The first feature which demands attention is the paraphrase relations described in (4). How can a grammar bring out and explain the equivalence between on ponimaet teoriju and teorija emu ponijatna (he understands the theory/the theory is understandable to him)? The easiest solution would be to derive both sentences from the same underlying structure. Quite
apart from the fact that the members of each pair of sentences are synonymous, the postulation of a single underlying structure would simplify the selectional rules for verbs and adverbs. The same selectional restrictions vis-a-vis adverbs hold for both members of each pair of sentences adduced in (4). If it is decided that the sentence with the animate noun in the nominative case and the sentence with the animate noun in the dative case have different deep structures, then the same set of selectional restrictions will have to appear twice in the grammar. If, however, only one deep structure is postulated the restrictions need be stated only once. Given the strong syntactic and semantic evidence (all of which is testable), one can discard the possibility of two separate underlying structures and begin considering what the single deep structure might look like. The choice lies between the underlying structures of on ponimaet teoriju and teorija emu poniatna. This choice will not be arbitrary since the evidence favours the latter. Firstly, there are strong semantic similarities between stative verbs and the majority of adjectives, which are said to refer to states. Secondly, these semantic similarities are accompanied by certain syntactic similarities, as evidenced by (1), (2) above. Thirdly, native speakers of the language feel that the subject of ponimaet is 'inactive' compared with the 'active' subject of a verb like pišet. This would seem to indicate that the superficial similarity of the subject nouns in the sentences on ponimaet problemu (he understands the
problem) and on pišet pis’mo (he is writing a letter) is misleading and that the sentence problema emu ponijatna (lit. the problem to him is understandable), where the animate noun is in the dative case, reflects more faithfully the underlying relations between the verb and the nouns. The underlying structure of teorija emu ponijatna will therefore be taken as basic in this paper.

1.5

The superficial nominative case appears to have several sources in the deep structure. Within the system of transitivity relations it is the realisation of underlying Agentives, as in on stroll dom (he was building a house) and of underlying Nominatives, as in on unal na nal (he fell to the floor). Within the theme-rheme system, as Halliday calls it, or the topicalisation system, as Fillmore calls it, the superficial nominative case appears to mark the theme or topic of the sentence. This explains why the animate noun in the dative case in the deep structure of teorija emu ponijatna can appear in the nominative case in on ponimaet teoriju. If the inanimate noun is chosen as the topic of the sentence the animate noun turns up in the surface structure in the dative case. If the animate noun is chosen as the topic of the sentence, it turns up in the surface structure in the nominative case.

This explanation of the nominative case of animate nouns in sentences like On znaet russkij jazyk (he knows
Russian) accords with the derivation of 'have' sentences discussed recently by Bach, Bendix and Benveniste among others. Possessive sentences of the type I have a house, J'ai une maison, Ich habe ein Haus are a comparatively late development in Indo-European. Benveniste (1960) has this to say about 'have' constructions: 'Avoir a la construction d'un verbe transitif; il n'en est pas un pour autant. C'est un pseudo-transitif. Entre le sujet et le régime de avoir il ne peut exister un rapport de transitivité, tel que la notion soit supposée passer sur l'objet et le modifier. Un verbe avoir n'énonce aucun procès. De fait, avoir comme lexème est, dans le monde, une rareté; la plupart des langues ne le connaissent pas. Au sein même des langues indo-européennes, c'est une acquisition tardive, qui mit longtemps à s'imposer et qui reste partielle. L'expression la plus courante du rapport indiqué en nos langues par avoir s'énonce à l' inverse, par être à constituant en sujet ce qui est l'objet grammatical d'un verbe avoir ... On observe souvent que l'évolution se fait de 'mihi est' à 'habeo', non à l'inverse, ce qui signifie que là même où 'habeo' existe, il peut sortir d'un 'mihi est' antérieur ... Or avoir n'est rien autre qu'un être à inverse: mihi est pecunia se retourne en habeo pecuniam. Dans le rapport de possession indiqué par mihi est, c'est la chose possédée qui est posée comme sujet; le possesseur n'est signalé que par ce cas marginal, le datif, qui le désigne comme celui en qui l' 'être à' se réalise. Quand la construction devient habeo pecuniam, ce rapport ne peut devenir 'transitif', le 'ego' posé maintenant
Lyons (1968) pp. 391-393) states that sentences such as habeo pecuniam may be considered the result of what was at first an optional, 'stylistic', transformation, the effect of which was to put the animate noun in surface structure subject position and points out that animate nouns are also usually the 'topics' of sentences. The latter fact certainly accounts for the greater frequency of ja znaju as opposed to mne izvestno constructions. It may be objected at this point that in Russian the Construction which corresponds to 'mihi est' in fact involves the genitive case, whereas the constructions being discussed in connection with stative verbs involve the dative case. A fuller answer to this objection will be made in Chapter Two, but it may be briefly indicated here that both the genitive and dative cases (at least in Russian) derive diachronically from locatives and that a synchronic approach gains in semantic insight by postulating underlying locative constructions as the source of genitives and datives in the surface structure of Russian. The differences between these locative constructions are not as important for this discussion as the fact that both contrast with the use of the nominative to mark agents.

One curious point is that while the mne izvestno, mne verit' sia type of constructions are much less frequent than the ja znaju, ja veriu type, in which the nominative marks the topic of the sentence and not an agent, the original 'have' construction, u menja (at me) is far more
frequent than the 'habeo' one, \textit{ja imaj}.

1.6

The preceding discussion of deep structure sources of superficial nominatives has partly anticipated the answer to the trickier question as to what the deep structure of \textit{teorija emu} \textit{ponatna} might be. The problem is providing a derivation for the sentence which accounts in a natural manner for the dative case of the animate noun and the nominative case of the inanimate noun. If one were using rules of the type proposed by Chomsky in 'Aspects', one would generate a string \textit{NP - V - NP}, assign features to the NPs (whatever these features might be) and then select an appropriate verb. The lexical entry for \textit{izvestnvi}, for example, might take the following form:

\[
\text{izvestnvi} : \left[ +\text{Inanimate} \right] / \left[ - +\text{Nom} \right] / \left[ - \text{Dative} \right]
\]

This entry would be interpreted thus: \textit{izvestnvi} combines with two nouns: to the left, an inanimate nominative noun; to the right, an animate dative noun. Following the application of this rule, further rules would have to deal with topicalisation. These rules would somehow have to change the feature (dative) to (nominative) and replace \textit{izvestnvi} by \textit{znat'} if the animate noun were selected as topic. Quite apart from any questions of complexity or arbitrariness in the
choice of features, this procedure has one essential defect in that the choice of verb depends on the features of the nouns. This is completely counter-intuitive since the key factor which determines and explains all the phenomena is the stativeness of certain verbs. Any claim concerning the deep structure of a language must at least be intuitively satisfying. The 'Aspects' type of approach which has just been outlined does not do anything to explain the 'inactiveness' of the subjects of znat', verit', nonimat' etc. and cannot therefore be accepted. On the other hand, by classifying verbs as stative or active one can account for the fact that animate nouns in the nominative case are felt to be 'active' or 'inactive' depending on what is in the sentence, and one can also explain the various paraphrase relations described in (4). This paper will attempt to show that a verb-dependency approach not only explains the intuitions of the native speaker but will also very probably result in a simpler, more elegant set of rules - at least for the above data.

1.7

Selectional restrictions apply to verbs and adverbs as well as to verbs and nouns. It has been shown that there are definite co-occurrence relations between verbs and adverbs and that the possible combinations of verb and adverb(s) are determined by whether the verb is active, static or stative. In addition to the adverbs
mentioned earlier there are various sub-classes of time adverbs, some of which co-occur with verbs in imperfective aspect, some with verbs in perfective aspect. Two considerations lead one to treat the occurrence or non-occurrence of adverbs as dependent on the aspect of the verb rather than vice-versa: (1) it seems counter-intuitive to make aspect, which is absolutely basic to the Russian verb system, dependent on the minor surface structure category of adverbs: (2) since adverbs do not occur in every superficial sentence the problem remains of assigning aspect to verbs in sentences without adverbs. This could be done either by somehow setting up different systems for sentences with adverbs and sentences without adverbs, or by postulating adverbs in the deep structure of every sentence - which adverbs might be deleted after the aspect of the verb had been determined. Both methods, apart from seeming implausible, could only make the grammar complex and clumsy.

If the choice of verb were made conditional on the choice of noun features, two dependency systems would operate in the grammar: adverbs would be dependent on verbs and verbs would be dependent on nouns. However, if the choice of noun were made conditional on the choice of verb features, the grammar would contain one single dependency system with both nouns and adverbs dependent on verbs. (It has already been noted that the superficial elements classed as adverbs may have diverse sources in the deep structure. This certainly means that the dependency rules will be a good deal more complex
than would appear from the discussion, but does not invalidate the notion of a single system of dependencies).

1.8

In this discussion the terms 'stative', 'static' and 'active' have been applied to verbs and sentences have been described as containing a stative or a static or an active verb. An examination of deep structure shows that the difference between sentences containing stative verbs and sentences containing active verbs involves more than just a difference of verb type. In the deep structure of the former there is a verb marked stative and two nouns. One noun is marked `[animate]` and `[dative case]`, and other `[inanimate]` and `[nominative case]` (The term 'nominative' will be used rather than Fillmore's term 'objective'). This combination of cases and features is peculiar to stative verbs. Other verbs can be accompanied by nouns in the dative case but either the noun is inanimate or the verb is like `dat` (give) and is accompanied by three nouns, not by two. In the deep structure of the latter there is a verb marked `active`. The verb may be accompanied by one, two or three nouns depending on whether the sentence is like `He is running`, `He is reading a book`, or `He gave me a present`. The noun in the first sentence would be marked `[Animate]` and `[Agentive]`. The first noun in the second sentence would be marked `[Animate]` and `[Agentive]`, the second `[Inanimate]` and `[Nominative]`. In the third
sentence the first noun would be marked \([\text{Animate}]\) and \([\text{Agentive}]\), the second \([\text{Animate}]\) and \([\text{Dative}]\), the third \([\text{Inanimate}]\) and \([\text{Nominative}]\). The crucial point is that an active verb is never accompanied by two nouns, one of which is \([\text{Animate}]\) and \([\text{Dative}]\), the other \([\text{Inanimate}]\) and \([\text{Nominative}]\).

There is also a great difference in the possible types of adverbs. Active verbs may be accompanied by any of the manner, place and instrumental adverbs mentioned earlier as well as by various kinds of time adverbs. Stative verbs can co-occur with time adverbs of the dolgo (for a long time) and vsegda (always) type but not with adverbs of manner, place or instrument.

Static verbs are accompanied by one noun marked \([\text{Animate}]\) and \([\text{Nominative}]\) and may co-occur with adverbs of place, certain types of time adverb, and certain types of manner adverb, such as lovko (skilfully).

These facts lead one to speculate whether the differences exist simply between various types of verbs or whether the linguist is missing a generalisation. It seems to the writer that it is equally possible to interpret the differences as being between whole configurations of elements. The configurations look thus (optional elements in brackets):

1. Stative verb + N(Animate, Dative) + N(Inanimate, Nominative)
   (+ Durative time adverbs).

2. Static verb + N(Animate, Objective) (+Time adverb)
   (+ Manner adverb).
3. **Active verb + N(Animate, Agentive), (+ N(Inanimate, Nominative)), (+ N(Animate, Dative))**

(+ Time adverb) (+ Place adverb) (+Manner adverb) (+Instrumental adverb).

If this second interpretation of the facts is adopted, the features 'stative', 'static' and 'active' will become features of the sentence rather than features of the verb. Sentences might then be generated as follows. A sentence would first of all be assigned one of these three features. One of the appropriate class of verbs would then be selected. The lexicon could be organised so that the selection of the feature 'stative', for example, brings into use a section which contains only stative verbs. The entry for each verb would show which combinations of \([\text{-Animate}] / [\text{-Inanimate}]\) and the various cases could be realised as nouns accompanying the verb and also which adverbs are permitted. Rules like these might go some way towards reducing the complexity of the selectional rules.

Although the co-occurrence relations between verbs and nouns and verbs and adverbs provided the first impulse towards the notion of stative, static and active sentences, the proposal leads to other simplifications. It was mentioned that stative verbs never occur in perfective aspect, only in imperfective aspect. The essential point is that aspect (cf. the traditional explanation quoted in the third paragraph of this chapter) is not relevant to stative verbs, so much so that one is tempted to question the validity of using the term 'imperfective aspect' with
reference to stative verbs, in spite of the formal similarities between stative verbs and active verbs in imperfective aspect. Whatever underlying structures were postulated for perfective aspect forms, it would be easy enough to exclude the combination of a stative verb and perfective aspect by marking the lexical entry for the verb as [-Perf. Asp]. This would certainly ensure that the grammar generated no incorrect sentences of Russian but would at the same time fail to capture the peculiarity which distinguishes stative (and static) verbs from active ones. On the other hand, if the grammar recognised a very deep, basic distinction between stative and active sentences, this peculiarity could be expressed by making the sentence feature Active the key which switches the grammar into the rules which determine aspect. If this suggestion turns out to be valid, it opens up the possibility that the base component includes various systems of rules, the choice of one system or another being determined by high-level features. Although in this chapter only very general features such as 'stative', etc. have been discussed, it is very probable that a particular class of sentences includes sub-classes of sentences. The class of active sentences for instance, can be split up into sentences containing transitive verbs and sentences containing intransitive verbs. When this problem comes to be examined it may be useful to talk of transitive and intransitive sentences rather than transitive and intransitive verbs.

One last point. However one decides to treat co-
ordination, and in particular the coordination of sentences, it is simpler to have a rule which allows the coordination of stative sentences, active sentence, a static sentence and an active sentence, but excludes the coordination of static sentences, static and stative sentences, active and stative sentences. This type of rule seems much more elegant than a rule which requires that the underlying structures of two (or more) sentences be generated so that it may examine them to find out what types of verb they contain.

In conclusion it must be emphasised that the above proposals are put forward with reference to a specific set of data from Russian and should be considered as very tentative until it is shown that a grammar constructed on these principles can also handle all the data at present handled by orthodox generative grammars. By the same token, orthodox generative models must seek ways of handling the above data - which at present they cannot do. This inadequacy is not just a matter of complexity or clumsiness but failure to capture the essential features of transitivity relations in Russian. This would indicate that at least some radical revision of existing models is urgently needed.
Footnotes

1. One objection to Fillmore's theory is that in it nouns are introduced as the constituents of cases. Anderson has recently proposed that the constituency trees used by Fillmore be replaced by dependency trees in which the categories are hierarchized in terms of dependency rather than constituency. For example, V might govern the cases Agentive and Objective, which would in turn govern their respective nouns. The introduction of each dependent category would presuppose the prior introduction of its governor, but the presupposition would not involve constituency.

2. A short outline of what is meant by 'aspect' will be useful to readers not acquainted with Russian. Russian verbs typically have two sets of forms, one set for imperfective aspect, the other for perfective aspect. For example, the imperfective infinitive form of the verb write is nisat', the perfective form - nanisat'. Na- is a prefix which marks perfective aspect. Many of the forms which are used as verbal prefixes occur elsewhere as prepositions with their own more or less definite meaning. Na, for example, means 'on'. Prefixation is not the only way of differentiating between perfective and imperfective forms. For some verbs a change of conjugation is used, as exemplified by resat' (imperfective) - resit' (perfective). Sometimes the imperfective stem is derived from the perfective
stem by the addition of an infix, e.g. onisat' (perfective) - opisyvat' (imperfective).

3. The verb dumat' in this list is the one that glosses 'think' in He thinks that Joe will win or Who thinks that linguistics is easy? It does not gloss 'think' in He is thinking about the race. Compare the acceptability of Think hard! and the unacceptability of Think that Joe will win! Note also He tried to think that linguistics was a science; He thought that we were wrong. Peter did so too.

In other words, one can distinguish between 'think' in the sense of having an idea or opinion and 'think' in the sense of 'cogitate'. (cf. French, penser de, penser a). There is no sentence in Russian Emu dumalos' o probleme - lit. To him thought about the problem.

4. 'Adverbs' here refers to surface structure adverbs, which may not originate as a category 'adverb' in the deep structure. Lakoff, for instance, has suggested that adverbs of manner like 'enthusiastically' derive from deep structure adjectives. The problem of postulating a plausible underlying source for adverbs does not crucially affect the argument in this chapter.

5. Other important candidates for the list of stative verbs are videt' (see), služat' (hear), nenavidet' (hate). The labelling of these verbs as stative is justified by the following pairs of paraphrases.
1a. On videl gorod : He saw the town.
1b. Gorod byl emu viden : (lit) The town was to him visible.

2a. Ja nenavižu etogo duraka : I hate that fool.
2b. Etot durak mne nenavisten : (lit) that fool to me hateful.

3a. Kto slyšit zvuk? : Who hears the sound?
3b. Komu slyšen zvuk? : (lit) To whom audible the sound?

Each pair of sentences is subject to the same selectional restrictions which apply to stative verbs already discussed. Slyšat' (hear) has an ingressive form uslyšat', as in Ja uslyšal zvuk (I heard the sound, i.e. the sound became audible). Videt' is usually described as the perfective form of viden' but is translated into English as 'catch sight of' and is more accurately described as ingressive. The sentence Ja videl ego (I have caught sight of him) may imply a sentence Ja vižu ego (I see him) but cannot imply the sentence Ja bol'se ne vižu ego (I no longer see him).
CHAPTER 2

Traditional Explanations of Aspect

2.1 With the exclusion of stative and static verbs from the aspect system of Russian the problem of aspect has been more clearly defined. Before the question is broached as to how aspect might be accounted for in a generative grammar of Russian, a brief report of previous explanations is in order.

Isačenko provides an excellent overview of the principal lines of approach adopted by earlier scholars. Some scholars, taking imperfective aspect as their starting point, put forward the notion of duration as the main criterion. Among the proponents of this view were such Western scholars as Brugmann, Leskien, Vondrák and Meillet and such Russian scholars as Potebnja and Peškovskij. Their explanation has one serious defect. If a verb in imperfective aspect refers to an action of some duration, and if perfective aspect is the opposite of imperfective aspect, then a verb in perfective aspect must refer to an action which has no duration at all. This view is open to two objections: (1) any action or process, even the shortest, has some duration; (2) A perfective form like написал (wrote/has written) is simply unmarked with respect to duration. The sentence Он наконец написал диссертацію (He has finally written his dissertation) is not to be taken as referring to a rushed job. One possible continuation in a dialogue is
Napisal no on desiat' let pisal ee (lit. Yes, but he wrote it for ten years). Aspect is not essentially an opposition of duration and non-duration.

Many scholars started out from the notion of perfectivity, which they thought has to do with 'completion'. The classic definition was formulated by Miklosisch in 1883: 'An action is either presented as on-going (dauernd) or expressed as completed (Vollendet). This definition, however, emphasises completion, the final phase of an action, or its result. But the form poslal (sent) in On poslal mne knigu (He sent me the book) does not emphasise completion or result but refers to the action as a whole.

A number of Russian scholars, among them Buslaev, Potebnja and Peškovskij, also made use of the concepts 'punctual' and 'linear' in their efforts to explain aspect. This choice of criteria was probably influenced by the existence of 'semelfactive' verbs like kol′nut' (stab) and tolknut' (push) which are usually described as denoting momentary or punctual actions. Peškovskij also claimed that by characterizing perfective aspect as 'punctual' one could explain why perfective forms never occurred with načat (begin). This characterisation also fails on several grounds: (1) The above examples of perfective verbs, napisal and poslal, can hardly be appropriately described as 'punctual'. (2) The class of semelfactive verbs is a particular sub-class of perfective verbs. In addition to forms like napisal there is another sub-class of perfective verbs which cannot on any grounds
be described as referring to 'punctual' actions as they refer to actions which went on for a short time in the past, e.g. *On pogovoril so mnoi* (He spoke for a short time with me, i.e. chatted), *On porahotal sevodnja* (He did some work today). Generalising from the class of semelfactive verbs to the class of perfective verbs is no less mistaken than generalizing from the class of 'attenuative' verbs such as *pogovorit*.

**Mazon's Account of Aspect**

2.1.1. Not mentioned by Isačenko, but nonetheless an extremely important contribution to the study of aspect in Russian is Mazon's book 'Emplois du Verbe Russe'. This book is important in two respects: it concentrates on explaining the use of aspect in modern Russian and not on explaining the historical evolution of the various aspect forms, and it attempts to find semantic criteria which apply to all the various verb forms, indicative, infinitive and imperative. Since one of the theses of this study is that in certain important cases different derivations of aspect are required for indicative and infinitive forms, (cf. Chapter Six) it is clear that I do not accept all Mazon's proposals. In spite of this, it is worthwhile describing the latter in detail, since they contain many valid comments and insights which will act as a semantic touchstone for whatever underlying structure is eventually set up.

Mazon defines a perfective verb as one which is not
capable of combining with budu (or the other future forms of the verb 'to be' to form a periphrastic future. One finds On budet pisat' dissertaciju (He will write the dissertation) but not On budet napisat' (perf.) dissertaciju. He then establishes his semantic criteria by examining the infinitive and imperative forms: 'On a cru remédier à ces deux défauts, ou du moins au second d'entre eux (substituer des séries de faits particuliers aux faits généraux) en étudiant tout d'abord, et à part, les formes non temporelles du verbe, à savoir l'infinitif et l'impératif. C'est en elles en effet que la notion d'aspect apparaît à l'état pur, exempte de tout alliage avec la notion de temps, et c'est en elles, par suite, qu'on est en droit de chercher les divisions et subdivisions essentielles entre lesquelles peuvent être répartis les divers emplois de l'aspect'.

For the perfective infinitive Mazon sets up the following criteria : (1) 'Action considérée dans son achèvement intégral'; (2) 'Action réitérée ramenée à l'unité'. These two criteria are then applied in the analysis of all types of perfective forms. For the imperfective infinitive three main criteria are established: (1) 'Action unique qui se développe'; (2) 'Action réitérée'; (3) 'Action généralisée'. These three criteria are then applied in the analysis of all types of imperfective forms. Each of the main criteria is further subdivided but each type of perfective or imperfective form has its own set of subdivisions. Exactly what the subdivisions are will be made clear in the discussion of
each type in turn. For the moment attention will be paid only to the imperfective present tense forms and the imperfective and perfective past tense forms.

**Imperfective present tense forms.**

(1) 'Action unique qui se développe'.

A Présent de tentative ou d'effort (praesens de conatu) 
Dvux synovel...bez oceredi y nekruty otdal, a teperja i 
trat'ev otnimaiet - He gave two sons together as recuits and is now getting rid of (i.e. trying to get rid of) the third one.

B Action unique simple.

Čto ty delaš' tut? - What are you doing here? 
-A storožem siž - lit. As a guard I am sitting, i.e. I'm keeping watch.

C Action unique complexe.

On segodnia pišet pis'ma - He is writing letters today.

(2) Action réitérée.

A Action réitérée proprement dite. 
Tepér' on mne sto calkovykh obroka platit - He now pays me a hundred roubles rent.

B Action réitérée ou complexe ramenée à l'unité. 
Za čto ni voz'metsja, vse iz ruk valitsja - No matter what he takes up, it all comes to nought.

**Imperfective past tense forms.**

(1) Action unique qui se développe.

A Action tentée. 
Ona zapela motiv pesni...kotoryj ona lovila vaju dorogu 
i nakonec pojmala - She began to hum the tune of a song... which she had been trying to remember all the way there and had finally remembered.
B Action unique simple conçue dans son développement et sa durée.

Poka ja eše spobražal, v kakúju storonu poiti... - While I was still wondering which way to go...

Volj dolgo otnékivalsja, nakonec soglasilsja - The wolf refused for a long time but finally agreed.

Vy dolzon’ko lašilis' (lit., You a long time were being cured, i.e. You took a long time to recover.

The last two sentences are meant to illustrate how adverbs can bring out and emphasise duration. At this point Mazon makes the following relevant observations:

'La conception imperfective de l’action passée prévaut pour un petit nombre de verbes à répartir entre deux catégories, à savoir verbes de fonctions naturelles, d’une part : voir, entendre, dormir, boire et manger, - et verbes exprimant un état physique ou moral, d’autre part : pouvoir et vouloir. La notion de durée justifie la prédominance de l’aspect imperfectif pour les premiers; la notion d’état malaisément limitable dans le temps, mais prolongée, justifie cette même prédominance pour les seconds. Dans l’un et l’autre cas, le sujet a plus volontiers en vue l’action verbale elle-même que son résultat, et une action verbale qui, de par sa nature même, implique un élément de durée...’ The last sentence is repugnant on general theoretical grounds. Does Mazon use 'plus volontiers' because he thinks that native speakers of Russian can choose freely whether they want to express the result of seeing or just the action of seeing? And is the notion of result really appropriate to verbs like
Are *boire* and *manger* similar in meaning to *voir*, *entendre*, *vouloir*? These questions can be asked on general grounds and some of the answers are supplied by the previous discussion of stative verbs with respect to a particular model of grammar. Sentences like *Ja vižu evo* (I see him) and *On spīt* (He is sleeping) derive from deep structures which differ in certain crucial respects from those underlying sentences like *On pišet pis’mo* (He is writing a letter). (For a discussion of *eat* and *drink* see Chapter Five, pp. 214 ff. The status of *moč* (be able) is examined in (Chapter Six).

Mazon is perfectly correct, of course, in maintaining that the notion of duration is important in the meaning of these verbs. His mistake lies in the assumption that the notion of aspect is in any way relevant to these verbs.

C Action unique complexe.

Mazon uses this phrase to describe 'une action prolongée décomposable, malgré son apparence d'unité, en un certain nombre de mouvements identiques ou varies, en un mot une action complexe.'

*Bababila menja da prigovarivala* - The woman was beating me and saying...

(2) Action réitérée.

A Action réitérée proprement dite.

*Peredonov užė neskol’ko raz draznil ego* - Peredonov had already teased him several times.

*Ja sam ne raz vstrežal etu Akulinu* - I myself have met that Akulina more than once.

Mazon also gives examples involving phrases like *mne*
ne raz slvačlos' (it happened to me several times that), raz šest' prizodilos' emu (six times he had to...). These phrases are certainly not to be placed under the rubric of 'action réitérée' for the very simple reason that they do not refer to actions. These objections on semantic grounds are supported by the form of the sentences, the animate noun associated with these verbs always appearing in the dative case.

B Action réitérée our complexe ramenée à l'unité.

Vater ... nes no ulicam nvp'vne vixri - The wind blew swirls of dust along the streets.

(3) Action généralisée.

Mazon has in mind sentences in which 'Le prêtérit imperfectif sert... à l'expression d'une action passée dégagée de circonstances qui précisent et limitent étroitement son accomplissement, conçue en un mot de manière indéterminée et jusqu'à un certain point généralisée.'

Umer čelov, - ne tvoja vina : tv no pravilam postupal - A man has died. It's not your fault: you acted according to the rules.

Čego mesti? Ja mel sevodnia. - Why sweep? I swept today, i.e. did the sweeping.

Perfective past tense forms

These forms express 'une action passée conçue comme un tout intégralement achevée.'

(1) Action unique considérée dans son achèvement intégral.

The perfective past tense forms, according to Mazon, exclude 'toute notion de développement et de durée'.

39
Hazon uses the terms *linear* and *punctual* action but gives them his own interpretation. By *punctual* he means simply that 'le prétérít perfectif pose simplement un fait... il ne fait autre chose que de l'indiquer purement et simplement sans y attarder l'imagination de l'interlocuteur ou du lecteur'. By *linear* Mazon means that 'le prétérít imperfectif est concrètement suggestif: il évoque une vision prolongée'.

A Action conditionnant une autre action.

...sredrazsvetnyj vater podul - i tixo vsplyvает bagrovoe solnce - ... The dawn wind sprang up - and the scarlet sun floated softly up.

B Action ne conditionnant pas une autre action, mais conçue comme un tout achevé.

a. Achèvement.

On dobilsia toi celi, kotoroi on vsiu žizn' dobivalsia -

He achieved the goal towards which he had been striving all his life.

The interesting feature of this example is that the formally unrelated verbs in the English sentence, *achieve* and *strive*, are formally related in the Russian version. *Dobilsia*, the form corresponding to *achieve*, is the perfective form, and *dobivalsia*, the form corresponding to *strive for*, is the imperfective form of one and the same verb. The point which Mazon is making is that the notion of completion combines with the notion of result 'dans toutes les phrases à opposition d'aspect dont le premier élément signifie l'effort du sujet vers la réalisation de cette même action verbale.'
b. Absence de durée.

Volk prygal - prygal, otorval sebe xvost i pustilsia
bez ogliadki bežat' - The wolf jumped and jumped (imperf.),
tore off (perf.) its tail and ran off (perf.) without once looking back.

The past perfective 'exclut ... toute représentation de développement et, par conséquence, de durée. Il exprime une action une et rapide.' This statement is open to criticism on the same grounds as the approach which takes duration vs. non-duration as the main feature distinguishing imperfective from perfective forms. Just as a perfective form may or may not refer to an action of long duration, so the same form may or may not refer to a rapid action. The sentence On posal' mne tridcat' kniz (He sent me thirty books) does not necessarily refer to a rapid action.

Mazon makes the point that when the duration of an action is emphasised an imperfective form is generally used, although past perfectives frequently co-occur with adverbial phrases such as celuiu noč (the whole night), tridcat' let (thirty years). In such cases the perfective 'concentre l'action verbale,...la ramasse...en un bloc; il en exprime l'achèvement et le résultat et n'en découvre nullement le développement ni la durée.'

a. Ne mozu skazat', skol'ko vremeni ja prospal - I can't say how long I've slept.

b. Už on sidel - sidel, celuiu noč' prosidel - He sat and sat, he sat through the whole night.

c. (On) tridcat' let na stolku prostojal - (He) stood for thirty years on a post.
d. Ja v tri dnja pročital etu knigu – I read through this book in three days.

e. ...vy ot'exali versty dve – ... you have covered two versts.

f. On v tri mesiaca vvučilsja čitat' i pisat' – He learned to read and write in three months.

Six of Mazon's examples have been quoted because the examples vary in type. (a), (b) and (c) are the most interesting in that they contain special perfectives formed by means of the prefix pro-. These perfectives are not paired with any imperfective forms, in the sense in which pisat' and napisat' are the perfective and imperfective forms of the verb 'to write', but are a special type of Aktionsart and co-occur with adverbial phrases of time containing quantifiers, e.g. celuju (whole), tridcat' (thirty), skol'ko (how much). Mazon is correct in pointing out that imperfective forms also co-occur with such adverbial phrases, and his glossing of the meaning of the perfective forms is also intuitively satisfying, even if not couched in a testable form. (d), (e) and (f), however, differ from the first three examples. The adverbial phrase in (d), v tri dni, expresses 'time within which' and not 'time during which'. Moreover, the form pročital (read through), although containing the prefix pro-, may be described for the moment as 'resultative' in meaning. The verb čitat' which simply means 'to read', is linked with the 'resultative' pair of forms pročitat' (perf.) and pročityvat' (imperf.), whereas the pro-forms in (a), (b) and (c) do not express result. (e) contains
an adverbial phrase expressing distance and not an adverbial phrase of time, and the perfective form *ot'ezat* is paired with the imperfective form *ot'ezžat*. The two forms both express completion in the sense of 'distance covered' or 'distance completed'. (f), like (d), contains an adverbial phrase expressing 'time within which', and *vyušit'sia* is paired with the imperfective form *vyušivat'sia*. These two forms have a 'resultative' meaning and are related to the verb *nšit'sia*, which means 'to learn'.

Mason's statement is thus seen to need some revision. That the perfective 'ramasse (l'action) en un bloc' applies only to (a), (b) and (c) (and even then the term 'action' is not appropriate to *prospal* (slept through), *prosidel* (sat through) and *prostotal* (stood through). That part of the statement which brings in the notion of result does not apply to these three examples, nor yet to the last three examples, since any element of 'result' in *vyučilsia*, *ot'ezal* and *pročital* is inherent in the lexical meaning of the verb, i.e. is present in both the perfective and imperfective forms and has therefore nothing to do with the choice of aspect.

c. Netteté de contour.

*napísal-li ví vý včera?* - Did you write to him yesterday?

*Ja napísal emu* - I wrote to him.

Mason glosses this example as 'Je lui ai écrit: c'est chose faite.'

2 Action réitérée ramenée à l'unité.

*On...neskol'ko raz skázal mne* - He told me several times.
The horseman rode past us three or four times...

Ljudmila turned round several times.

Mazon's description is easily understood from the examples but it is worth noting that the second and third examples above refer to actions performed on one occasion, whereas the first example may be interpreted as referring to several occasions. What Mazon seems to be talking about is several actions performed on one occasion.

It must be stressed that the preceding account of Mazon's work leaves out a number of comments and examples which will be taken up once my own proposals have been made. In particular, the examples of negative sentences will be fully dealt with in the section on aspect in negative sentences. Although no attempt has been made in this thesis to define and distinguish between the notions of aspect and Aktionsart, this will be undertaken in the Chapter on Aktionsarten.

2.1.2 Isačenko's Account of Aspect.

Isačenko's explanation of aspect is rather similar to Mazon's, though expressed in a different way. Isačenko considers the opposition of perfective and imperfective aspect in Prague School terms. Perfective aspect, which definitely denotes a completed action, is the marked member of the opposition, and imperfective aspect, which may or may not refer to a completed action, is the unmarked
member. Isačenko also explains the opposition more graphically. The viewpoint of the speaker who uses an imperfective verb is like the viewpoint of a person taking part in a parade, in that the latter can see neither the beginning nor the end of the parade but is in the thick of things. On the other hand, the viewpoint of the speaker who uses a perfective verb is like the viewpoint of the people reviewing the parade, in that the latter can see the parade as a whole, its beginning, middle and end.

The preceding statements and comments are representative of the general views taken of aspect by scholars in the Russian field, Mazon's work in particular remaining to this day the most comprehensive and detailed study of aspect in Russian. Although the statements and comments do not form part of a general grammar of Russian based on explicitly stated principles, nonetheless many of the analyses contain genuine and valuable insights which satisfy the intuition of native speakers of Russian. As such, these analyses are not to be discounted and discarded but kept very much in mind. The task of the transformationalist is to propose underlying structures which accord both with the principles of transformational grammar and with these insights.

2.2. Verbs and Adjectives in Russian

I am going to approach the problem of aspect in what may seem a very indirect fashion, namely by considering
those parts of speech known as verb and adjective. The arguments set out will be in support of a proposal that, while verbs and adjectives are separate categories in the surface structure of Russian, they are categorically identical in the base component of a transformational grammar of that language. Since this proposal goes against the notions generally accepted by linguists working on Russian, and since it may seem rather implausible because of the very striking superficial differences between verbs and adjectives in Russian, the case will be argued in two parts. Firstly, the problem will be discussed from a general linguistic and philosophical viewpoint in order to show that the suggestion is not outrageously implausible, and secondly specific syntactic evidence from Russian will be presented.

2.2.1 Some Similarities Between Verbs and Adjectives in Russian

The important word in the previous sentence is syntactic. The fact is that in Russian these striking superficial differences between verbs and adjectives concern the form of these categories and their position in the sentence. To take the latter point first, it is well known that there are different sets of endings for verbs and adjectives, that the adjective agrees with the noun it modifies in case, number and gender (except in those sentences in which the adjective occurs after the past tense or future tense form of the copula, in which case it agrees with the noun in number and gender but itself
takes the instrumental case), and that the verb agrees
with the subject noun in person and number in the non-
past tenses, in number and gender in the past tenses.
However, it may be asked on general grounds whether this
question of agreement is not rather incidental than ess-
ential to these categories; and in a generative grammar
there can be no doubt that agreement is a comparatively
'high-level' phenomenon. It may be argued that verbs are
capable of displaying tense whereas adjectives are not.
As will be seen, this view of tense as inherent in the
verb is not acceptable on general linguistic and philos-
ophical grounds, and it has been demonstrated that in a
generative grammar of English tense is better treated as
a separate element in the deep structure which is some-
times attached to the verb and sometimes realized as a
dummy element, e.g. did in Did you knock?

The differences in position turn out to be even less
certain than the differences in form. It might seem at
first sight that adjectives occur in both predicative and
attributive position and that verbs occur only in predic-
ative position. But it is possible to argue that the
'present and past participles are simply the form assumed
by verbs when they occur in attributive position. It is
significant that adjectives and participles occur in
'attributive' position only in complex sentences which,
in a general way, may be said to be composed of simpler
sentences. For example, The house is red may be said,
without getting caught up in philosophical subtleties, to
express one proposition, namely that the house is red.
But the red house is empty may be said to express two propositions, namely 'A house is empty' and 'That house is red'. (It might be claimed that this sentence expresses a third proposition, namely 'There is a house'.) In transformational grammar the notions 'attributive' and 'predicative' are not relevant to the base component. 

The sleeping child lay on the floor and the sick child lay on the floor are both derived from deep structures containing two sentences, and both спиашчий and болной are in 'predicative' position.

The tree diagram shows clearly how the sentence The child is sleeping is embedded in the sentence The child is lying on the floor. The Russian verb 'sleep' is represented as сп-, i.e. as the root form, because it is not possible to predict in the base component exactly what endings will be attached to the root. It should also be noted that the tree contains no category 'definite article' but only a feature, [^-Definite] which is realised as a
superficial category in English but not in Russian. If the embedded sentence were Rebenok bol'noi (The child is sick), the VP of the embedded sentence would be developed as Adjective, which in turn would be replaced by the root bol'n (sick)

It seems intuitively clear to native speakers of English and Russian that the distinction between verbs and adjectives reflects some kind of fundamental distinction in reality, but attempts to define this distinction generally meet with little success. The Academy Grammar describes adjectives as denoting a characteristic (prisnak) of an object and verbs as denoting actions, or as presenting other processes as actions (whatever that may mean) or as expressing states, the appearance of a characteristic, a change in a characteristic, or a relation with somebody or something, e.g. uvazat' (respect). However, given the sentences Ivan kurit trubku (Ivan smokes a pipe), Ivan peškom xodit na rabotu (Ivan goes to work on foot), and Ivan bednyi (Ivan is poor), the phrases kurit trubku, and peškom xodit na rabotu, which contain verbs, and the adjective bednyi can all equally be said to denote characteristics of Ivan, from which it is clear that the property of denoting characteristics is not peculiar to adjectives. Furthermore, although the majority of verbs refer to actions, some verbs do refer to states, e.g. znaet (knows). But the property of denoting states is traditionally ascribed to adjectives, e.g. on ščastliv (He is happy). For Russian, then, one could say that most, but not all, verbs denote actions or processes while no adjectives
denote actions or processes. Such a statement cannot be considered satisfactory, since it gives only a negative definition of adjectives and does not give a definition which applies to all verbs.

2.2.2 Sapir on Verbs and Adjectives

Sapir (1921) aware of all these difficulties, wrote perhaps the most lucid short account of the general linguistic situation. He points out that there is no simple correspondence between verbs and actions, nouns and objects, adjectives and qualities. Speakers of English would think it strange to express the notion of 'being red' by a verb, yet there are hundreds of languages in which one would say 'It reds' in the sense of 'It is red', and there are many languages that can express what speakers of English would call on adjective only by making a particle out of a verb. In such languages 'The red book' is related to 'The book reds', just as in English 'The sleeping Child' is related to 'The child sleep'.

Having noted that many languages have no separate formal categories of verb and adjective, Sapir relates the formal categories of noun and verb to the nature of propositions. Speech consists of a series of propositions in which there must be something to talk about and something to be said about this subject of discourse. The vast majority of languages have emphasised this distinction by creating a formal barrier between the two terms of the proposition. Nouns refer to the subject of discourse
and verbs are used for predicating. No other part of speech is essential for the life of language.

The next step in the exposition is to argue that verbs and adjectives are merely variants of the same category, though Sapir did not have at his disposal the necessary conceptual apparatus for stating this view succinctly in terms of deep and surface structure.

2.2.3 Philosophical Treatment of Verbs and Adjectives

Sapir accepts a theory of propositions which has its roots in Greek philosophy. As far as is known, Plato was the first Western philosopher to distinguish between nouns and verbs. 'Nouns' were terms that could function in sentences as the subject of a predication and 'verbs' were terms which could express the action or quality which was predicated. Two points must be noted about this definition: (1) words were classified as nouns or verbs according to their role as constituents of a proposition; (2) verbs and adjectives were assigned to the same class. Because the adjective, like the noun, is inflected in Greek and Latin for case and number, and because the adjective may be used without an accompanying noun as the subject of a sentence, the Alexandrian grammarians grouped the noun and the adjective together in one class and put the verb in a class of its own. The Alexandrian classification was itself modified in mediæval times when the noun and the adjective were classified as separate parts of speech. It is this modified Alex-
andrian classification which was adopted, and is still accepted, by the majority of scholars engaged in linguistic studies.

Philosophers, however, who remained more interested in the structure of propositions than in the form of words, continued to hold, more or less, the views expressed by Plato. The need for the cautious phrase 'more or less' becomes apparent in Strawson's discussion of subject and predicate in his book 'Individuals'. Strawson examines 'the supposed distinction between two kinds of elements which may be combined to yield a singular proposition'. This distinction may be thought of as a distinction between the two function involved in the assertion of propositions, namely between referring to something and describing it or between designating something and predicing something of it. This distinction can also be thought of in terms of the linguistic parts of sentences to which these functions are assigned when a statement is being made. Philosophers have drawn a distinction between the singular term and the predicative expression, the referring expression and the predicate expression, the subject and the predicate, the subject expression and the ascriptive expression. Strawson considers that the phrases 'predicate' and 'ascriptive expression' are the most revealing, since they suggest that the notion of elements being combined to form propositions can be interpreted in the sense of two different non-linguistic items, or terms, being brought together or connected to produce a proposition. 'The two items are
that which we ascribe, and that to which we ascribe it, that which we predicate and that of which we predicate it'.

Strawson then examines the assertions *Raleigh smokes* and *Socrates is wise*. In the first assertion one would want to qualify *Raleigh* as the subject expression and *smokes* as the ascriptive or predicate expression. The problem is to give adequate definitions of subject and predicate. Strawson argues that in *Raleigh smokes*, for example, the expression 'Raleigh' serves to *introduce* the particular person Raleigh into the remark and that the expression 'smokes' serves to *introduce* the habit or action of smoking. The expressions 'Raleigh' and 'smokes' both introduce a term, but in different ways, which Strawson calls respectively, the noun-like and the verb-like style of introduction. Strawson attempts to describe the distinction between subject and predicate expressions by appealing to the grammar of English: a subject expression may be called a 'singular grammatically substantival' expression and a predicate expression may be characterized as containing at least one finite form of a verb in the indicative mood. This definition would apply to both *smokes* and *is wise*.

It is at this point that the import of 'more or less' becomes obvious, since Plato said nothing about predicates having to contain a finite form of a verb. Strawson's tentative characterisation of predicate expressions is at least implicit in the writings of other influential philosophers. Reichenbach, for example, has the following to
say: 'We may therefore say that it is the syntactical nature of the verb to indicate a function. On the other hand, since the copula does not constitute a function when used alone, but does so only in combination with adjectives or nouns, it appears justifiable to regard the copula as performing only the syntactical task of indicating the function, while the content of the function is stated in the adjective or noun. We thus consider 'x sleeps' and 'x is sleeping' as of a similar logical nature'. (It may be noted in passing that the notion that a predicate expression must contain at least one finite form of a verb in indicative mood, combined with a confusion of logical and linguistic concepts, was partly responsible for the statement found in many grammar books to the effect that every sentence must contain a finite verb.)

One defect common to Strawson's tentative definition of 'predicate' and to Reichenbach's statement about the copula is that they are inapplicable to Russian. Strawson's definition cannot be taken as generally valid because of such sentences as On bolen (He is ill) and On inžener (He is an engineer) which contain no morph corresponding to is. These examples also show that the copula is not a necessary indicator of predication. Strawson himself realises the inadequacy of the tentative definition, which allows the phrase Socrates is to be classified as a predicate, since it contains a verb in indicative mood.

He also emphasises how mistaken it is to rely on
grammatical criteria, since grammatical classifications may differ radically from one group of languages to another and since 'grammatical explanations do not unequivocally or clearly declare their own logical rationale'. That is the distinction between the noun-like and verb-like styles of introducing terms has still to be explained.

Any given subject expression, i.e. a noun or a noun phrase, indicates nothing about the kind of sentence in which it occurs but a predicate expression such as is wise in Socrates is wise does not merely introduce its term but introduces it in a quite 'distinctive and important style, viz. the assertive or propositional style'. Strawson anticipates the objection that, e.g. the expression is wise may occur in questions or conditional clauses by arguing that questions invite one to pronounce on the truth-value of propositions and that the function of conditional clauses is to bring before one propositions on the truth-value of which the speaker does not commit himself.

This summary of Strawson's work is not meant to be exhaustive, especially as Strawson goes on to consider what combinations of particular and universal terms are possible in propositions and to elaborate the notions of sortal and characterising universals. (For an indication as to how these latter notions might be applied in linguistic theory, see Lyon's (1968) pp 337-338.) The purpose of the summary is to illustrate the steps by which philosophers have arrived at the notion that verbs and adjectives have the same function in propositions and to
show that, although the surface structure of Western European languages requires that an adjective in predicative position be connected by the copula with the noun it modifies, there are languages in which, in the present tense at least, no copula is used between noun and adjective. From this it follows that there is not the great gulf between verb and adjective that one might suppose - and as has been imagined by many linguists - from a cursory examination of such English sentences as Raleigh smokes and Socrates is wise.

2.2.4 Lyons and Lakoff on Verbs and Adjectives

Against this general linguistic and philosophical background, and within the framework of transformational grammar, two contemporary linguists have recently proposed that the categorial distinction between verbs and adjectives is not appropriate in deep structure. Lyons (1966), drawing on the type of philosophical argument outlined above and presenting syntactic evidence from various languages, makes out a general case for regarding 'noun', 'predicator' and 'sentence' as the primary categorial notions of grammatical theory. 'Verb', 'adjective' and 'adverb' should not be regarded as substantive universals of grammatical theory but as complex 'cover terms' to be employed in the description of particular languages. In addition to the syntactic arguments mentioned at the beginning of this discussion of verbs and adjectives, Lyons makes the suggestion that the copula be regarded
as a 'dummy carrier' of tense, mood, aspect and number in 'surface structure'.

While Lyons makes out an extremely attractive case for general grammatical theory, the decision to regard superficial verbs and adjectives as categorically identical in the deep structure must be taken on the basis of syntactic evidence internal to each language under analysis. This is not to suggest that Lyons presents no evidence internal to any language but simply that the hypotheses of general grammatical theory must be tested by gathering as much syntactic evidence as possible and must be demonstrated for each language under investigation. A fair amount of such evidence has been presented for English by Lakoff (1965). Some of the syntactic phenomena which Lakoff adduces as evidence are not relevant to Russian but a number of points are.

2.2.5. Lakoff's Evidence From English Which Also Holds For Russian.

(1) Many pairs of sentences are understood in the same way, though one of the sentences contains a verb and the other an adjective. Examples from Russian are (the first sentence in each example contains a verb, the second an adjective.)

a. *Evo vopros udivil' vsex* - His question amazed everybody.

a₁. *Evo vopros byl udivitel'nym dlja vsex* - His question was amazing to everybody.

b. Tobacco is harmful to one's health.

c. The disease frightens (one).

d. He resembles his father.

e. I do not agree with the author's opinion.

f. He is angry with his neighbour.

g. We are glad about your success.

h. He is always silent.

i. He is always ill.

j. His deed horrifies everyone.

The fact that in some examples, for instance (b) and (b), the adjective is accompanied by a preposition while the verb is not does not have any direct bearing on the
problem of deep structure categories. Lakoff, in commenting on the difference between the English sentences My fear of rain and I fear rain, makes a passing suggestion to the effect that prepositions are probably present in the deep structure at some level of analysis and that there may be a late rule in English which deletes prepositions after verbs which have not been nominalized. This suggestion is of no help with respect to the Russian examples which involve verb and adjective, not verb and noun.

What does have a direct bearing on the problem of deep structure categories is Fillmore's work on case. Fillmore (1968) suggests that in view of the many similarities between the functions of case endings and prepositions these superficial elements should be treated as realisations of the same abstract elements in the deep structure. For example, there are languages such as Georgian and Eskimo which have ergative, nominative and instrumental cases, among others. Given sentences in these languages corresponding to the English sentences John pushed Bill, Peter sang and Frank broke it with a hammer, the words corresponding to John, Peter and hammer would be in the ergative, nominative and instrumental cases respectively. Such languages seem totally different from English, yet in the English sentences Bill was pushed by John and It was broken with a hammer by and with can be regarded as marking the agent and the instrument respectively. It is further possible to argue that the case endings of the 'exotic' languages and the famil-
lar prepositions of English are simply different realisations of abstract features such as [+Ergative] and [+Instrumental].

It may even be the case that a difference in preposition is connected merely with nominalisation as in His hopes of a quick success which derives from He hopes for a quick success. A thorough investigation of the problem would go far beyond the bounds of this discussion. Since enough has been said to demonstrate that the presence or absence of prepositions does not affect in any essential way the proposal concerning the deep structure categorial identity of verbs and adjectives, the question of cases and prepositions will be neglected for the moment.

(2) Almost all the contextual restrictions which apply to verbs also apply to adjectives.

a. One finds transitive and intransitive adjectives as well as transitive and intransitive verbs. (The terms 'transitive' and 'intransitive' refer here to the surface structure. A 'transitive' verb is one which is followed by a noun phrase or a preposition plus a noun phrase; a 'transitive' adjective is one which is followed by a preposition plus a noun phrase).

Transitive verbs

Professor prinimaet eti idei - The professor accepts these ideas.

Ja smotriu na kartinu - I am looking at the picture.

Intransitive verbs

Ivan bekit - Ivan is running.

Alexei spit - Alexej is sleeping.
Transitive adjectives

On ravnodušen k lingvistike - He is indifferent to linguistics.

On poxož na otca - lit. He is like to his father.

On sposoben na vse - He is capable of anything.

Intransitive adjectives

Ona bogata - She is rich.

On zastenčiv - He is shy.

b. There are both verbs and adjectives which occur only with animate subjects.

Verbs

Filosof razmyšljaet o budučem - The philosopher is meditating about the future.

Ministr rozglasilsja s planom - The minister agreed with the plan.

*Kamen' razmyšljaet o prošlem - *The stone is meditating about the past.

*Zabor soglasilsja s planom - *The fence agreed with the plan.

Adjectives

Otec zol na syna - The father is angry at his son.

Devoška robka - The little girl is shy.

*Holot zol na syna - *The hammer is angry at its son.

*Boška robka - *The boat is shy.

c. There are verbs and adjectives which can occur with both abstract and concrete nouns.

Verbs

Pryl' rasprostranjaetsia na ves' rajon - The dust is spreading to the whole area.
His influence is spreading to all the workers.

Fertilizer is useful for the crops.

His influence is useful for the workers.

d. There are both verbs and adjectives which can be accompanied only by nouns referring to physical objects.

Verbs

- The box is sitting on the table.
- The plate fell to the floor.
- *Fury is sitting on the table.
- *Sincerity fell to the floor.

Adjectives

- The book is heavy.
- The ball is round.
- *Softness is heavy.
- *Inspiration is round.

e. There are verbs and adjectives which require an animate object.

Verbs

- He taught the children.
- Who killed the dog?
- *He taught the books.
- *Who killed the river?

Adjectives

- He was kind to the children.
On byl dobrý k mašinam - He was kind to the cars.

f. There are verbs and adjectives which take abstract objects.
On ob'jasnil idej - He explained the idea.
On byl ravnodušen k takim teorijam - He was indifferent to such theories.

g. Both verbs and adjectives co-occur with time adverbs.

Verbs
On pisal vsiu noč' - He wrote all night.
On často poseděl muzej - He often visited the museum.
On postojanno posylal si podarki - He continually sent her presents.

Adjectives
On vsiu noč' byl bolan - He was ill all night.
On často byl prav - He was often right.
On dolgo byl bedný - He was poor for a long time.
On postojanno ugrijum - He is constantly grumpy.

h. Both verbs and adjectives co-occur with manner adverbs.
On neoxotno vzal knigu - He took the book unwillingly.
On neoxotno byl zol na ženu - lit. He was unwillingly angry with his wife, i.e. was unwilling to be angry.

2.2.6 Additional Evidence From Russian

In addition to the above arguments which were advanced by Lakoff with respect to English but which also hold for Russian, there are other features of Russian
which support the hypothesis.

(3) Both verbs and adjectives occur with subordinate noun clauses introduced by čto (that).

**Verbs**

On soglasilsja, čto takoj podzod nepravil'nyj - He agreed that such an approach was incorrect.

On radovalsja, čto skoro vternetsja domoj - He was glad that he would soon return home.

On zaključil, čto teorija neadekvatná - He concluded that the theory was inadequate.

**Adjectives**

On byl ščastliv, čto brat vernulsja - He was happy that his brother had returned.

On byl rad, čto polučil knigu - He was glad that he had received the book.

On soglasen, čto plan ne goditsja - He is agreed that the plan is no use.

(4) Both verbs and adjectives co-occur with the same types of adverbial phrase consisting of a preposition plus noun. (The examples are taken from the Academy Grammar).

a. Phrases with ot (basic meaning from, in spatial sense) expressing reason or cause (in the broadest sense of the terms).

**Verbs**

On xoxočet ot malejšego pustiaka - He laughs at the smallest trifle.

Ona plakala ot radosti - She wept with joy.

Šokolat rastopilsja ot znoja - The chocolate melted with the heat.
Adjectives

Плащъ бял се от пъл - The raincoat was grey with dust.
Она бяла багровая от жар - She was scarlet with the heat.
Он уронил скошкъ от розов поводъ - lit. He dropped the slippy with dew reins.

b. Phrases with s (basic meaning from/with) expressing (1) reason or cause; (2) time since when.

(1) Verbs

Она быстро с горяща неделя - She quickly turned grey with grief.

Adjectives

Он бял мрачный с похмелье - He was gloomy with his hangover.

(2) Verbs

Он работал с прошлого месяца - He has been working since last month.
Он болел с начала каникул - He has been lying ill since the beginning of the holidays.

Adjectives

Они веселые с утра - They have been in a gay mood since morning.
Его нервь привык к потрясениям с детства - His nerves have been used to earthquakes since childhood.

c. Phrases with do (basic meaning up to, as far as) expressing (1) degree or extent; (2) 'concrete distance'; (3) 'abstract distance'.
(1) **Verbs**

Ona pravitsia do bezumia - lit. She pleases to madness, i.e. is maddeningly beautiful.

Oni smejalis' do slez - lit. They laughed to tears, i.e. till the tears flowed.

Do duxoty paxlo xvoej - lit. To stiflingness was fragrant of pine needles, i.e. the fragrance of pine needles was stifling.

**Adjectives**

On smuglyj do černoty - lit. He is dark-skinned to blackness, i.e. His complexion is so dark as to be black.

Čemodan do strannosti lagkij - lit. The suitcase to strangeness is light, i.e. The suitcase is strangely light.

Konfet' sladkij do pritornosti - lit. The sweets are sweet to sickliness

(2) On dobežal do pervogo počtovogo jaščika - He ran to the nearest post-box.

On byl mokryj do pojasa - He was soaked to the waist.

(3) **Verbs**

My ždali do večera - We waited until evening.

Oni gulišali do zari - They walked till sunset.

**Adjectives**

On budet vernym do groba - lit. He will be faithful to the grave.

On nevo byl jasnyj do starosti um - lit. He had a clear till old age mind.

In addition there are phrases with do which can be
said to express 'distance' only in a rather vague way and which occur both with verbs and with adjectives.

Čto kasaetsja do menja - lit. What touches as far as me, i.e. as far as I am concerned.

Žadnye do spleten dəbəy - lit. hungry for gossip women.

(d) Phrases with po (basic meaning approximately - about) expressing (1) time when; (2) place where; (3) cause;

(4) 'distinguishing characteristic'.

(1) Verbs

My rabotaem po nočam - We work at night.

On sanimaetsja po vtornikam - He works on Tuesdays.

Ja po celym časam smotreli v okno - lit. I for whole hours looked out of the window, i.e. for hours on end.

Adjectives

Eti cvety dušistwe po večeram - These flowers are fragrant in the evening.

On byl grustnyj po celym dniam - lit. He was sad for whole days.

On zmuryj po utram - He is gloomy in the mornings.

(2) Verbs

On dolgo xodil po Ulicam - lit. He a long time walked about the streets.

Adjectives

Oblaka byli rozovwe po kraiam - The clouds were pink at the edges.

Les byl gustoj po beregu reki - The wood was thick along the bank of the river.

(3) Verbs
On ошибся по неизвестности - He made a mistake out of ignorance.

On забыл по рассеянности - He forgot out of absent-mindedness.

Я по гордости рассталась с тобой - lit. I out of pride left you.

**Adjectives**

On несчастной по собственной вине - lit. He is unhappy out of his own fault.

В книге непонятные по расспильчатости идей - lit. In the book (are) incomprehensible from vagueness ideas.

(4) **Verbs**

Я узнал его по глазам - I recognized him by his eyes.

**Adjectives**

Профessor известный по своим открытиям - The professor is famous for his discoveries.

e. **Phrases with в expressing 'place where'**.

Verbs

Мы работаем в Москве - We work in Moscow.

Он занимается в библиотеке - He studies in the library.

Чехов писал пьесу в этой комнате - Chekhov wrote the play in this room.

**Adjectives**

Этот актер известный в городе - This actor is well known in the town.

Пиджак тесный в груди - The jacket is tight across the chest.

Он широк в плечах - lit. He is broad in the shoulders.

f. **Phrases containing к (towards) whose meaning can in**
many cases be interpreted only as an abstract sense of 'movement towards'.

**Verbs**

On zašel k nam - He called on us.

My približaemsja k celji - We are drawing near to our goal.

Ona privykaetsja k rabote - She is getting used to the work.

On sklonjaetsja k matematike - lit. He inclines towards mathematics.

**Adjectives**

On dobryj k detkam - He is good to the children.

On sposoben k naučnoj rabote - He is capable of scientific work.

On gotov k ot'ezdu - He is ready for the departure.

(5) Both adjectives and verbs can be nominalized.

**Verbs**

**Priglasili Ivanova** (They (indefinite) invited Ivanov).

**Priglašenje Ivanova** (the invitation of Ivanov).

**On ob'jasnil problemu** (He explained the problem)

**ego ob'jasnenie problemy** (his explanation of the problem).

**Adjectives**

**On bodryj** (He is cheerful) **ego bodrost'** (his cheerfulness).

**Kover mjagkiij** (The carpet is soft) **mjagkost'** kovra (The softness of the carpet).
(6) Both verbs and adjectives govern cases.

Verbs

*Mny udivilis vašemun vorosu* - We were amazed at your Question.

(Vorosu (question) is in the dative case.)

On respologuet masinoj - lit. He disposes of a car.

(Masinoj (car) is in the instrumental case.)

Adjectives

*Ja rad vašemu usnemu* - I am glad about your success.

(Usnemu (success) is in the dative case.)

Oni doval'ny etimi resul' tatami - They are content with the results.

(Resul'tatami (results) is in the instrumental case.)

From the preceding six sections of data two main conclusions can be drawn. (1) Verbs and adjectives have the same distribution. Both occur before various types of adverbial phrase containing various prepositions; both occur before subordinate noun clauses introduced by *čto*; both occur before nouns in oblique cases; and both occur in predicative or attributive position (cf. the opening remarks in this discussion of verbs and adjectives.)

(2) Verbs and adjectives share a large number of select-}

ional restrictions with respect to transitivity, the animacy of the subject, the concreteness or abstractness of the object and the subject, the animacy or inanimacy of the object, and with respect to time and manner adverb-
ials. As Lakoff (1968) argues, stating the same set of selectional restrictions twice adds to the complexity of the grammar and is to be avoided if possible. The identical distributions, the common selectional restrictions and the considerable gain in economy constitute convincing reasons for accepting the hypothesis that verbs and adjectives are categorially identical in the deep structure.\(^{(p.105)}\)

2.3 Adjectives, Verbs In Imperfective Aspect, and Some Locative Constructions

Accepting the hypothesis that verbs and adjectives are categorially identical in the deep structure raises two important questions. (1) What, if any, is the difference between clauses which appear in the surface structure with verbs and those which appear with adjectives? (2) How, if at all, does the hypothesis help to solve the problem of aspect? The latter point will be investigated first and (1) will be taken up in Chapter Three.

Several syntactic phenomena are highlighted by the hypothesis.

(1) Both adjectives and verbs in imperfective aspect co-occur with habitual and durative time adverbs.

Verbs in imperfective aspect

On často posylal si den'gi - He often sent her money.

My vsegda otkazyval's' igrat' v karty - We always refused to play cards.
On postojanno pišet stixotvorenija - He is continually writing poems.
Ja vremja ot vremenii pokupaju sigary - I buy cigars from time to time.
My dve nedeli rešali problemu - lit. We were solving the problem for two weeks.
On dvadcat' let izobrel malšiny - He invented machines for twenty years.
On dolgo sam pročitiyval vse soobščenija - lit. He a long time himself read through all the reports.

Adjectives
On často byl zmurvi - He was often gloomy.
Ona vségda byla brezglivaja - She was always fastidious.
Evo žena každvì den' zlaža - His wife is spiteful every day.
Otec postojanno byl božen - My father was constantly ill.
Vremja ot vremeni mal'čik usrijumyì - From time to time the boy is morose.
Ja dve nedeli byl ščastliv - I was happy for two weeks.
On dvadcat' let byl tolstvì - He was fat for twenty years.
My dolgo byli bednev - We were poor for a long time.

Verbs in perfective aspect (I exclude for the moment 'perfective' forms like prostojet', cf. Chapter Five) cannot co-occur with such time adverbs.
* On dolgo napisal pis'mo - He wrote the letter a long time.
* Professor dve nedeli izobrel masinu - The Professor invented the machine for two weeks.
* On často poslal ei den'gi - He often sent her money.

Napisal, izobrel and poslal are perfective forms.
Adjectives and verbs in imperfective aspect cannot occur with adverbial phrases like *za čas (in an hour) with which verbs in perfective aspect co-occur.

*On za čas byl tolstý - He was fat in an hour.
(In Russian one would have to say On za čas stal tolstý - He became fat in an hour.)

*My za den' polučali dokumenty - We received the documents in a day.

But one can say:

My za den' polučili dokumenty - We received the documents in a day.

On za čas rešil problému - He solved the problem in an hour.
(Polučili and rešil are perfective forms.)

These examples show that with respect to completion and duration there is an opposition between adjectives and verbs in imperfective aspect on the one hand and verbs in perfective aspect on the other hand. The examples further suggest that common to the first two are the appropriateness of the notions 'duration' and 'repetition' and the inappropriateness of the notion 'completion'. On these grounds it seems worthwhile trying to postulate some kind of abstract constituent structure which underlies clauses containing a form of byt' (be) plus an adjective and clauses containing verbs in imperfective aspect and which provides a basis for semantic interpretations involving duration and repetition but not completion.

(2) Durative and habitual time adverbs also co-occur with phrases consisting of a nominal plus a locative adverbial construction.
On často v biblioteke - He is often in the library.
Ona byla na lekcijax každyj den' - She was at the lectures each day.
Mv dolgo byli v biblioteke - We were in the library for a long time.

These examples appear to indicate some kind of similarity with respect to duration and repetition between clauses expressing 'being in a place' and clauses containing adjectives or verbs in imperfective aspect. This possible similarity directs one's attention to the sentences adduced in (3) below.

(3) a. General otčajannyj - The general is desperate.
    a₁. General v otčajanii - The general is in despair.
    b. General stal otčajannyj - The general became desperate.
    b₁. General prišel v otčajanie - lit. The general came into despair, i.e. became desperate.
    c. Iz-za poraženija general stal - Because of the defeat the general became desperate.
    c₁. Poraženje privelo generala v - The defeat led the general into despair.

The significant feature of these sentences is the paraphrase relations which hold between (a) and (a₁), (b) and (b₁), (c) and (c₁). (a) and (a₁) have the same meaning, yet (a) consists of a noun followed by an adjective, and (a₁) of a noun followed by a locative construction which is identical in form with locative con-
structions expressing 'place where'. The locative construction consists of the preposition **v** (in) followed by a noun in the prepositional case. Cf.

**General v štabkvartire** - The general is at Headquarters.

**General v otčajani** - The general is in despair.

Other examples of the latter type are:

**Prepodavatel’ byl v bešenstve** - lit. The teacher was in fury.

**Vše byli v užase** - lit. Everyone was in horror.

**Ona byla v vostorge** - lit. She was in delight.

(b) and (b₁) have the same meaning, although (b) consists of a noun followed by the verb **become**, which is in turn followed by an adjective in the instrumental case, and (b₁) consists of a noun followed by the past tense perfective aspect form of the verb **come**, which is in turn followed by a construction identical in form with locative constructions expressing 'place into which'. Such constructions consist of the preposition **v** (in) followed by a noun in the accusative case. Cf.

**General vošel v komnatu** - The general came into the room.

**General prišel v otčajanie** - lit. The general came into despair.

Other examples of the latter are:

**Dom prišel v vetxost’** - lit. The house came into rickety-ness, i.e. fell into disrepair.

**Devuška pridet v jarost’** - lit. The girl will come into fury.

**Vše prišli v vostorg** - lit. Everyone came into delight.

**Mašina prišla v negodnost’** - lit. The car came into un-fitness.
(c) and \((c_1)\) have the same meaning, although \((c)\) consists of a prepositional phrase expressing cause \((iz-za \ noraženija \ - \ \text{lit. out from behind the defeat})\), a noun in the nominative case, \textit{general}, the appropriate past tense perfective aspect form of \textit{become}, \((stal)\), and an adjectival in the instrumental case, \textit{otčajannym}, whereas \((c_1)\) consists of a noun in the nominative case, \textit{noraženie}, the appropriate past tense perfective aspect form of the verb \textit{bring/lead}, a noun in the accusative case, the 'object' of the verb, \textit{generala}, and a construction which, as in \((b_1)\), is identical in form with locative constructions expressing 'place into which'.

\textit{General vvel soldata v komnatu \ - \ The general brought the soldier into the room.}

\textit{Poraženie privelo generala v otčajanie \ - \ \text{lit. The defeat brought the general into despair.}}

It may be objected at this point that the root \textit{vél} (brought/led) occurs with the prefix \textit{v} in the first example but with the prefix \textit{pri} in the second example. Two points must be noted in this respect. Firstly, \textit{privelo} and its associated forms do occur with 'concrete' locatives which express not 'place into which' but 'place towards which'. E.g.

\textit{Doroga privela k pljažu \ - \ The road led to a beach.}

\textit{Ona privela rebenka v nam \ - \ She brought the child towards us.}

The difference between \textit{privelo k} and \textit{privelo v} appears to reflect the difference between 'concrete' and 'abstract' locatives. One finds

\textit{Eto privelo evo v xoroše nastroenie \ - \ \text{lit. This brought}
him into a good mood.
but not *Eto privelo evo k xorosemu - lit.* This led him
nastroeniiu to a good mood.
One finds
\Doroga privela k pljaču - The road led to a beach
but not *Doroga privela v pljač - The road led into a
beach.
Secondly, privelo v in the sense of 'lead into'
is used only with 'abstract' locatives and does not carry
the meaning of 'movement towards the speaker' which is
characteristic of the prefix pri-. With 'concrete' loca-
tives, privelo is always accompanied by the preposition
k and pri- does express 'movement towards the speaker'.
However, these superficial differences do not affect
the essential part of the argument, namely the formal
parallelism between the constructions of verb plus preposi-
tional phrase in (b₁) and (c₁) and the constructions
consisting of verb plus locative phrase expressing 'place
into which'.
The sentences involved in the paraphrase relations
described above also share certain selectional restrict-
ions.
A. Sentences of the type in (a) and (a₁) do not occur
with adverbs of manner such as enerživo (energetically)
or lovko (skilfully).
*On enerživo byl otčajannyj - *He was energetically
desperate.
*On enerživo byl v otčajanii - *He was energetically
in despair.
*On lovko byl jaryj* - He was skilfully furious.
*On lovko byl v jarosti* - He was skilfully in fury.

B. Such sentences do not occur with adverbs denoting instruments, e.g. nožom (with a knife), telegrammoj (by the telegram).

*Mašina byla negodna na nožom* - The car was no use with a knife.
*Mašina byla v negodnosti na nožom* - lit. The car was in unfitness with a knife.

*Professor budet jaryj telegrammoj* - The professor will be furious by the telegram.
*Professor budet v jarosti telegrammoj* - The professor will be in fury by the telegram.

These selectional restrictions also apply to 'concrete' locatives.

*My energično byli v gorode* - We were energetically in the town.
*On lovko budet v Moskve* - He will be skilfully in Moscow.
*Ja byl v Edinburge mašinoj* - I was in Edinburgh by car.
*Oni v Sovetskom Sojuze telegrammoj* - They are in the Soviet Union by a telegram.

(4) To complete the range of parallel selectional restrictions it may be noted that the durative and habitual time adverbs mentioned under (2) with respect to 'concrete' locatives also apply to 'abstract' locatives.

*On často byl v okřážani* - He was often in despair.
*Ona byla v vostorge každý den'* - lit. She was in delight each day.
Žena byla dve neděli v jarosti - lit. My wife was two weeks in fury.

Mašina dolgo byla v negodnosti - lit. The car a long time was in unfitness.

An adequate transformational account of the sentences set out in (1) to (4) must explain why the members of each pair of sentences in (3), (a) and (a₁), (b) and (b₁), (c) and (c₁), are identical in meaning. The simplest way of doing this, if it can be justified, is to derive both members of each pair from the same underlying structure. A transformational account must also seek to state the various selectional restrictions as economically as possible. In the case of the sentences in (1) to (4) the restrictions are as follows:

(1) 'concrete' locatives such as v komnate (in the room) and 'abstract' locatives such as v očajanii (in despair) both co-occur with time adverbs expressing duration or habit; neither type of locative co-occurs with manner adverbs such as energično or lovko or with instrumental adverbs such as nožom or mašinaj. Both types of locative are identical in form.

(2) 'Abstract' locatives and superficial adjectives are subject to the same selectional restrictions that are shared by 'abstract' and 'concrete' locatives. Although 'abstract' locatives are not identical in form with phrases consisting of the copula followed by an adjective, the two types of construction may have the same meaning.
2.3.1
A possible source for adjectives and verbs in imperfective aspect.

The need to explain the fact that the members of each pair of sentences in (3) are understood in the same way and the requirement that the selectional restrictions be stated as economically as possible demand the postulation of a single underlying structure from which 'concrete' locatives, 'abstract' locatives and adjectives are all derived. Given the three types of sentence, On v komnate, On v otčajanii and On otčajannyi, and given the general principle that, where appropriate, it is easier to delete structure than to introduce structure by transformations at a later stage in the derivation, the most suitable type of underlying structure would appear to be one which contains a locative. This supposition is supported by another kind of superficial construction which is identical in meaning with constructions containing a noun followed by an adjective (with or without the copula) but which itself consists of a noun followed by a prepositional phrase. This prepositional phrase in turn consists of a plus an adjective in the prepositional case plus the noun sostojanie (state) in the prepositional case.

Mašina negodnaja - The car is unfit.

Mašina v negodnom sostojanii - The car is in an unfit state.

General otčajannyi - The general is desperate.

General v otčajannom sostojaniii - The general is in a desperate state.
Dom vetxii - The house is ramshackle.
Dom v vetxom sostojanii - The house is in a ramshackle state.

The basic structure which suggests itself for the sentences General v otka"anom sostojanii, General otka"annyi and General v otka"anii is shown in Fig. 2

![Fig. 2](image-url)

This structure may be glossed as 'The general is in a state: The general be desperate'. (It must be stressed that the structure shown in Fig. 2 contains only those underlying elements which are absolutely essential to the exposition. The elements NP and LOC are strange bedfellows (cf. the introduction to Chapter One) but this anomaly will be removed later when more details and features are added.)

A superficial 'concrete' locative construction as in Ja byl v biblioteké (I was in the library) derives from the structure;
Fig. 3

which can be glossed as 'I was in a state: I be in the library'. Under this proposal, the topmost LOC in the tree is always interpreted as an 'abstract' locative and the superficial 'concrete' locative constructions are derived from the structure dominated by the second S.

The discussion of paraphrase relations began by pointing out that adjectives and verbs in imperfective aspect could both occur with durative and habitual time adverbs, and that the notion of 'completion' was equally inappropriate to both. Furthermore, the hypothesis that that in the deep structure verbs and adjectives are categorically identical was investigated and accepted. It has just been argued that sentences containing adjectives derive from underlying locative constructions. The locative notion is captured by the structure dominated by the topmost S and the general category Predicator from which adjectives derive appears in the structure dominated by the second S.

The consequence of these arguments and hypotheses is
that verbs in general derive from underlying locatives and that verbs in imperfective aspect derive from the same type of underlying locative as adjectives. The validity of these proposals depends on the validity of the verb-adjective hypothesis, but they make an immediate contribution to the economy of the grammar by simplifying the statement of the selectional rules for habitual and durative time adverbs. (Verbs can of course co-occur with the various manner and instrumental adverbs which cannot co-occur with adjectives or locatives, but this is to be explained by the differences between superficial clauses containing adjectives and locatives and superficial clauses containing verbs.)

Under this proposal the underlying structure of sentences containing verbs in imperfective aspect, e.g. Student pisal dissertaciju (The student was writing his dissertation), is:

![Diagram of sentence structure](Fig.4)

which may be glossed as: 'The student was in a state: The student write his dissertation'.

While this proposal concerning the source of verbs
in imperfective aspect follows inevitably from the preceding steps in the argument, the structure of superficial clauses containing verbs does not afford as many glimpses of the underlying structure as are given by superficial clauses containing adjectives. There are, however, certain surface structure phenomena which support the proposal. In scientific discourse one often finds the sentence Časticy dvižutsja (The particles are moving). This sentence has two paraphrases which are regularly used:

Časticy v dviženii - The particles are in movement.
Časticy naxdotsja v sostojanii dviženija - The particles are in a state of movement.

These examples show a sentence consisting of a noun and a verb in imperfective aspect being paraphrased by sentences consisting of a noun and a locative construction (with or without a verb like naxdit'sja (find oneself)).

The locative source of adjectives also explains why General stal otčajannym (The general became desperate) can be paraphrased by General prišel v otčajanie - (The general came into despair), i.e. by a sentence consisting of a noun, a verb expressing and a construction identical in form with locative constructions expressing 'place into which'. Stat (become) turns out to be one superficial realisation of a structure which may be glossed as 'go into a state', and the sentence which has been treated as the paraphrase in fact reflects the underlying structure more faithfully. The sentence On načal pisat'
**pis'mo** (He began writing the letter), which can be paraphrased as *on stal pisat' pis'mo*, must be assumed to have an underlying structure 'He went into a state: He write the letter'. It is only on this hypothesis that one can explain why both *nacat'* and *stat'* are used with imperfective infinitives in the sense of 'begin'. This hypothesis further helps to explain why *stat'* co-occurs both with the imperfective infinitive forms of verbs and with adjectives, since sentences such as *On stal pisat'* (He began writing) and *On stal tolstv* (He became fat) both have derivations which contain at one point the string 'go into a state'. The choice between *stat'* and *nacat'* is made at the next level where the PRED in the sentence dominated by LOC is developed as a verb or adjective.

2.4 **Verbs in Perfective Aspect**

So far nothing has been said about verbs in perfective aspect. Traditional accounts of aspect in Russian describe the perfective aspect as being used when the speaker views the action as a whole or when the speaker is interested in the result of the action. The connection between 'result' and perfective aspect will be examined in the chapter on Aktionsarten, since it seems to the writer that the first part of the traditional account is more to the point. A sentence such as *On rasskazal mne istoriju* (He told me the story) certainly presents the act of story-telling as completed, and the 'completeness'
is brought out even better in *On za čas rasskazal mne vsiu istoriju* (He told me the whole story within an hour). It will be remembered that Isačenko’s explanation of perfective aspect implies that a person using a perfective form sees the beginning, middle and end of an action. This explanation is all the more interesting in that the Russian example above can be naturally interpreted as: ‘He began telling me the story, was engaged in telling me the story and finished telling me the story’. Furthermore, the sentence *On za čas rasskazal mne vsiu istoriju* can be paraphrased as *On za čas končil rasskazvat’ mne vsiu istoriju* (Within an hour he had finished telling me the whole story). Given that *končit’*, the opposite of *načat’*, derives from a structure ‘come out of a state’, and given the preceding interpretations, it may be tentatively proposed that the deep structure of *On rasskazal mne istoriju* may be glossed as ‘He went into, was in, and came out of a state: He tell me story’. As certain other factors have to be taken into consideration, no attempt will be made at the moment to construct a tree diagram of the structure which underlies sentences containing verbs in perfective aspect.

2.4.1 *Uža* (Already) and *Esča* (Still)

These other factors are connected with the interpretation of sentences containing the adverbs *uža* (already) and *esča* (approx. still) and sentences contain-
ing negatives. Consider the sentences

a. 1 Ivan ubiraet komnatu - Ivan is cleaning his room.
    2 Teper' my citaem Tol'stogo - Now we are reading Tol'stroy

b. 1 Ivan stal'načal ubirat' komnatu - Ivan has begun cleaning his room.
    2 Teper' my stali/načali čitat' Tol'stogo - We have now begun reading Tol'stroy.

While one would not wish to argue that (a1) is a paraphrase of (b1), or (a2) of (b2), there is nonetheless a very close relationship between these pairs of sentences.

To state this relationship in its weakest form, (b1) and (b2) are presupposed by (a1) and (a2) respectively. If (b1) refers to the immediate rather than to the remote past, i.e. if it means 'has begun' rather than 'began', then it is possible to say that (b1) may imply (a1).

These arguments apply also to (b2) and (a2) and to sentences containing verbs in the past tense, e.g.

c. On vybirat' sebe knigu - he was choosing himself a book.

d. On načal/stal vybirat' sebe knigu - He had begun choosing himself a book.

These relationships of presupposition and/or implication also hold between sentences containing verbs in the 'future' tense.

d. K ptiatnice oni budut drat'sia - by Friday they will be fighting.

d. K ptiatnice oni stanut/načnut drat'sia - By Friday they will have begun to fight.
These relations, which at present one does not want to characterize more strongly than 'presupposition' or 'implication', make themselves felt much more strongly in sentences containing уже or еше. The sentence Он уже занимается физикой (He is already doing physics) presupposes and is definitely implied by Он еше стал заниматься физикой. (He has already begun doing physics). The negative sentence Он еше не учится математике (He is still not learning mathematics) presupposes and is definitely implied on Он еше не стал учится математике (He has not yet begun doing mathematics). The relations of presupposition and implication are so strong between such examples with уже and еше that one is tempted to say that the sentences with уже стал and еше не стал are paraphrases of the sentences with, respectively, уже plus an imperfective form and еше не plus an imperfective form. The temptation to say that these sentences are paraphrases of each other is particularly strong when they are accompanied by subordinate adverbial clauses of time.

1 Когда мы пришли, он уже укладывал вещи - When we arrived he was already putting his things away.

Когда мы пришли, он уже стал укладывать вещи - When we arrived, he had already begun putting his things away.

2 Когда он звонил, я еше не готовил доклад - lit. When he phoned, I was not yet preparing the report.

Когда он звонил, я еше не стал готовить доклад - When he phoned I had not yet begun preparing the report.
As with the other problems investigated in this study of the Russian verb, semantic considerations are supported by selectional restrictions. Uže and ešče ne occur both with constructions of the type stat' + imperfective infinitive and with sentences containing simply a verb in imperfective aspect. The semantic and syntactic phenomena can be most easily handled if sentences such as On čitat' and On stal čitat' are derived, not from exactly the same underlying structure, but from a structure which in some way captures the fact that the interpretations of these sentences are very close.

The above arguments based on paraphrase relations and selectional restrictions also hold for the following pairs of sentences:

1  a. Kogda my prišli, on uže uložil vešči - When we arrived, he had already put his things away.
     b. Kogda my prišli, on uže končil ukladyvat' vešči - When we arrived he had already finished putting his things away.

2  a. Kogda on zvonil, ja ešče ne prigotovil doklad - When he phoned I had not yet prepared the report.
     b. Kogda on zvonil, ja ešče ne končil gotovit' doklad - When he phoned I had not yet finished preparing the report.

In this case, the paraphrase relations hold between sentences containing verbs in perfective aspect and constructions consisting of končit' (finish) plus an imperfective infinitive.
The problem is to take the underlying locative structures already proposed and adapt them in order to obtain a structure as simple yet general as possible which explain not only the paraphrase relations but the varying 'strength' of the relations, and which will simplify as far as possible the statement of the selectional restrictions on \( \text{uže} \) and \( \text{eščě ne} \). Since the essential notions which must be captured by the formalisation are those of 'going into a state' and 'coming out of a state', I wish to suggest that, where appropriate, the underlying structure of sentences contains at the highest level in the tree an obligatory feature \([+\text{Ingressive}]\), which may be optionally followed by the feature \([+\text{Egressive}]\). If only \([+\text{Ingressive}]\) is selected, the sentence will contain a verb in imperfective aspect. If both \([+\text{Ingressive}]\) and \([+\text{Egressive}]\) are selected, the verb will be in perfective aspect \(^{(p.107)}\).

Although the arguments leading to the postulation of these features involve only 'active' verbs, there is evidence that \(+\text{Ingressive} \) should be present in the structure underlying sentences containing 'stative' and 'static' verbs. Firstly, \text{On uže znaet} and \text{On uže spít} (He knows and He is sleeping) presuppose the sentences \text{On užal} (He found out, i.e. got to know) and \text{On zasnul} (He has fallen asleep) respectively. Secondly, one finds \text{On uže znaet} (He already knows) and \text{On uže užal} (He has already found out), \text{On uže spít} (He is already sleeping) and \text{On uže zasnul} (He has fallen asleep). The members of each pair of sentences are understood in the same way.
and uže co-occurs both with the past tense perfective form of verbs expressing 'going into a state' and with the 'imperfective' form of verbs expressing 'being in a state'.

The same arguments hold for ešče. One finds On ešče ne znaet (He still does not know) and On ešče ne uznał (He has still not found out), On ešče ne spít (He is still not sleeping) and On ešče ne zasnuł (He has still not fallen asleep).

The selection of both [+Ingressive] and [+Egressive] is possible only in active sentences. The features may be regarded as attached to the highest LOC in the phrase structure tree (at least for the purpose of the present discussion).

2.4.2. The Underlying Structure of Verbs in Perfective Aspect

The underlying structure of On uložil vešći (He put away his things) is:

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NP  Aux

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Fig. 5

The underlying structure of On ukládýval vešći (He was putting his things away) is:
From these underlying structures it is clear how closely connected are the notions 'being in a state' and 'going' into a state', even in such a simple sentence as On pišet pis’mo (He is writing a letter). (Further discussion of the features [ +Ingressive] and [+Egressive] can be found in Chapter 5, pp.237ff). It is equally clear that it is possible for the scope of NEG to include [ +Ingressive] or [+Egressive] or 'being in a state' or all three together. These possibilities are illustrated by the following examples:

1 On vsej nedel’j ne delal opyty - He did not do any experiments all week.

2 Ona ne budila rebenka potomu, čto on pozdnno leg spat’ - She did not waken the child because he had gone to bed late.

3 Zvonok budil’nika ne razbudił ego, tak krepko on spal - The ring of the alarm clock did not waken him, so soundly was he sleeping.

In (2) ne budila has a very definite ne stala budit’
(did not begin waking) meaning. (1) could be interpreted either as 'not going into a state' or as 'not being in a state'. The latter interpretation is the stronger, perhaps because of the adverbial phrase 'all week'. In (3), NEG applies to the whole action. The structures underlying (1), (2) and (3) are shown in Figs. 7, 8 and 9 respectively.

Fig. 7

Fig. 8

Fig. 9
The main problem, which passes beyond the scope of this thesis, is devising a formalism for representing the scope of NEG, i.e. for indicating in a tree diagram when NEG applies to [+Ingressive], or to LOC or to LOC [+Ingressive] [+Egressive].

These underlying structures have the further advantage of explaining why stat' (become/begin), načat (begin), and končit' (finish) are always followed by infinitives in imperfective aspect. Since stat' and načat' derive from a structure 'go into a state', and končit' from a structure 'come out of a state', the infinitive must derive from the structure dominated by the LOC and therefore can take only imperfective aspect.

That is, stat', načat', končit' derive from underlying structures containing verbs of movement into' (stat', načat') or 'movement out of' (končit'). On stal pisat' (He began to write) has the underlying structure shown in Fig.10. (It will be assumed that Predicators which are +Active may also be marked, say, [+Motion] and [+Abessive] or [+Inessive], the two latter features determining whether the locative construction accompanying the verb of movement in the surface structure is of the type v.dom (into the house) or iz.doma (out of the house). The predicator marked [+Motion] and [+Inessive]\(^8\) (p.101) which is realized as stat' or načat', co-occurs in the deep structure not just with LOC but with LOC + S. To ensure the generation of LOC + S, it will be further assumed that the Predicator is assigned a feature, say [+Abstract].)
This structure can be glossed thus: 'He went into, was in, came out of state : He go into state: He write'.

2.5 How These Proposals Explain Some of Mazon's Data

It is interesting to note that the examples which Mazon gives of negative sentences containing imperfective past tense forms can all be easily interpreted in terms of the above abstract structures. Under his rubrics of (1) 'Action unique', (2) 'Action réitérée' and (3) 'Action généralisée' Mazon puts the following sentences:

1a (Vzjal ty etu knigu segodnja?) Net, ne bral - (Did you take (perf.) this book today?) No, I did not take (imperf.) it.

1b Ja esë ne vstaval - lit. I was not yet getting up.

2 ...podarkov...ot samogo Gospoda Boga ne prinimal - I've never taken presents, not even from God Himself.

3 ...on vam ničego takogo pro menja ne rasskazyval?
Didn't he tell you such things about me? (1a), (1b) and (3) have 'ne stal' (did not begin) interpretations (2) is understood as 'I was never in the state of accepting presents from anyone'. (Sentences like (2) may also have a ne stal interpretation. Compare Ne stanu ja prinimat' podarki (lit. I will not begin taking presents, i.e. I will not accept presents) and Ja ni kogda ne stal prinimat' podarky (lit. I have never begun taking presents, i.e. I have never taken presents).)

Mazon divides sentences containing NEG and a verb in perfective aspect into two main types: (1) Those which express 'la non-réalisation de l'acte unique...envisagée au point de vue de son résultat', e.g. On emu ne napisal (He did not write to him); (2) 'la non-réalisation de l'acte qui a été ou eut pu être réitérée est envisagée au point de vue du résultat global qui s'en dégage', e.g. On mne ni odnogo pisma ne napisal (He did not write me a single letter). In other words, in both (1) and (2) NEG applies to the action as a whole, and the basic structure needed to support this interpretation is provided by LOC [+Ingressive] [+Egressive]. Mazon's rubrics are acceptable as general comments on the general meaning of sentences containing negated past tense forms of verbs, but fail as basic explanations on two counts: (1) by interpreting negated perfective forms in terms of result they fail to account for such sentences as Ja ne poslal emu paket (I did not send him the parcel), to which the notion of result does not seem very appropriate; (2) The criteria used in the explanation of negated past tense perfect-
ive forms are not the same as those used in the earlier explanation of past tense perfective forms. Thus, with respect to the latter Mazon talks about 'achèvement', and 'résultat'; with respect to the former he mentions only 'résultat'. In the earlier explanation he talks about 'action réitérée ramenée à l'unité', whereas with reference to the negated forms he uses the notion of 'global result'. The criteria 'nettété de contour' and 'absence de durée', which are important for past tense forms, do not appear at all in the discussion of negated forms. The explanation in terms of abstract underlying structures relates positive and negative verb forms in the sense that it provides a basic structure to the various parts of which NEG can be applied. In Mazon's explanation positive and negative verb forms seem almost to be two completely different and unrelated phenomena.

Mazon's account of perfective and imperfective past tense forms is also open to the objection that it is superficial, in that it concentrates on the uses of the basic structure without ever saying what that structure is. This leads him to include in his criteria elements of meaning which are contextual, for instance his 'présent de tentative ou d'effort'. But there is a big difference between being in the process of doing something and being in the process of trying to do something. If the present tense imperfective form otnimaet (getting rid of, cf. p36) can be interpreted as a praesens de conatu, this interpretation is surely occasioned by the context rather than inherent in the meaning of present

97
tense imperfective forms. Some of the criteria which Mazon employs are not testable. One wonders, for instance, whether it is possible to oppose an 'action unique simple' to an 'action unique complexe' (cf. p 36) without using some sort of physiological measurements, and even if such measurements were readily available where would one draw the line between complex and simple actions? One example of an 'action unique simple', 'Čto ty delas'š' tut?' (What are you doing here?) could be either simple or complex depending on the context. Sižu (I am sitting) in another of Mazon's examples may refer to something simple but it certainly does not refer to an action. One final criticism may be made. Mazon says that past tense perfective forms may refer to an action 'conditionnant une autre action'. If by 'conditionnant' Mazon means 'causing', 'conditioning' or 'necessarily preceding' then he is trading in notions which have occasioned, and still do occasion, much controversy among philosophers and which should therefore be avoided by linguists. If, however, Mazon is simply saying that each of a series of actions is usually expressed by means of perfective forms, then one has no quarrel with him, except to wonder why he could not have said what he meant to say.

Although one can criticize Mazon's criteria, his incidental comments and the many examples he provides are an excellent means of testing the adequacy of any theory of aspect. The explanation in terms of underlying locatives explains why, as Mazon puts it, imperfective forms can express the development, repetition or duration of an
action but not completion (which is not the same as saying that imperfective forms express non-completion) and why perfective forms can express completion of an action but not development or duration (which is not to say that the actions expressed by perfective forms have no duration). Although the interpretation of completion in terms of locatives may perhaps be new in Russian studies, the idea that perfective aspect has to do with completed actions is not new. A Czech philologist, Černy, who worked in Russia in the latter half of the nineteenth century, defined perfective aspect as expressing an action 'gathered together, enclosed, in its totality, summarily, in contracted form'. A Russian scholar, Rasmusen, stated that a verb in perfective aspect expressed an action '...viewed as a single whole (the beginning, middle and end altogether)'. These definitions might well have been formulated with respect to the structures proposed above.

2.5.1 Some Remarks on Interrogatives.

This discussion of aspect in past and present tense forms in declarative sentences can be suitably concluded by mentioning some points which arose during the writer's own work with informants and by indicating how these points can be explained within the framework of the preceding proposals. These points concern the use of aspect in interrogative sentences.

When presented with the sentences Ty sdavai karty?
(imperfective aspect) and *Ty sdal karty?* (perfective aspect), both of which can be translated as *Did you deal the cards?*, informants stated that the imperfective forms would be used in one situation, the perfective forms in another, e.g. *Ty sdaval karty (dva kroka tomu nazad)?* (Did you deal the cards (two rounds back)?) and *Ty sdal karty?* (*Pocham u tabla ešča dve karty v ruke/la dumal, čto ty ešče ne gotov*) - Did you deal/have you dealt the cards? (Why are there still two cards in your hand/I thought you weren't ready). The first question, containing the imperfective form, is asking *Was it you who dealt the cards?*, i.e. *Was it you who was in a state of dealing the cards?* This explains why imperfective aspect is used, since imperfective forms derive from a structure 'being in a state'. The second question, containing the perfective form, is asking whether the action is completed and can be paraphrased as *Vy končili sdavat' karty?* (Have you finished dealing the cards?), which extracts, as it were, the essential element [+Egressive] from the structure, LOC [+Ingressive] [+Egressive], which underlies perfective verbs. The nature of the question together with the postulated source of perfective forms explains the use of perfective aspect and makes it obvious why the question occurs in some situations but not others. It would be senseless to ask *Did you finish dealing the cards two rounds back?* because no play could have taken place if the dealing of cards had not been concluded in accordance with the rules. *Ty sdal karty?* can refer either to the immediate past, *Have you dealt*
the cards?, or to a more remote past, Did you deal the cards? There is no need to set up the features [*Immediate*] to be assigned to Past Tense, as it is the context which determines whether or not the immediate or non-immediate past is being referred to. The essential notion is 'completion'.

Informants felt in some cases that the perfective form was more 'definite' than the imperfective form. For instance, when asked about the use of the sentences Vy delali peresadku? (imperfective aspect) and Vy sdelali peresadku? (perfective aspect) both of which can be translated into English as Did you change trains?, informants answered that the first sentence might be used in a question such as Vy delali peresadku, kogda Vy exali suda? (Did you change trains on your way here?). This question is asking, 'Was there a change of train?', i.e. Were you at any time during the journey in a state of changing trains? The second sentence, containing the perfective form, might be used in a question Vy vxe sdelali peresadku? (Have you already changed trains?), with the implication that if this has been done the speaker and hearer can get on with something else. As with the sentences in the preceding paragraph, there is no need to postulate extra features, in this case [*Definite*] which are assigned to peresadku and which determine the aspect of the verb. Perfective forms refer to an action as a whole. The scope of Q (the underlying element which indicates that the sentence is interrogative) may include just [*Egressive*], thus producing
Vy sdelali peresadku (Have you finished/did you finish changing trains?). It may include LOC, [+Ingressive], [+Egressive], thus producing Vy sdelali peresadku?, which is understood as Did you change trains? Finally, the scope of Q may include just LOC, thus producing Vy delali peresadku? which is understood as 'Were you in a state of changing trains?' The varying scopes of Q and the basic structure to which it is applied are sufficient to account for the native speaker's intuition that Vy delali peresadku? is less definite than Vy sdelali peresadku? (Mazon makes much the same point when he explains that the sentence Čevo mesti? Ja mel savodnja (Why sweep? I did the sweeping today) denotes an action 'dégagée de circonstances qui précisent et limitent étroitement som accomplissement'.)

Finally, the locative proposals help to explain why verbs in imperfective aspect occur more frequently than verbs in perfective aspect in interrogative sentences containing kto (who). The sentence Kto sdelal rabotu? (perfective aspect) - Who did the work? - derives from a deep structure containing LOC, [+Ingressive], [+Egressive] and is interpreted as Who finished the work? or as Who undertook the work and carried it through to completion? Kto delal rabotu? (imperfective aspect) is understood as Who was in a state of doing the work?, i.e. Who was engaged on the work? When the question is asked 'Who did such and such', the speaker is usually interested in who was engaged on the work rather than in who finished off the work. This seems to be the reason for
the appropriateness of Кто написал 'Войну и Мир'? (imperfective aspect) as opposed to Кто написал 'Войну и Мир'? (perfective aspect) - Who wrote 'War and Peace'? Note also the appropriateness of Толстой написал 'Войну и Мир' (imperfective aspect) as opposed to Толстой написал 'Войну и Мир' (perfective aspect) - Tol'stoj wrote 'War and Peace'? A questioner would not wish to ask Who finished writing 'War and Peace' but Who was in a state of (engaged upon) writing 'War and Peace'?; and the person replying would not wish to say 'Tol'stoj finished writing 'War and Peace'.
Footnotes

1. It may be objected that nouns also occur in these environments, since one finds phrases such as *Ego dovol'stvo rezultatami* (His contentment with the results), *osibka po neznaniyu* (a mistake caused by ignorance), *rasskaz o sraqenii* (the tale about the battle). The crucial feature of these phrases is that in a generative grammar they appear to be derived from underlying sentences, e.g. *on dovolen rezultatami* (He is content with the results). In other words, nouns such as *dovol'stvo, osibka* do not appear at the deepest level of deep structure.

2. It must be emphasized that not all superficial adjectives derive only from a deep structure category *Predicator*. Russian grammars draw a distinction between 'qualitative' (kačestvennye) and 'relational' (otnositel'nye) adjectives. 'Qualitative' adjectives are said to denote directly characteristics, properties and qualities of objects which are perceived directly by us, and 'relational' adjectives denote properties of an object not directly but through its relation to some other object, phenomenon or action. These definitions are clumsy and inadequate (cf. the summary of Strawson's views) but what the Academy Grammar is trying to say is clear from the examples. 'Qualitative' adjectives include *hot, thick, fragrant, sweet; red, blue, bright; long, short, narrow; deaf, healthy, young; proud, generous, cunning; important, harmful, useful.*
'Relational' adjectives include *gas*, as in *gas cooker*, *chess*, as in *chess tournament*, *woollen*, as in *woollen suit*, *school*, as in *school building*. (In Russian the words corresponding to *gas*, *chess* and *school* are adjectives.) The difference between the two types of adjective can be expressed more precisely in transformational terms. 'Qualitative' adjectives are the realisation of the category *Predicator*, whereas 'relational' adjectives are the realisation of more complex structures. *Śleresitanoj kostium* (woollen suit) derives from the structure which underlies *kostium sdelanyj iz Śerst* (a suit made of wool); *borodatyj mužčina* (bearded man) derives from *mužčina, u kotorogo borods* (lit. man at whom beard).

3. If one took the view that infinitives are verb forms, one could also argue that both verbs and adjectives in Russian occur after *stat'* (the perfective form of become) and after *budu*, *bude*, etc. (i.e. the future forms of *be*).

**Infinitive forms of verbs.**

Ivan cale rabotat' - Ivan began to work.

Petr budet pisat' pis'mo - Peter will write a letter.

**Adjectives**

Ivan cale bogatym - Ivan became rich.

Petr budet ostorožnym - Peter will be careful.

In Chapter Six of this thesis, however, the case will be presented for regarding infinitives as derived from
underlying verbs by nominalisation. This is not to say that infinitives are nouns in the same way in which house and brick are nouns, but only that infinitives are noun-like in certain respects and that it is more fruitful to take the noun-like properties as primary (see footnote 2 of Chapter Six for a more detailed discussion). The verb-like properties of infinitives, e.g. that they occur with adverbs, can be explained if infinitives are derived from underlying verbs. Thus, On liubit bystro čitat' (He likes to read quickly) derives from two underlying sentences which, if they were to reach the surface structure separately, would be: On liubit (He likes); On čitaet bystro (He reads quickly). In the underlying structure the adverb bystro (whatever its source) occurs with a verb, and when the verb is nominalized the adverb is, so to speak, carried along with it.

Under this proposal, since superficial infinitives are regarded as nominal rather than verbal, the argument concerning the occurrence of verbs and adjectives after stat' and budu, etc. no longer holds.

4. One does find such sentences as

On vsegda posylal otvet za neskol'ko minut
He always sent a reply in a matter of minutes.

My vsegda resali problemy za dve minuty
We always solved the problems in two minutes.

In these sentences the adverb vsegda (always) modifies
the whole phrases posval otvet za neskol'ko/minut (sent a reply in a matter of minutes) and resali problemy zadve minuty (solved the problems in two minutes). In other words, the events which were habitual were the sending of a reply in a matter of minutes and the solving of the problems in two minutes, not just the sending of a reply or the solving of the problems. This explains why the verbs in these sentences are imperfective although they co-occur with za - phrases.

5. I am not suggesting that esce (still) and uže (already) are in any way equivalent in meaning. I am simply pointing out a certain similarity between sentences containing esce + ne (not) + verb in imperfective aspect and sentences containing uže + verb in imperfective aspect and sentences containing uže + verb in imperfective aspect, namely that both types of sentence are very closely connected with (perhaps to the extent of being paraphrased by) sentences containing a past tense or a future tense form of stat' or pačat'.

6. On this proposal every superficial sentence of Russian which contains a verb in imperfective aspect or a form of byt' (be) plus an adjective will derive from an underlying structure containing a locative case node with the feature [+Ingressive]. This proposed structure must be considered very tentative, since there is at least one strong objection to it, based on the fact that sentences such as God exists or Bill is intelligent.
do not presuppose the sentences *God began to exist* and *Bill began to be intelligent*. To put it another way, the questions *When did God begin to exist?* and *When did Bill begin to be intelligent?* are inappropriate.

To say that these questions are inappropriate, however, is not to say that these questions can never be asked. Indeed, the first of these, *When did God begin to exist?*, is very often asked in all seriousness. There seems to be nothing inherent in the deep structure of Russian or English, at least, which prevents the formation of such interrogative sentences. Rather, given that a child has learned to use the predicators *exist, write, intelligent* and *bald*, that child learns by experience that it is normally appropriate to ask the questions *When did John start writing his essay?*, *When did Bill take up writing?*, *When did Daddy become bald?*, but inappropriate to ask *When did God begin to exist?* or *When did Harry become intelligent?*

The proposed structure is supported by two further pieces of evidence from Russian (1) In certain constructions (cf. Chapter Six) imperfective infinitives are understood as 'begin doing something'.

(2) Imperfective imperative forms are often understood as 'Begin doing something', 'Get on with doing something'. The way in which Russians understand these imperfective forms can be explained if the forms derive from underlying structures containing the feature [+Ingressive].
7. Sentences like *On uže ne spit* (He already not sleeps) are only apparent counter examples to this assertion. There is no perfective form of *spit* which would derive from a structure 'He went into, was in and came out of a state : He sleep'. *On uže ne spit* probably derives rather from a structure 'He is already in a state : He not sleep'. The adverb 'probably' in the preceding sentence is necessary because several problems have still to be investigated. These include the generation of negative sentences and the relation between sentences such as *On uže ne spit* and *On uže prosnulsia* (He has already woken up).

8. The use of features such as [+Abessive], [+Inessive] begs a rather important question: is it more advantageous to add such features to active Predicators and realize LOC in various ways depending on which features have been assigned to the Predicator, or should the deep structure contain such cases as ABESSIVE and INESSIVE? This question cannot be answered on the basis of this tiny fragment of Russian grammar but the attaching of features to the Predicator accords with the general form of grammar hinted at in Chapter One.

9. The sentence with the perfective verb is inappropriate only if it is meant as a statement about who carried out the writing of 'War and Peace'. It is perfectly appropriate in such sentences as: *Tol'stój napisal 'Vojnui Mir' pered tem, kak pisat' 'Annu Kareninu'* (Tolstoy wrote 'War and Peace' before writing 'Anna Karenina').
CHAPTER THREE

Stative verbs once more.

3.1 Although possible solutions to some problems of aspect have been advanced, there still remains the task of determining exactly when the category Predicator appears superficially as an adjective or as a verb. (cf. the opening sentences of 2.3) In the discussion that follows an attempt will be made to make clear the features which a generative grammar of Russian must take into account, and it is possible that the discussion will have some bearing on the verb-adjective problem in general.

A suitable starting point is provided by some of the data which Lakoff uses in support of his hypothesis that verbs and adjectives are categorially identical in the deep structure of English. One of his arguments is that many pairs of sentences are understood in the same way, although one contains a verb, the other an adjective. Two of the examples he cites are please - be pleasing to, fear - be fearful. In Russian there is only one expression, a verb pravit'sia, corresponding to the first pair of English expressions. In the opening chapter of this study, it was argued that the sentences Ja ljublju dom (I like the house) and Dom mne pravitsia (The house pleases me) both derive from the structure which directly underlies the second sentence. This structure consists of a stative verb, an animate noun in the dative case and an inanimate noun in the nominative case. It was further argued that the essential characteristic of stative verbs
was that the animate noun be in the dative case and that the verb be accompanied by only two cases, dative and nominative. It was suggested (a) that the animate noun appears superficially in the nominative case only when it is selected as the topic of the sentence, and (b) that verbs like *nравиться* and *любить*, although morphologically similar to verbs in imperfective aspect, stand outside the aspect system of Russian. A similar pair of sentences are *Он знает это* (He knows that) and *Это ему известно* (That to him is known), the sentence with the animate noun in the nominative case containing a verb and the sentence with the animate noun in the dative case containing an adjective. The structure underlying these sentences was assumed in Chapter One to consist of the following categories and features:

![Diagram](image)

**Fig.11**

In the light of the discussion in Chapter Two, V in the above diagram will be replaced by PRED.

For the sake of convenience, the diagrams in this section will not show the superordinate NP + LOC [+Ingressive] [+Egressive] string but only the structure dominated by LOC (but cf.3.1.3). After V is replaced by PRED, the structure in Fig.11 will be:
Whether \texttt{PRED} in stative sentences is realized as a verb or as an adjective depends in some cases on whether the animate noun is made the topic of the sentence or not. In other instances \texttt{PRED} turns up as a verb whether the animate noun is topicalized or not, e.g. \texttt{liublit'} and \texttt{nrayit'sia}. In the latter case the verb agrees in person and number with the topic of the sentence.

\textbf{A special type of stative construction}

3.1.1.

The investigation of stative verbs is very relevant to the second pair of examples from Lakoff. \texttt{I fear} in Russian is \texttt{Ja bojus'}, \texttt{boius'} being a reflexive verb. The reasons for the reflexive form of the verb will be investigated briefly in Chapter Five and is of no importance at present. \texttt{I am fearful}, however, is \texttt{mne bojazno} (lit. to me fearful). Superficially, this sentence is identical in form with sentences of the type \texttt{eto mne izvestno}, except that there is no inanimate noun in the nominative case. Sentences of this type are quite common, e.g.
Common to all these examples is an animate noun in the dative case and a predicate expressing a psychological state. These six examples are identical in form with the following (a) sentences:

All six examples contain predicates expressing physical states. The first sentence in each of the pairs (1), (2) and (3) contains an animate noun in the dative case, but the second sentence in each pair contains a locative construction denoting 'place where'. The locative construction consists of a preposition y (in) followed by an inanimate noun in the prepositional case. Predicates such as dušno, neprijatno and xolodno thus co-occur both with animate nouns in the dative case and with inanimate nouns in the prepositional case preceded by y. This parallelism between the locative constructions and the animate nouns in the dative case extends to sentences with prepositional
phrases expressing cause.

C 1a. Me xolodno ot moroza - lit. To me cold from the frost.
   b. V komnate xolodno ot vetra - lit. In the room cold from the wind.

2a. Nam neprijatno ot dozdla - lit. To us unpleasant from the rain.
   b. V gorode neprijatno ot žary - lit. In the town unpleasant from the heat.

The selectional restrictions which apply to the stative sentences examined in Chapter One also apply to the above examples, both to the sentences with locative constructions and to the sentences with animate nouns in the dative case. Neither type of sentence can contain an adverb of manner expressing speed (bystro- quickly), adverbs of manner such as lovko (skilfully), nebrežno (carelessly), or with instrumental adverbs such as nožom (with a knife).

D  a. *Mne bystro xolodno - lit. To me quickly cold.
   *V komnate bystro xolodno - lit. In the room quickly cold.
   b. *Emu enerzično dušno - lit. To him energetically stuffy.
   *V biblioteke enerzično dušno - lit. In the library energetically stuffy.
   c. *Nam lovko neprijatno - lit. To us skilfully unpleasant.
   *V gorode lovko neprijatno - lit. In the town skilfully unpleasant.
d \( \text{Ej tenlo plamenem} \) - lit. To her warm by the flame.
\( \text{V mašine tenlo plamenem} \) - lit. In the car warm by the flame.

On the other hand, both types of sentence can contain durative and habitual time adverbs.

E \( \text{Emu ves' den' bylo xolodno} \) - lit. To him all day was cold.
\( \text{V škole ves' den' bylo xolodno} \) - lit. In the school all day was cold.
\( \text{Nam často neprijatno} \) - lit. To us often unpleasant.
\( \text{V gorode často neprijatno} \) - lit. In the town often unpleasant.

A possible deep source for such stative constructions

3.1.2
If the animate nouns in the dative case and the locative constructions are derived from different underlying structures, not only will the same set of selectional restrictions have to be stated twice but the parallelism noted in the examples in B will remain unexplained. In order, then, to cover as many facts as possible, as economically as possible, one is forced to consider postulating a single deep structure from which both animate nouns in the dative case and locative constructions are derived. The most plausible underlying structure is some kind of locative. The suggestion that in the preceding examples the animate nouns in the dative case derive from an underlying locative is not motivated only by selectional restrictions. Consider, for instance, the pair of sentences U
menja dom (lit. At me house, i.e. I have a house) U reki stoit dom (At the river stands a house). The possessive construction, consisting of the preposition u (at/ by) followed by a noun in the genitive case, is identical in form with the locative construction, which also consists of u followed by a noun in the genitive case. The only difference is that the noun following the preposition is animate in the first sentence but inanimate in the second.

One of the pairs of sentences discussed in Chapter One was On vladet domom (He owns a house) and Emu prinadležit dom (To him belongs a house) or u nogo dom (At him house). The possessive - locative construction u nogo and the noun in the dative case, emu, both denote the possessor of the house. What is also noteworthy is that the verb prinadležit (belongs) is derived from the verb ležit, which means lies, i.e. which is a verb with a locative meaning. This fact, although perhaps not crucial to a grammar of Russian, is one which a complete grammar will eventually have to explain. 1(p.136)

Further support from the locative hypothesis is provided by sentences On ponimaet teoriju (He understands the theory) and Teorija emu poniatna (The theory to him understandable). These may be paraphrased by U nogo ponimanje teorii (At him understanding of the theory). The case for deriving all three structures from the same underlying structure seems valid on three grounds: (1) all three sentences are understood in the same way; (2) all three sentences share the selectional restrictions which apply to stative sentences; (3) it has already been argued
that the first two sentences derive from the structure directly underlying Teorija emu ponjatna. The problem of eliminating in this underlying structure the superficial difference of genitive as opposed to dative case seems best solved by deriving both from a locative. This would explain the identity in form between superficial locatives such as u rekli and phrases expressing possession. With respect to the three sentences quoted at the beginning of the paragraph, it does not seem rash to suppose that the animate noun in the underlying locative is realized as a noun in the dative case if PRED is not subject to any transformations (except of course the transformational rules which substitute lexical items and handle concord) but is realized as a noun in the genitive case preceded by u if PRED is nominalised. 2

(It might be objected that these proposals involve locatives, although it was argued in Chapter One that adverbs of place (i.e. locative phrases) do not occur in stative sentences and that sentences such as Mne bilo xolodno v biblioteke (To me was cold in the library) are to be interpreted as Mne bilo xolodno, korda ja bily v biblioteke (To me was cold when I was in the library). It may be suggested that in the deep structure an S may dominate no more than one locative. Since the animate noun in stative sentences is derived from a locative, this explains why stative sentences like *Ja znal eto v biblioteke (I knew that in the library) are unacceptable.)

At first glance one might conclude that the basic structure underlying stative sentences like Teorija emu
poniatna, mne xolodno, u reki stoit dom is:

\[ \text{LOC} \xrightarrow{\text{Aux}} \text{PRED} \]

Fig. 13

with LOC being developed as an animate or inanimate noun and PRED as an adjective or verb and a noun or as an adjective or verb alone. In addition to the stative sentences cited in Chapter One, a number of other sentences derive from the structure shown in Fig. 8, in particular sentences expressing physical or psychological states, e.g. Emu tošno, durno, protivno, bol'no (lit. To him queasy, unwell, disgusting, painful); Mne obidno, smešno, skučno, stvdno, dosadno, žalko, neprijatno, nelovko, grustno, bojazno, soveatno (lit. To me offensive, funny, boring, shameful, annoying, regretful, unpleasant, awkward, sad, fearful, ashamed). Since such superficial sentence patterns are very common in Russian, one might expect all expressions denoting psychological states to be cast in this form. In fact, one's expectations would not be met, as there are a number of expressions, e.g. ja ščastliv (I am happy), ja rad (I am glad), ja otčajan (I am desperate), which never occur in the form *mne ščastliwo (to me happy), *mne rado (to me glad), *mne otčajanno (to me desperate). There are, however, several reasons for deriving superficial sentences like ja rad from the same type of structure as that which underlies mne grustno (to me sad), i.e. from a structure which can be glossed as mne rado : (1)
grustno and ja rad are both understood as saying something about the psychological state of the speaker; (2) sentences of the type mne grustno and of the type ja rad share the selectional restrictions which apply to stative sentences; (3) a sentence like mne gore (lit. to me grief) is obviously related to the sentence mne gorestno (to me grief-ful) and can be derived from the underlying structure LOC + PRED by means of a nominalizing transformation which operates on PRED. The parallel sentences, however, Vam budet ščastje (lit. To you will be happiness) and Emu budet radost' (lit. To him will be joy) are obviously related in meaning but not in form to the sentences Vy budete ščastlivy (You will be happy) and On budet rad (He will be glad). But the close relationship between these sentences could be shown clearly in a generative grammar, and mne gore could be very easily derived if the structure underlying ja rad were in fact LOC + PRED, i.e. mne rado.

Superordinate Locatives and Stative Constructions

3.1.3. Further consideration of the relations which hold between the above sentences and other sentences in Russian that the structure shown in Fig.13 is too poor. (1) The structure does not make it possible to explain the relationship between Emu grustno and On v grustnom sostojanii (He is in a sad state). LOC in the diagram is developed as a noun in the nominative case if the noun is the topic of the sentence, otherwise as a noun in the dative case. There is no obvious way, however,
of explaining how PRED becomes a locative; (2) The proposed structure does not explain why *emu grustno* and *on v grustnom sostojanii* share the same selectional restrictions with respect to adverbs nor why durative and habitual time adverbs can occur in these sentences and in sentences containing verbs in imperfective aspect. The structure, moreover, does not explain why neither the above examples nor sentences containing verbs in imperfective aspect can contain adverbs like *za čas* (within an hour), which can co-occur with verbs in perfective aspect.

A structure which does meet these demands is the one shown in Fig. 14 which may be glossed as, e.g. 'He is in a state: To him is sad' or 'The town is in a state: It is cold' or 'The river is in a state: At it is a house'. The first string in the phrase structure tree is NOM - AUX - LOC. LOC is expanded as LOC - $S_1$, and $S_1$ is expanded into LOC - AUX - PRED. For the sake of the discussion, it will be assumed that the LOC$_1$ dominated by $S_1$ is expanded, as in Fillmore (1968) suggests, into $K + N$, $K$ being the case element which is realized in English as a preposition, in Russian either as a case ending or as a preposition and a case ending. It will be further assumed that $K$ is assigned the features [−PROX] (for proximate) or [−INT] (for internal). If $N$ is [animate], [−PROX] is realized by the superficial dative case or by $u$ and the superficial genitive case, and by $u$ and the superficial genitive case if the noun is inanimate. [−INT] is realized by $v$ and the superficial prepositional case.
If this structure were realized directly, it would be On v sostojaniii:Emu grustno (He is in a state: To him is sad). Grustno is shown in Fig.14 as grust- because this is the root to which verb or adjective endings are added. Since [+INT] is realized both as a preposition and as a case ending, it may be assumed that a copying transformation adds the feature [+INT] to N and that this feature is realized as whatever ending is appropriate to the gender and number and declension of the lexical item substituted for N. The string DAT + on, which is the realization of the string k + N dominated by LOC in S₁, is transformed into emu. The presence of on in the lowest string is misleading, since N would not be realized directly as on but would be assigned various features such as [Third Person], [Singular], [Masculine], and emu is the realization of these features and the case element and N together, and not the realization of on plus dative case.
Fig. 15 shows a structure which, if it were realized directly, would take the form "Gorod v sostojanii: V gorode zarko" (The town is in a state: In the town is warm).

The phrase structure tree of "emu grustno" will serve to illustrate how these structures meet the criticisms made of the structure shown in Fig. 13. From the structure in Fig. 14 it is possible to derive "On v grustnom sostojanii" (He is in a sad state), "On grusstit" (he is sad - grusstit is a verb) and "Emu grustno" (To him sad).

There is an optional transformation which deletes the topmost S and the structure dominated by it. If this transformation applies, all that remains is $S_1$ and the structure it dominates, thus

![Diagram](attachment:diagram.png)
If the animate noun is made topic of the sentence PRED is marked verb and the whole structure is realized as On grustit (If the animate noun is not made topic of the sentence, PRED is assigned the feature Adjective and the structure is realized as Emu grustno.

If the optional deletion transformation does not operate, LOC and AUX dominated by S1 are deleted and PRED is shifted into the structure dominated by S, to produce the sentence On v grustnom sostojanii. After PRED has been shifted, an optional transformation may apply to delete LOC, which would otherwise be realized as sostojanii, and a nominalizing transformation applies to PRED to produce On v grusti (lit. He in sadness). Whether this nominalisation can take place depends on the lexical item substituted for PRED. One finds On v iarosti (He in fury) but not On v boli (He in pain).

A sentence like Emu budet radost' (To him will be joy) is derived as follows. The first optional deletion transformation applies to delete S and the structure it dominates, leaving S1 and the structure dominated by it. The nominalising transformation operates on PRED, in this case rad-, to produce a noun, radost'.

That durative and habitual time adverbs can co-occur with these constructions and with verbs in imperfective aspect is explained by the fact that both the former and the latter derive from a structure 'be in a state'.

Two points must now be emphasised: (1) the present discussion is concerned only with a fragment of Russian
grammar, which means that the proposed underlying structures may need much revision when other areas of Russian grammar are investigated; (2) the structures are not fully detailed nor are the transformations completely specified. I have attempted only to anticipate the types of structure which will be needed for an adequate explanation of the data and to give a general account of the transformational operations which will have to be carried out in order to get from the underlying base structure to the various superficial structures.

Realization of predications as verbs or adjectives

3.2 Within the class of stative sentences the realization of PRED as a verb or adjective is obviously not linked with the distinction between 'actions' and 'states', since all the examples cited above refer to states. It has been noted that in some cases PRED is marked +Verb if the animate noun is made topic of the sentence, but not all lexical items which may be substituted for PRED permit the changes associated with topicalisation. For instance, the structure underlying \( v \) gorode žarko (in the town hot) can never be realized as \( * \)gorod žarkii (the town is hot), and there is no sentence \( * \)On bolit (lit. He hurts) which is understood in the same way as emu bol'no (to him painful). Lexical items which do allow the changes associated with topicalisation to take place are obidno (On obižaetsia - He is taking offence), skučno.
(On skučaet - He is bored), stydno (on stvdatia - he is ashamed), dosadno (On dosaduet na - He is annoyed at), žalko (On žaleet - He is sorry for/regrets), grustno (On grustit - He is sad), bojazno (On boitsia - He fears), and of course the various items cited in the chapter on stative verbs.

It should be noted that these lexical items do not prevent any noun in the sentence being selected as topic but simply prevent the topicalisation from being marked in a certain way, i.e. by assigning the animate noun nominative case in the surface structure and by realizing PRED as a verb which agrees with the animate noun in person/gender and number. Topicalisation may be marked by word order or emphatic stress.

In other cases PRED is realised as a verb whether the animate noun is made topic or not. For instance, On dumaet, što (He thinks that) and Emu dumaetsia, što (To him thinks that), On verit, što (He believes that) and Emu veritsia, što (To him believes that), On vladeet domom (He owns a house) and Emu prinadležit dom (To him belongs a house).

In the case of some lexical items, whether PRED is realized as a verb or as an adjective makes no difference to the superficial form of other items in the sentence. For example, in both the sentences Emu žalko poterjannogo vremen (lit. To him regretful of the lost time) and On žaleet poterjannogo vremen (He regrets the lost time) the expression referring to the cause of the regret consists of a noun in the genitive case. Cf. also Emu stydno druzej (To him shameful of friends) and On stvdatia druzej
(He is ashamed of his friends).

Static Predicators

3.2.1 In studies of English it has been stressed that it is not possible to account for the difference between verbs and adjectives simply by means of features [\textit{Stative}] and [\textit{Active}]. The reason for this is that in English there are verbs which are stative (as in Russian) and adjectives which are active. The preceding discussion has provided a solution to the problem of stative verbs in Russian by showing that the sentences in which they occur have a basic underlying structure which differs from the structure underlying such sentences as \textit{On čitaet} (He is reading) or \textit{On strojit dom} (He is building a house). The different behaviour of stative and static adjectives in English is illustrated by the sentences \textit{He is tall}, \textit{He is being tall}; \textit{He is naughty}, \textit{He is being naughty}. Only active adjectives can co-occur with the progressive form of 'to be'.

Although Russian has no active adjectives, there are certain problems connected with the distinction between stative and non-stative sentences which may throw some light on active adjectives in English. Non-stative sentences in Russian may be divided into various types of sentence, for example \textit{Mal'čik spit} (The boy is sleeping), \textit{Devočka sidit na stole} (The little girl is sitting on the table), \textit{Mal'čik ozornoj} (The boy is naughty), \textit{Kniga tolstaia} (The book is thick), \textit{Devočka upala} (The little girl fell),
Molot unal (The hammer fell), Mal'čik pišet pis'mo (The boy is writing a letter), Devočka begaet (The little girl is running about). In the first chapter the term 'static' was introduced for the verb in such sentences as Devočka sidit na stole and also for verbs such as stoit (stands), lezit (lies). Such verbs co-occur with durative and habitual time adverbs, e.g. On často sidel v sadu (He often sat in the garden), Ja dolgo stojal na ugru (I stood for a long time on the corner); with adverbs of place, e.g. My sideli v kamina (We sat at the fireplace); with adverbs of manner such as lovko (skilfully), e.g. On lovko stojal na zahore (He stood skilfully on the fence), but not with manner adverbs such as hystre (quickly) enerzično (energetically), nor with instrumental adverbs like nožom (with a knife). Other verbs which refer to states rather than actions, which are not accompanied by an animate noun in the dative case and which share these selectional restrictions are spat' (sleep), ždat' (wait), izobilovat' (be abundant), preobladat' (be dominant), prisutstvovat' (be present), Molčat' (be silent), naxodit'sja (be situated), otsutstvovat' (be absent), bolet' (be ill). If one considers sentences such as Mal'čik ozornoj (The boy is naughty) and Mal'čik spit (The boy is sleeping) it is difficult to draw a distinction between verbs like spit and adjectives like ozornoj. Both are non-stative yet refer to states rather than actions. Both combine with a noun in the nominative case to form a sentence. The one difference is that the adjectives do not co-occur with adverbs of place, e.g. *On byl tolstv v Parizu (He was fat in Paris). One can
ask *Kogda on byl tolstyi" (When was he fat?) but not *Gde on byl tolstyi" (Where was he fat?). Most of the verbs do co-occur with adverbs of place but *moltat' and *bolet' do not.

I wish to propose the following structure as underlying sentences of the type On sidit na zabore and On tolstyi:

This structure may be glossed as 'He is in a state: He is sitting on the fence' or as 'He is in a state: He is fat'. The initial string NOM-AUX-LOC, which captures the notion of 'being in a state', explains why such sentences can contain the same durative and habitual time adverbs as sentences with verbs in imperfective aspect. Whether PRED is realized as a verb or an adjective would seem to depend on whatever lexical item is substituted for PRED, though PRED will in the vast majority of cases be realised as a verb.

(One feature of Russian which merits thorough investigation is the distinction between temporary and permanent characteristics, which may be interpreted in terms of the
proposed structures as temporary or permanent states. This distinction is traditionally used to explain the use of the long and short form of the adjective in predicative position and to account for the difference between Ivan byl poez (Ivan was a poet), where the second noun is in the nominative case, and Ivan byl inženérem (Ivan was an engineer), where the second noun is in the instrumental case. 'Being a poet' is described as an inherent ability or state whereas 'being an engineer' is supposed to be an ability which can be acquired. Although a full study of this feature goes far beyond the scope of the present paper, it may be noted that the distinction between temporary and permanent states may be of importance in the analysis of adjectives and static verbs. For example, the sentence On molčit (He is silent) means 'He is silent at the moment' but On molčaliv (He is silent), which contains an adjective, means 'He is silent by nature'. 'He is a silent man'. On bolen, with the short form of the adjective, means He is ill (at the moment), whereas On bol'innaj, with the long form of the adjective, means He is constantly ill, i.e. He is an invalid.

'Active' predications

3.2.2
Of the list of non-stative sentences there still remain Mal'čik pišet pis'mo, Devočka upala, Molot upal and Devočka bęgaet. To these may be added Starik umer (The old man died) and Ja potolstel (I grew fat). This
group of sentences divides into two sub-groups. Which group a sentence is assigned to depends on whether the sentence can be used in answer to the question čto on delal? (What was he doing?) or čto slučilos’ s nim (What happened to him?). The first question can be answered by Mal’čik pisal pismo (The boy was writing a letter) and On begal (He was running about). The second question can be answered by On upal (He fell), On umer (He died), and On potolstel (He grew fat). The distinction between the two types of sentence reflects the distinction between those verbs which take an agent and those verbs which do not. Within the group of 'agentive' verbs there is a further distinction between 'transitive' and 'intransitive verbs'.

(Special causative deep structures may be postulated to account for such sentences as On dal mne knigu (He gave me the book). The underlying structure of this sentence may be glossed approximately as 'He caused it : The book be at me'. Similar structures would underlie Molot upal (Something caused the hammer to fall) and On upal (Something caused him to fall). Since a complete study of such deep structures would encompass the full range of impersonal sentences in Russian as well as the use of reflexive verbs, causative sentences and their underlying structures will be largely neglected in this paper. For further comment on causative constructions see Chapter Five).

Both agentive and non-agentive verbs occur in perfective and imperfective aspect, both co-occur with adverbs of manner such as hystro (quickly) and medlenno.
(slowly), but only agentive verbs co-occur with adverbs of manner such as enerģično (energetically), lovko (skilfully), and nebreţno (carelessly), and with instrumental adverbs such as noţom (with a knife), mašinoj (by car), molotom (with a hammer).

**Some possible base rules.**

3.3 Now that a fair amount of data has been examined, various hypotheses formulated and several particular underlying structures proposed, it is necessary to consider once more the general form of the grammar which is to generate these structures. At the end of Chapter One it was suggested that linguists might more profitably talk about stative, static and active sentences than about stative, static and active verbs. These three types of sentence were envisaged à la Fillmore in terms of a central verb accompanied by certain cases, the cases being expanded into a case element plus a noun. It was argued that by taking the features stative, static and active to refer to types of sentence the various acceptable combinations of verb plus number and type of nouns plus number and type of adverbial phrases could be generated without recourse to the complex selectional rules which would be required in a generative grammar of the type described by Chomsky in 'Aspects of the Theory of Syntax'.

These arguments by themselves do not compel one to adopt stative, etc. as sentence features rather than as
verb features. It would be just as simple to subcategorize $V$, which would then govern the cases and adverbial phrases which could co-occur with it in the sentence.

The preceding investigation of certain Russian sentences which led to the postulation of two basic different underlying structures, one for sentences containing stative construction and the other for sentences containing non-stative constructions, settles the issue in that the initial $S$ must be subcategorized if the appropriate features are to be assigned to LOC. One does not need to formulate the rules in order to see that subcategorizing both initial $S$ and the PRED dominated by $S_1$ would be to complicate the grammar and is therefore to be avoided.

\[Before the rules are formulated, a word about terminology is in order. The non-stative constructions referring to actions or processes will be labelled 'ergative'. The term 'ergative' is widely used in the description of certain languages to refer to the agent noun in transitive sentences. In this discussion it is being used to indicate that a construction refers not simply to being in a state but to an action or to a transition from one state to another. The difference between the sub-types of ergative construction will be captured in the sub-categorisation by the terms 'agentive' and 'non-agentive', and the distinction between intransitive and transitive agentive constructions will be reflected in the terms 'reflexive' and 'non-reflexive'. The terms 'reflexive' may be roughly but not exactly compared to the traditional 'intransitive'. Although the terms 'static' is unfortunately similar to the
term 'stative', it will be retained since it accurately characterizes the constructions to which it is applied. In Chapter One the terms 'dative case' and 'genitive case' were used with respect to elements in the deep structure. In the light of the discussion of stative sentences these terms will now be used to refer only to superficial morphs and the term 'locative' will be used instead. The case element which accompanies static verbs was labelled 'nominative' in order to distinguish it from the case 'agentive' which accompanies active verbs. These terms will be kept, but 'nominative' is not to be confused with the superficial 'nominative case' of traditional grammars of inflecting languages like Greek and Latin. It is clear that the superficial nominative case is the realisation both of the underlying 'nominative' in static sentences and of the inanimate noun in stative sentences, of the animate noun in stative sentences if it is made topic of the sentence, of the agent noun (in Russian, Latin and Greek at least) in active sentences. The second case element which accompanies active non-reflexive verbs will be termed 'objective'. The term 'nominative' will also be used to refer to the second case which accompanies non-agentive ergative verbs.) cf. Anderson (1968).

The rules might be as follows:

(1)  $S \rightarrow \dagger \text{stative}$
     - $\text{stative} \rightarrow \dagger \text{static}$
     - $\text{static} \rightarrow + \text{ergative}$

(2)  $+ \text{ergative} \rightarrow \dagger \text{agentive}$

(3)  $S \rightarrow \text{NOM AUX LOC}$
(4) \( \text{LOC} \rightarrow K+N+S_1 \)
(5) \( \text{LOC} \rightarrow +\text{Ingressive} \)
(6) \((\text{ergative} / +\text{Ingressive} \rightarrow +\text{Egressive})\)
(7) \(S_1 \rightarrow \text{PRED}_1\)
(8) 
\begin{align*}
\text{i} & \quad +\text{stative}/\text{PRED}_1 \rightarrow \text{LOC AUX PRED} \quad (\text{NOM}) \\
\text{ii} & \quad +\text{static}/\text{PRED}_1 \rightarrow \text{NOM AUX PRED} \\
\text{iii} & \quad +\text{ergative}/\text{PRED}_1 \rightarrow \text{NOM AUX PRED} \\
\text{iv} & \quad +\text{ergative}/\text{PRED}_1 \rightarrow \text{AG AUX PRED} \quad (\text{OBJ}) \\
\text{v} & \quad +\text{ergative}/\text{PRED} \rightarrow \text{Verb} \\
\end{align*}

The fact that the distinction between perfective and imperfective aspect is relevant only to verbs denoting actions or processes is captured in these rules by attaching the feature \([+\text{Egressive}]\) to LOC by means of a context-sensitive rule which can operate only in the presence of \([+\text{Ergative}]\). The rules bring out the 'relational' nature of cases and, since \([+\text{Static}]\), etc. are sentence features, capture the notion the sentences do not consist of bits and pieces thrown together by accident but fall into three basic types, each type having its own distinctive coherent configuration of elements in the deep structure. Rule (8) iv reflects the fact that only agentive verbs can be transitive. Verb is regarded not as a category in the deep structure but as a feature which is assigned to PRED.

Although this discussion of the general form of the rules is not intended as a contribution to the development of case grammar, it is perhaps significant that on investigation into aspect in Russian has led quite naturally to the postulation of various sentence types, the core of
each type being a particular kind of predicate accompanied by particular cases.
Footnotes.

1. A linguist might ask at this point whether I am not confusing historical processes with synchronic states, and a psychologist might wonder whether I am claiming that speakers of Russian actually interpret the notions of 'owning' and 'belonging to' in terms of locatives. To the linguist I would reply that it makes good sense from a linguistic point of view to derive sentences like \( \text{nego dom} \) and \( \text{Emu prindale\v{z}it dom} \) from locative constructions, and that \( \text{prinadle\v{z}it} \) will probably be built up by the addition of the prefixes \( \text{pri-} \) and \( \text{nad-} \) to \( \text{lezit} \). This is not to say that speakers of Russian consciously build up the verb \( \text{prinadle\v{z}at'} \) but simply that this solution enables the linguist to understand and correlate certain phenomena in Russian.

To the psychologist I would reply that there is as yet no evidence as to how adult speakers of Russian "interpret" the notions of 'owning' and 'belonging to', but that it seems not implausible to suggest that locative notions are involved in at least the acquisition of these concepts — given that an understanding of movement through space and position in space is basic and crucial to a human being's mastery of his environment.

2. In general, when the notion of an 'object' being 'at a person' is involved, the locative is realized as \( \text{u + noun + genitive case ending} \); and when the notion of (something) 'being in a state at a person' is in-
volved the locative is realized as a noun in the dative case, e.g. teorija emu ponjatna, emu xolodno.
CHAPTER FOUR

'Future Tense' in Russian

4.1 At this point in the discussion of aspect it becomes necessary to give some thought to the relationship between time and tense and to the intersection of tense, mood and aspect. By tense will be understood that category which 'has to do with time relations insofar as these are expressed by systematic grammatical contrasts.' Linguists tend to use the term 'grammatical' for notions which are expressed by means of inflexions or particles but not for notions which are expressed by means of lexical items. Thus, the term 'tense' would not be used in descriptions of a language in which reference to time depended on the use of adverbs such as yesterday, today, tomorrow. This statement immediately raises doubts as to whether linguists should talk about 'future tense' in English, in which reference to future time often involves the use of lexical items such as will, shall, ought, etc., or 'future tense' in Russian, in which reference to future time involves either the 'present perfective' (i.e. a combination of aspect and tense) or a construction with the 'future tense' of the verb 'to be', budu, and an imperfective infinitive.

Before any new treatment of tense and aspect in Russian is elaborated it will be instructive to examine how scholars have tackled this problem in the past. Most (if not all) have used the terms 'past tense', 'present
tense' and 'future tense'. Difficulties have arisen mostly over the classification of perfective forms such as реши́т, (I will decide), дам (I will give), сказа́т (I will say), the problem being whether to call these forms 'future perfectives' or 'present perfectives'. The choice of label is a problem because such perfective forms may refer to both future and present time. In the sentence

_on пошлёт вам документ_: He will send you the document

пошлёт refers to future time, but in the sentence

_Быват, придёт к нам сосед, сидят и расска́зят что-нибудь весёленькое_: Our neighbour will call on us, sit down, and tell us amusing stories

придет (come), расска́зят (tell), сидят (sit down) are all (like пошлёт) perfective forms, but refer to the present. (At this juncture it may be objected that present tense forms have several different functions, or even that there are several different kinds of 'present tense', and that these perfective forms are in any case used only to refer to habitual actions. These objections are perfectly valid and will be taken up in due course.)

Mazon's Treatment of Future Tense

4.1.1

Mazon (1914) sidesteps this problem by entitling the relevant section of his book 'Présent perfectif ou présent futur and then listing the various types of 'présent futur'. According to Mazon, the key to the puzzle lies in the
'présent futur de l'action immédiatement prochaine':

Ne poželaete vy vina? - Won't you take some wine?

Birjuk skazal - a čto muzik, - The wolf said, 'Know what, mužik, I'm going to eat you up!

Mazon points out that 'la notion dominante qui ressort de tous ces exemples est celle d'une volition plus ou moins immédiatement satisfaite... Cette notion serait sans doute imperfective si elle n'impliquait que la tendance vers l'acte, mais elle implique la volonté du sujet de réaliser l'acte intégralement, et par là elle est perfective.' Mazon further asserts that '... la transition de la valeur de présent à celle de futur apparaît-elle comme sensible dans une catégorie d'emplois du présent-futur que l'on peut appeler présents-futurs de l'action immédiatement prochaine. In Mazon's treatment there are two main kinds of présent futur, 'l'action unique considérée dans son achèvement intégral' et 'l'action réitérée ramenée à l'unité'. Both kinds have several sub-divisions. The first is subdivided into

a. présent-futur antérieur.

A vašim detkam ešče lučšie budet. - Things will be even better for your children, if God grants it.

b. présent-futur de désir ou de finalité.

Ja tebe i den'gi vse pokazu - I will show you all the money.

c. présent futur impératif

Tv vernay'sia zavtra - You will come home tomorrow.
d. présent futur d'incertitude.

Čelovek, požalyi, stopol torasta nahežit - A fellow might make a hundred and fifty roubles.

The second is subdivided into various semantic types which are not assigned such definite labels as those which have just been listed. The 'basic' use is exemplified by On stuknet tri raza v dver - He will knock two or three times on the door.

stuknet being characterised by Mazon as denoting the 'somme abstraite... des mouvements'. Next a distinction is drawn between perfective forms which are 'réellement futurs' and perfective forms which are 'hypothétiquement futurs'. The former are used in such sentences as My vse podadim v otstavku - We will all resign which expresses 'la volonté et l'aptitude du sujet à accomplir l'action verbale', whereas the latter are used in sentences such as Pri takix obstojetel' stvax vsegda - People will always podadut v otstavku resign in such circumstances.

which emphasises the 'caractère nécessaire et fatal de l'action'. Mazon then discusses perfective forms which 'servent à l'expression d'un fait particulier présenté comme habituel' and cites as examples Vv vsegdaisportite - You always spoil things Znaeš', ne različiš' vezdy ot - You know, sometimes you bomb inogda. can't tell stars from bombs.
Sometimes sentences occur in which two individual facts are mentioned, one being referred to by a present imperfective form, the other by a present perfective form. Mazon explains that 'l'imperfectif constate le développement d'un acte dont le perfectif fixe le point d'aboutissement: le premier pose un fait, et le second en formule la conséquence réelle, sinon logique'. One such sentence is

Živem v odnom gorode, pošti rijadom, - We live in the same town, almost next door to each other, but we'll see each other once a week.

Sentences such as

Za čem poideš', to i naideš' - You'll find what you want if you go looking for it.

prošlogo ne varotíš' - you won't bring back the past.

are said by Mazon to contain special perfective future forms which he labels 'préents-futurs gnomiques'.

Finally Mazon adduces examples of the 'présent-futur des affirmations et des négations absolues'. He glosses the sentence

Ja emu napišu ot imeni všetkých vás - I will write to him on behalf of you all.

(where napišu is perfective) as 'Je lui écrirai, c'est chose faite', whereas the sentence

Ja budu emu pisat'... I will write/be writing

(where budu pisat') is imperfective) is given the gloss 'Je me chargerai de lui écrire...mais je ne saurai

vous
dire quand j’écirai’. The first sentence is an affirmation of immediate action, the second is not.

As examples of 'négations absolues' Mazon cites

*Tener' menja ne nadueř* - You won't fool me now.
*Nikak ne pridumaju* - I can’t think of (the number, the word, etc.)

Čto vy ničego ne skažete? - Why won't you say anything?

The perfective forms in the first two examples are said to express 'incapacité absolue' and the perfective form in the third example is said to express 'volonté absolue'.

Mazon's account of the présent-futur is open to criticism on several counts.

1. The very label 'présent-futur', referring simultaneously to two different times, makes one wonder whether tense is the key factor or whether something more basic in the examples has been overlooked.

2. The label 'présent-futur de désir ou de finalité' seems to indicate that the 'désir' and 'finalité' are at least as important as the 'présent-futur', though Mazon does not investigate this possibility. It is rather curious to find 'désir' and 'finalité' lumped together under one rubric, there being no inherent or necessary connection between the two notions. This is clear from the examples which Mazon himself uses, the 'présent-futur' de désir' being exemplified by, among others

Ja teba i den'gi vas pokazu - I will show you all the money

and the 'présent-futur de finalité' being exemplified by

*Da pridet k nam mir i soglasie* - let peace and harmony come to us.
3. One wonders why the positive 'présent-futur de désir' and the negative présent-futur expressing 'volonté absolue' have been treated as isolated phenomena rather than as two facets of the same modality, since the modal elements in both sets of examples are identical, the only difference between the sentences being that one is positive, the other negative.

4. One would like to know whether the 'finalité' of the example quoted in (2) is somehow different from the 'finalité' which is present in the sentences exemplifying the 'présent-futur gnomique'. In the case of the latter, Mazon does recognize and relate positive and negative versions of such forms.

5. Are the preceding 'finalités' in turn different from the 'finalité' of the present perfective forms which refer to actions with a 'caractère nécessaire et fatal'?

6. Is the difference between the forms which Mazon describes as 'réellement futurs' and the forms which he describes as 'hypothétiquement futurs' not to be traced to some more fundamental factor? One factor which seems suggestive is that the form 'réellement futur' is first person and could equally well be classed as an example of 'désir' or 'volonté', whereas the form 'hypothétiquement futur' is third person and cannot be said to denote 'désir' or 'volonté'.

To sum up, it seems probable that Mazon, by concentrating on relatively unimportant semantic characteristics of his examples, has missed a fundamental generalisation, a defect which is reflected in the unsatisfactory typology of the examples. The task is now to propose a derivation
for these sentences which distinguishes clearly between
time and modality and which contains an underlying struct-
ure or structures as general as possible yet capable of
explaining all the facts presented by Mazon.

Saxmatov's Treatment of Future Tense

4.1.2
It is interesting to see how other eminent scholars
have tackled the problem of the present/future perfective.
Saxmatov (1963) distinguishes between the perfective
present and the perfective future. According to his des-
cription the perfective present has four uses:
1. to express the present tense of the 'potential' mood.
   Examples of this use are
   Tut dolgo ne vysidish - You won't sit there long.
   Ne skazu vam teper' - I won't tell you just now.
   However, Saxmatov previously defines the 'potential'
   mood as being used when 'the speaker is establishing that
   the link between the subject and the predicate has been
   realised, in spite of the fact that it might not have been
   realised.' In popular language this mood is usually ex-
   pressed by means of the past tense of the verb 'can' plus
   an infinitive:
   a On mog uiti ottuda i ne rasplatit'sia - but he might
   have left and not paid.
2. to express the result of an action as being extra-
temporal:
   Lubov' zla, poljubis' i kozla - love is evil; you can
   fall in love with a goat.
3. to express a repeated action in the past 'in its result':

Ja načnu govorit'emu o dolge, - I would begin to speak to him about the debt and he would laugh in my face.

Byvalo, siadam s nim na etoj skamejke - it used to be that we would sit on this bench.

4. to express a momentary action which took place in the past:

On kak kriknet na menja, ja i ispužalsja - when he shouted at me I took fright.

The perfective future denotes an action which is to take place after the moment of speech:

Ja skazhu vam na eto - In reply to that I'll tell you...

Šaxmatov's explanation is also inadequate. The label 'potential' is perfectly valid when applied to the original example of 'potential mood' but seems inappropriate for the examples with present perfectives. If 'potential' is glossed as 'possible', i.e. as 'what might be' as well as 'what might have been', then the example Tut dolgo ne vvsidiš could be interpreted as 'it is impossible for it to be the case that you will sit there long'. However, a similar gloss cannot be given to Ne skazuja vam tapan'. In fact the latter sentence appears to contain one of Mazon's 'présent-futur de volonté'. The example ... polinubši i kozla, which is better glossed as 'you'll fall in love with a goat (given the chance), would seem to have much the same modality as Tut dolgo ne vvsidiš'. Šaxmatov at least emphasises explicitly the non-temporal nature of vvsidiš'. The sentences adduced as examples of
(3) are not accounted for satisfactorily, mainly because Saxmatov's explanation combines the traditional - mutually exclusive - criteria for explaining the use of imperfective and perfective aspect (i.e. a repeated action is almost always denoted by a verb in imperfective aspect and perfective aspect is said to be used when the completion of an action is important or when the speaker is thinking or the action as a whole). To claim that speakers using sentences like byvalo, siadem... are thinking of a repeated action in its result, or of a series of completed actions, fails to convince on two counts:

(a) one has the impression that the psychological criteria are being juggled in a rather ad-hoc fashion. Even if one did accept Saxmatov's explanation, this use of present perfective forms would still remain awkwardly outside the central system of rules governing the use of aspect, not related to this system in any predictable way but only by sudden whims in speakers of Russian to think of actions in a new way.

(b) such sentences as often as not contain imperfective forms which are regularly used to refer to a habitual action or to an action repeated a number of time (assuming that these sentences display a typical use of aspect, cf. 4.2.2.). However, Saxmatov might well have pointed out that siadem in Byvalo, siadem is just as much extratemporal, both with respect to duration and location in time, as vvsidis' in the earlier example. Siadem is extratemporal in these two senses (1) because it refers to actions in past time yet does not have past tense endings; (2)
because it refers to the repetition and duration in time of an action, yet is a form which is normally said to refer to a completed action in the future. *Vysidiš'* is extra-temporal in the same way, since it is modified by *dolgo* (long), which usually co-occurs with verbs in imperfective aspect. These two sentences, though kept apart in Saxmatov's classification, may turn out to have the same modality, a modality which cuts right across tense and aspect.

Finally it may be noted that Saxmatov's example of perfective future looks very like Mazon's examples of the 'présent futur de désir'.

**Isačenko's Treatment of Tense.**

4.1.3 One of the most recent attempts to establish an adequate theory of tense for Russian - Isačenko (1962) - is also one of the most ingenious. In considering the problem of aspect and future tense Isačenko found himself compelled to take into account some of the peculiarities inherent in the notions of present tense and present time, notions which at first sight seem simple and straightforward. Isačenko takes the view that the present is the unmarked tense form, meaning by this that any event which is neither in the past nor in the future is conceived as being in present time and is expressed by the present tense. Language, he states, does not follow the physical or psychological concept of time. Objectively, the present is each moment which separates the past from the non-past, but in
language the present is expressed not as a point in time but as an extent in time. The verbs *ich lese, du schlafst, es regnet* express an action as taking place in time, without making any reference to the beginning or end of the action. (in this section Isačenko is simply repeating Jespersen's views of the present tense.)

Isačenko then proceeds to distinguish between the actual and non-actual present (naming as his inspiration an article by a Czech linguist, Kopečný). The actual present is used in replies to the question 'What are you doing there?' It is the tense used to talk about concrete actions which are observed as they take place. Isačenko sees the expression of the actual present as the primary function of the present tense. The non-actual present is used in a great variety of contexts. If someone were showing people round a university and led them into an empty hall, saying, 'The examinations are held in this hall', that person would be using the non-actual present, since the event would not be taking place at the exact moment the sentence was spoken. Isačenko lists and exemplifies the uses of the non-actual present as follows:

1. **General Present (Generelles Präsens)**

   *Zemlja vraščaetsja vokrug solnca* - The Earth revolves round the Sun.

2. **Habitual Present (Usuelles Präsens)**

   *On vstaet v šest' časov utra* - He gets up at six a.m.

3. **Qualifying Present (Qualifizierendes Präsens)**

   *On učitsja na piatom kursе* - He's in the fifth year at school.
4. **Potential Present (Potentielles Präsens)**
   
   *On odnoi rukoi podnimает 60 kilo* - He lifts 60 kilos with one hand.

5. **Historic Present (Historisches Präsens)**
   
   *V 1848 godu Marks priезжает w Pariz* - In 1848 Marx arrives in Paris.

   The actual present clearly contrasts both with the past and the future, but this contrast is much less obvious in the non-actual present.

   Under the heading 'Grammatical transposition of the present' Isačenko discusses some of the examples which Mazon assigns to one or other type of présent-futur. By 'grammatical transposition' is understood the transference of a particular tense form to another temporal plane. As an example, Isačenko compares the two sentences:

   Byvaet, prizodit k nam naš posased, - (It often happens that)

   saditsia i rasskazyvaet čto-nibud' our neighbour calls in,

   veselen'koe sits down and tells us amusing stories.

   Byvaet, pridet k nam naš posased, - (It often happens that)

   siadet, i rasskazet čto-nibud' our neighbour will call in, sit down and tell us amusing stories.

   veselen'koe

   Isačenko holds that these two sentences have pretty well the same meaning, in spite of the fact that the verbs in the first sentence are imperfective, the verbs in the second perfective. The only difference is that the first sentence is more prosaic and narrative, the second more dramatic and dynamic (dramatischer, dynamischer und anschaulicher). Isačenko maintains that there is really
no paradox in this use of so-called 'perfective future' forms to refer to habitual actions in present time. Although Russian scholars such as Vinogradov and Kuznetsov have used the term 'perfective future', and although there is a widespread belief that the non-past form of a perfective verb can refer only to the future, nonetheless these forms are present tense forms which express the non-actual present. Although they are most frequently used to refer to future actions, they do have other uses, a point which is often overlooked. In sentences containing such verb forms the time perspective is often fixed by means of lexical items such as byvaet (it is the case that), byvalo (it used to be the case that), inoj raz (now and again).

As another example of transposition of the non-actual present Isačenko quotes sentences in which a present tense form refers to a future action:
Čto tv delaeš' večerom? - What are you doing this evening?
Zavtra ja idu k vraču - I am going to the doctor tomorrow.

He points out that such sentences always contain adverbs such as zavtra (tomorrow) or na dnuax (shortly) which determine the reference to future time. However, Isačenko maintains that the present tense form does not acquire future meaning; rather 'a non-actual present is actualised because the whole utterance is transposed into the plane of the future'.

Of the future Isačenko has the following to say:
'The simple future is formally identical with the present. We know that a perfective present can never be used to refer to the actual present. Now the future itself is
a non-actual, unreal time in which planned or expected events are placed. The form of the perfective present, which denotes an action conceived as a completed whole, is particularly suitable for making the speaker aware of planned or expected events. In modern Russian reference to future time is closely connected with the present perfective. The future meaning of a form like Ja napisu is without doubt primary; the meaning of non-actual present (byvalo, ja napisu - it used to be that I would write) is secondary, because it is stylistically motivated and possible only with transpositions.

Having discussed both the forms referring to future events and the various kinds of present tense, Isačenko attempts to construct a diagram showing the structure of the Russian tense system in terms of oppositions. The most important opposition is that of past and non-past. The strong (stark) marked member of this opposition is past. Only past tense forms refer to events which the speaker was able to observe in their entirety and which he can recognise from his own experience. The past tense forms of Russian are formally differentiated from all the other tense forms in that they are marked for gender. Within the past forms there is a further division into perfective and imperfective forms.

Of the non-past forms, the analytic imperfective future contrasts with all the other non-past forms. On budet brosat' (he will throw) means that at the moment of speech the event has not yet begun and therefore lies wholly in the non-past (the future). The periphrastic
future, the marked form, is opposed to the present tense forms. The present is the weak, unmarked member of this opposition because it does not necessarily refer to events which belong wholly to the non-past. Within the past tense forms there is a further opposition of perfective and imperfective. The strong member of this opposition is the perfective present, which refers explicitly to a non-actual event, to an event which does not coincide with the moment of speech. Because of this, the perfective present can refer both to future and to past events (both types being non-actual). The weak, unmarked member of this opposition is the imperfective present, which gives no indication of whether the action coincides with the moment of speech or not. This means that the imperfective present can refer to events which are taking place at the moment of speech and which are observed by the speaker and also to habitual or potential events which are not actually taking place at the moment of speech. Isachenko's diagram looks thus:

Past

<table>
<thead>
<tr>
<th>imperfective</th>
<th>perf.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-Past</td>
</tr>
<tr>
<td></td>
<td>imperf.fut.</td>
</tr>
<tr>
<td></td>
<td>perf.</td>
</tr>
</tbody>
</table>

Isachenko's attempt at elucidating the basic principles of the Russian tense system is undoubtedly the most ingenious in the literature. The particular merit of his approach is that it tries to evolve a more hard and fast criterion than simply differences in the way a speaker of
Russian might choose to view an action, to reduce the various factors involved to as few as possible, and to relate the factors systematically.

However, in spite of the economy of the system and the realisation that something more than 'tense' is involved, Isačenko's system is in turn open to criticism. 1. Consider the definition of the actual present as the tense which is used to refer to concrete actions which the speaker can observe directly ('jenes Tempus, mit dem Handlungen, die ich unmittelbar in ihrer Abwicklung beobachten kann, qualifiziert wer den'). On a strict interpretation this definition has certain undesirable consequences - which Isačenko recognises and accepts - in that verbs which do not refer to events but to what Isačenko calls 'conditions and relations' ('Verhältnisse und Beziehungen') can occur only in the non-actual present. Examples quoted by Isačenko are стоять (to cost), знать (to know), любить (to love), ценить (to value). Presumably one would have to include verbs like спать (to sleep), лежать (to lie), и сидеть (to sit), since these verbs also refer to 'conditions' and not to actions.

While one accepts that the present tense forms in

Ja vstaju v čest' časov - I get up at six o'clock
Ja pišu emu pis'mo - I am writing him a letter

are being used in different ways, and that this difference is appropriately characterised as 'non-actual' vs. 'actual' as defined above, the classification of знать (I know) as 'non-actual' in the sentence

Ja znam, čto on prišel - I know that he has come
seems counter-intuitive. On the other hand, the form *znaet* (he knows) in

\[ \text{On vserda znaet, u kovo den'gi} \quad \text{He always knows who has money} \]

\[ \text{No Marks znaet, cto budet revolucija} \quad \text{But Marx knows there will be a revolution} \]

seems more suitably labelled 'non-actual'.

The confusion arises from the original definition of 'actuality', which, it can be argued, involves two distinctions:

a. Isačenko appears to be distinguishing between verbs referring to actions and verbs referring to 'conditions and states'. This seems very similar to the distinction drawn in Chapter One between stative, static and active verbs.

b. Isačenko also distinguishes between verbs referring to actions which are taking place at the moment of speech in the situation of the speaker and hearer and verbs referring to actions which are not taking place there and then.

Unfortunately, the two distinctions have fused into one because of the importance attached to the word 'observable'. As a result, Isačenko's proposal provides no means of distinguishing between the use of *znat*' to refer to somebody's knowledge of something in the situation of the speaker and hearer and the use of *znat*' to refer to somebody not present in the situation.

2. The proposed system does not really contain a satisfactory solution to the problem of present and future tense,
since it lays down no hard and fast rules for distinguishing between the imperfective periphrastic future *ja budu pisat*' and the perfective future/present *ja napisu*. Isačenko argues that the former refers to an action which lies wholly in the future, whereas the latter may refer to an action that has already begun. But if the speaker has already begun the action, that action may be labelled 'actual' - whereas the essential feature of forms like *napisu* is that they are non-actual.

3. The 'non-actual' meaning of perfective present forms does not entail the vividness and dynamism that Isačenko claims for sentences like *sbyvaet, pridet k nam posed* (cf. p.150). Indeed, the terms 'actual' and non-actual' might even lead one to expect the 'actual' forms to be more dynamic and vivid. Moreover, Isačenko does not explain what makes the 'non-actual' forms vivid and dynamic. This unexplained factor will later be shown to be crucial not only to understanding the above use of present perfective forms but also to understanding why such forms are also used to refer to actions which have taken place in the past, as in the sentence cited by Ward (6):

*Evvalo, zajdet solnce, prol'utsia* - It used to be that the sun would set, rivers would spill, and burn out, a golden red ash would descend upon the velvet greenery of the garden.

(*zajdet* - set, *prol'utsia* - spill, *soriat* - burn out,
nispadet - descend, are all perfective present forms).

As Isačenko points out, the initial $byvalo$ (it used to be that...) sets the time perspective, but this still does not explain these perfective forms. It is not a rule in Russian that whenever the location in time of an action is indicated by an adverb the verb turns up in the perfective aspect. Isačenko himself states that one could also say $byvast, prizodit...$ using imperfective forms, which would be less dynamic than the perfectives. But in this case the imperfectives are just as much 'non-actual' as the perfectives, which seems to indicate that this distinction, interesting as it is, is still not the crucial one.

'Past' and 'Non-Past'

4.2 Now that the proposals of three scholars have been examined and found inadequate, it is incumbent upon me to balance the negative criticism by putting forward some positive suggestions. Pointers to a more fruitful hypothesis are to be found in that part of Isačenko's work which treats of the actual and non-actual present tenses. Isačenko talks about the various meanings which the present imperfective forms may have and also about the non-actual use of these forms. It seems to the present writer that more powerful explanations become possible if one concentrates on what a speaker is doing in using an imperfective present rather than on establishing various kinds of present tense, general, habitual, qualifying, etc., as Isačenko does. One can also question the validity of the
terms 'future tense' and 'present tense' which are accepted and used frequently in discussions of tense, though any definitions of these terms either fail to encompass all the phenomena or have so many ramifications as to be unworkable.

Of course, in taking up such questions the linguist is entering upon ground which has been thoroughly quartered (some might say 'trampled') by philosophers. It is not the writer's intention to describe the various philosophical schools of thought concerning time but to concentrate on the linguistic ways in which a speaker of Russian can refer to past, present and future time, adducing only such comments as seem pertinent.

The first point to establish is from what position a speaker looks at time. This is easily done, since linguists have for long recognised that past, present and future are not absolute but relative to the time of the utterance.

The second point which has to be decided is how one can describe and explain the expression of time in Russian without using the traditional triadic system of tenses which has given such unsatisfactory results in the past. One should also ask whether the three times are equally important, since it has been argued by both linguists and philosophers that the past and future are the important times. Isačenko holds that an event which lies neither in the past nor in the future is conceived as lying in present time, that is he thinks of the present as that time which is non-past and non-future. Of the philosophers,
Gale and Thalberg (1965) maintain that 'the distinction between past and future is deeply entrenched in our everyday conceptual system. This is revealed by certain logical asymmetries in the way in which we speak about the past and future, some of which are: 1. There is no future analogue to 'trace' or 'memory'; 2. We can speak of our present actions as producing or causing future, but not past, results; 3. We can act so as to falsify some predictions but not retrodictions; 4. Thus it is incorrect to speak of deliberation over future, but not past, conduct'.

Although nobody would wish to dispute the above statements, they cannot be adopted by the linguist just as they stand. The most important reason is that a scrutiny of the formal expression of tense in Russian leads one to regard as basic the distinction between 'past' and 'non-past'. (cf. Lyons (1968), 304,ff.) The past tense forms have their own distinct set of inflections and are the only verb forms (apart from the participles) which are marked for gender. The same set of inflections occurs both with present imperfective forms (which often refer to events contemporaneous with the time of the utterance) and with present perfective forms (which typically refer to future events). There is thus no inflectional distinction reflecting the difference between present and future time. This is clear from the table below:

<table>
<thead>
<tr>
<th></th>
<th>imperf.</th>
<th>perf.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ja vimal</strong></td>
<td>(I (masc.) wrote)</td>
<td><strong>ja napimal</strong></td>
</tr>
</tbody>
</table>
ja pisala (I (fem.) wrote)  
vy pisal (You (masc.) wrote)  
ty pisala (You (fem.) wrote)  
on pisal (He wrote)  
Ona pisala (She wrote)  
My pisali (We wrote)  
pisali (They wrote)  

NON-PAST  

imperf.  
ja pišu (I am writing)  
vy pišeš' (you ... )  
on pišet (he ... )  
ona pišet (she ... )  
my pišem (we ... )  
vu pišete (you ... )  
oni pišut (they ... )  

perf.  
ja napišu (us, translated 'I will write')  
vy napišeš' (you ... )  

In the past tense forms there is a basic distinction between singular and plural. In the singular forms there is a distinction between masculine, feminine and neuter (an example of the latter is moloko skislo - the milk turns sour, lo being the neuter ending) but no distinction between first, second and third person. In the plural forms there is no distinction of either person or gender. The addition of the prefix na- marks a change of aspect. The use of the terms 'Past' and 'Non-Past' rather than 'Past', 'Present', or 'Future' is further supported by the fact that past tense forms refer only to actions, events or
states which are 'before now', i.e. before the time of the utterance, whereas the so-called present tense forms may refer to both 'at now' and 'after now' actions, events or states.

**Statements and Predictions.**

4.2.1 The problem now is how to distinguish between the various uses of the non-past forms. Gale and Thalberg's four points are significant in this respect. What they amount to is that past and present actions, events or states are relatively definite and fixed, open to observation and examination, whereas future actions, events or states are not in the same sense definite or fixed, nor are they open to observation. These differences between the past or present and the future are recognised in the vocabulary of philosophers, who maintain that while one can make statements about the past or the present one can make only predictions about the future.

This distinction drawn by philosophers can be applied naturally and successfully in the analysis of Russian. The linguist need not worry about all the theoretical points which philosophers raise concerning how one knows something, the exact difference between statements and predictions, whether statements are really as definite and fixed as they appear to be, and so on. What is crucial for a linguistic approach to the problem is that people usually talk about the past and the present in a much more assertive way than
they talk about the future. This observation is in no way startlingly new. In his 'Philosophy of Grammar' Jespersen has this to say: 'It is easy to understand that expressions for times to come are much less definite and less explicit in our languages than those for the past: we do not know so much about the future as about the past and are therefore obliged to talk about it in a more vague way. Many languages have no future tense or have even given up forms which they once had and replaced them by circuitous substitutes'.

The distinction between statements and predictions accounts for some uses of the 'imperfective future' and 'perfective present/future' and simplifies the analysis of the various 'kinds' of present tense. To take the latter claim first, a non-past statement can be made about many things - about actions, states and events which may be observable or unobservable and which may be part of the speaker-hearer situation or may be remote from that situation; about actions, states or events which normally or regularly take place but which need not be occurring at the exact moment of speech; about actions, events or states which characterise a person. In short, what is common to all the types cited by Isachenko is that they are non-past statements. The 'potential present' is easily reinterpreted as a statement about a person's capabilities. The 'potential' element would be made explicit in the deep structure of such sentences. For instance, the deep structure of

*On odiy rukoj podnimat 60 kilo* - He lifts 60 kilos with one hand
can be glossed as

I state : He capable : He lift 60 kilo with one hand.

The 'praesens historicum' seems to contain a contradiction in that it is a non-past statement about a past action, event or state. However, this use of non-past statements is essentially a stylistic device. The speaker or narrator imagines that he is observing the events as they happen, in order to make the narrative more vivid, and thus represents the events as contemporaneous with the moment of speech. Jespersen, following a suggestion of Brugmann's, thinks that a better label would be 'dramatic present'.

The former claim provides an immediate simplification in a similar manner, in that one no longer has to worry about which label to use, 'perfective present' or 'perfective future', the crucial element in the deep structure now being prediction. It will be argued later that the element prediction, or at least a modification of it, accounts for the use of these forms in sentences referring to past or present as well as to future actions, events or states. It is clear that Isačenko, unsuccessful though his own attempt is, realised that the great dispute about 'present' or 'future' perfective was essentially irrelevant and that the pivotal factor is something other than tense.

Assuming, then, that the above arguments about statements and predictions are valid, sentences like

On zavtra napišet pis'mo - He will write the letter tomorrow
On nedolgo budet pravit' stranu - He will not govern the country for long
can be assigned the underlying semantic structures:
I predict : He tomorrow to into, be in, and come out of state : he write letter.
I predict : He not long be in state : He govern country.

Unfortunately this neat scheme does not account for all uses of imperfective and perfective future forms. Consider, for instance, the sentence cited by Mazon:
Ja tebe i den'gi vse pokazhu - I will show you all the money.

It is, to say the least, highly improbable that in this case the speaker is predicting of himself that he will do such-and-such. Much more plausible is an interpretation involving intention on the part of the speaker. This would produce a structure:

I state : I intend : I go into, be in, come out of state : I show you all the money.

Another example from Mazon

My vse podadim v otstavku - We will all resign.

can be assigned a similar underlying structure. Many examples which are best interpreted in terms of intention contain 'imperfective future' forms:
Ja budu emu pisat' - I will/am going to write to him.

This would have a structure:

I state : I intend : I be in state : I write to him.

The difference in aspect is explained by the fact that in the underlying structure of the latter sentence the locative element can be glossed as 'be in a state', whereas in the underlying structure of the former sentence the locative element can be glossed as 'go into, be in, come out of a state'. (This is not to suggest that all first per-
son 'future' forms express intention, but simply that in many instances 'intention' is more appropriate to such forms than 'prediction').

In declarative sentences there is no superficial distinction between sentences marked as predictions in their underlying structure and sentences whose deep structure contains a modal element of intention. In interrogatives, however, there is a distinction. If the sentence

**vy budete brat' knigu?** - Are you going to take the book?

is derived from an underlying structure containing **Intention** there is a marked stress on **budete** and the intonation pattern rises perceptibly higher over **budete** than it would if the sentence were a question about a prediction.

(Although the modal element is here called 'Intention', the line between **intention** and **volition** is very hard to draw. Given a sentence such as

**Čto vy ničevo ne skázete?** - Why won't you say anything?

The choice between the terms is arbitrary, since both are equally suitable. The essential point is that both **intention** and **volition** refer to the future, not to the past or present.)

**Prediction and Necessity.**

4.2.2

Two further types of sentences with 'perfective future' forms have yet to be explained. To the first type belong the sentences containing what Mazon calls the
'présent-futur impératif'.
Ty vernesslia zavtra - You will come back tomorrow

While the majority of such sentences contain verbs marked as second person, some sentences which contain verbs marked as third person also lend themselves to interpretation as a kind of imperative - in the appropriate context.

Ne bespokoites', on pridet izvinit'sia - Don't worry, he'll come and apologise.

What is common to these two examples is that the speaker intends that somebody else will do something, in the first example the 'somebody else' is the person being addressed; in the second example the 'somebody else' is a person other than the speaker or hearer. In the case of the second example the speaker can make clear that he is not simply predicting the third person's action by using various features of stress, intonation, and general voice quality.

To the second type belong such sentences as

studenty vsedga naidut obščij jazyk - Students will always find a common language.

That this perfective future is different from the others which have been discussed is evident from the adverb vsedga (always), which usually co-occurs only with imperfective forms. One does not find on dolgo napisat pis'mo

I predict : He a long time go into, be in, come out of state : He write letter.

Other examples from Mazon are:

a. Teper' menja ne nadues' - You won't fool me now.
b. *Derevca na verstu krugom ne uvidiš* - You won't see a tree for miles around.
c. *Svoej sud'by ne minueš* - You won't escape what Fate has in store for you.
d. *Vsevo ne pereskažes'* - You'll never tell the whole story.
e. *Sila vsedga svoe voz'met* - 'Might is right'.
f. *nikak ne pridumaju evo imia* - I can't remember his name.

These examples are all predictions, which fixes the time reference of the sentences. (Although it might be argued that (b) looks like a statement, it is a prediction based on the speaker's experience. The whole import of (b) is: 'I haven't seen any tree for miles around, I know the area well, and I predict that you won't see any trees either'.) What distinguishes these from other predictions is the presence of a modal element which may be glossed as 'without fail' (*nepremenno*). This is a rather unsophisticated term but it seems preferable to such terms as 'necessarily' which are used in a technical sense by philosophers. The semantic structure of these examples is approximately:

I predict : It without fail (not) be the case : x
where x is a sentence.

By this analysis the semantic structures of (a), (b) and (f) are:
a. I predict : It without fail non-past not the case :
   You fool me.
b. I predict : It without fail non-past not the case:
   You see a tree for miles around.
f. I predict: It without fail non-past not the case: I remember his name.

Crucial in these cases is the modal element 'without fail'. The 'Perfective future' forms are primarily realizations of this element and having nothing to do with completed actions or actions viewed as a whole. This is especially clear in (c), in which the 'you' does not refer to a listener present in the situation but to people in general. It could be rendered in English as 'One will not escape one's fate'. If there were no modal element in the underlying structure, the superficial realization would be:

\[ \text{Svoej sud'by ne budut minovat', which is a straight prediction.} \]

Both (c) and (c1) refer to a continuous or recurring state of affairs (depending on their metaphysics some linguists might term (c) a timeless sentence - an equally 'timeless' sentence is (c3) Svoej sud'by ne minujut, a statement to the effect that 'people do not escape their fate'.) Of these three sentences only (c) has a 'perfective future' form because only (c) has 'without fail' in its deep structure.

It was mentioned that the time reference of these examples is fixed by virtue of their being predictions. This determination of the time reference is important because these 'perfective future' forms turn up in sentences referring to the past and the present as well as to the future. Isaenko (cf. 4.1.3) notes that such sentences almost always contain a byvaet (it is the case that) or a byvalo (it used to be the case that).
Ward quotes the following sentence:

S četyrex let on pas gusej. Gusi - From the age of four he
vidut v roš', v járovoe, a Sten'ka tended (imprf.) the
stola v pole kričal : Babuška, geese. The geese would
gusi vo rži go off (perf. fut.) into
standing in the field used to shout
(imperf.past) : Granny, the geese
are in the rye.

Isačenko gives an example of such a sentence referring
to present time:

To zajac proskočit, to projdet - Now a hare will leap past
ryš', to pereidut dorogu losi or a lynx will run by, or
elk will cross the road.

The basic semantic structure of these sentences is:

I state : It without fail Past the case: the geese
run off ...

I state : It without fail non-past the case: A hare
leap past ...

If a sentence derives from an underlying structure
'I predict : It without fail non-Past the case : ...',
that part of the structure which is here glossed as 'It
non-past the case' is not given any superficial realization.
However, if the underlying structure contains 'I state : ...',
then 'Past' and 'non-Past' are realized as byvalo and
byvaet respectively. (In the example quoted by Ward, one
finds simply Gusi vidut, not Byvalo, gusi vidut. This
can easily be explained. The function of Byvalo is to
mark reference to past time. Since the first sentence in
Ward's example, \textit{scetvrex let on pas gusei}, determines the time reference, there is no need for \textit{byvalo}.

That reference to past and present time should be explicitly indicated in the surface structure of sentences deriving from 'I state: It without fail Past/non-Past the case', but not reference to future time in the surface structure of sentences deriving from 'I predict: ...', requires an explanation. In sentences whose underlying structure does not contain the modal element 'without fail', the distinction between 'Past' and 'non-Past' is marked by different sets of verb endings, while the indeterminacy of 'non-Past' is resolved by the difference between 'Statement' and 'Prediction', which determine whether the reference is to present or future time.

However, in the surface structure of sentences whose deep structure does contain the modal element 'without fail', all the verb forms are 'future perfective', no matter whether the reference is to past, present or future time. Because of this, the distinction between 'Past' and 'non-Past' cannot be marked by the different sets of verb endings. In such sentences the 'future perfective' verb forms are primarily realisations of 'without fail', but since 'without fail' and 'Prediction' are closely connected, and since 'future perfective' forms normally express 'prediction', no conflict or confusion arises if 'future perfectives' express simultaneously both 'Prediction' i.e. reference to future time, and 'without fail'.

But, 'future perfective' forms do not express reference to past or present time, and it is for this reason
that in sentences in which the verb form is a realization of 'without fail' that reference to past or present time is indicated by byvalo or byvaet.

To sum up: perfective future forms are the superficial realisation of Prediction + perfective aspect or of without fail or of Prediction + without fail. The link between Prediction and without fail seems to be in the implication carried by the latter, 'it is possible to predict with certainty that'. However, it is not satisfactory to base the deep structure on this implication, since one can make certain predictions about actions which will go on for a long time (on bez somnenija/naverno budet posylat' pis'mo každyj den' - He will undoubtedly/probably send a letter each day) and about actions which will be completed (on bez somnenija/naverno pošlet pis'mo zavtra - He will undoubtedly/probably send the letter tomorrow). But the peculiar feature of the perfective forms which are realisations of without fail is that they refer both to completed actions and to actions which go on for a long time. It is for this reason that the separate modal element has been introduced into the analysis and the connection with predictions left simply as an implication.

'Statement/Prediction' Analysis and the Accounts of Mazون and Isachenko

4.2.3
The proposals concerning tense and mood which have
been put forward in this paper meet all the objections which were made both to Mazon's and Isačenko's account and provide a simple general base which is capable of carrying all the possible implications and inferences which Mazon attributes to each type of 'présent-futur'. A good example of simplification is afforded by sentences like (a) and (c) above. According to Mazon, (a) expresses 'incapacité absolue' whereas (c) belongs to a special class of gnomic sentences. But the form of the verb in both (a) and (c) is to be explained by the modal element in the underlying structure, and both sentences express absolute inability. They differ in that (a) refers to a particular individual, the listener, whereas (c) refers to people in general - but these differences are in the extra details, as it were, and not in the essential nucleus of this sentence type.

An example of the generality of the proposals is found in the sentences

Ja napišu emu pis’mo - I will write (perf. asp.) him a letter

and

Ja budu pisat’ emu pis’mo - I will write (imperf. asp.) him a letter.

Mazon claims that the former means 'I will write to him straightaway, the thing is as good as done' but that the latter means 'I take it upon myself to write to him but I do not really know when I will get round to it'. In accordance with the above proposals, both sentences have in their underlying structure an element Intention, this
being the crucial factor. That the two sentences differ in the inferences one can draw is to be attributed to the difference of aspect. Given the locative source of aspect described earlier, \textit{ja napišu} is derived from an underlying structure which can be glossed as:

I state: I intend: I go into, be in, come out of

\textit{Ja budi pisat'} is derived from

I state: I intend: I be in state: I write to him.

where there is no indication of coming out of the state.

It is this difference in the two underlying structures which makes possible the different detailed interpretations given by Mazon.

These proposals are essentially semantic in nature. The time reference of the various verb forms can be established by examining the adverbs with which they co-occur. The forms which are realisations of \textit{Statement + Past} co-occur with such adverbs as \textit{včera} (yesterday), \textit{čas tomu nazad} (an hour ago), etc.; forms which are realisations of \textit{Statement + non-Past} co-occur with such adverbs as \textit{seias} (now), \textit{v etot že moment} (at this very moment), etc.; and forms which are realisations of \textit{Prediction + non-Past} or of \textit{Intention + non-Past} co-occur with such adverbs as \textit{zavtra} (tomorrow), \textit{čerez pšt'minut} (in five minutes), and so on. Counter-examples appear to be sentences like

\textit{Ty prides' seias} - you will come (perf. fut.) now.

\textit{Ja seias napišu emu} - I will write (perf. fut.) to him now.

In this connection it is instructive to note that \textit{Ožegov's dictionary gives four meanings of seias}:
1. at the present time: Ja seičas zanijat - I am busy just now.
2. very quickly, immediately: Seičas pridu - I will come now.
3. quite recently: On seičas zdes' byl - He was here just now.
4. at first sight, immediately: Seičas vidno, v čem delo - it is evident at first sight what the matter is.

It is obvious from the above examples that seičas in Russian and now in English can refer to the exact moment of speech or to times immediately preceding or following the moment of speech. It is interesting that Russian possesses another word tener' which can mean only 'at this time', e.g. on živet zdes' tener' (He lives here now). Strictly speaking, of course, tener' refers not just to a point of time contemporaneous with the moment of speech but to an extent of time which includes a bit of the past and a bit of the future. It thus turns out that the apparent counter-examples can be handled adequately within the theoretical framework.

Because of the syntactic evidence is so scanty, one must have recourse to other criteria to back up the proposals. The chief merit of the latter is that they cover and explain naturally all uses of the so-called 'perfective future'; the overall system, although it has yet to be formalised as part of a grammar of Russian, is straightforward and uncluttered; and the postulated underlying structures are intuitively satisfying. By these criteria the proposals are acceptable, insofar as there are as yet no
other proposals which are equally comprehensive, yet simpler and more satisfying to the native speaker's intuition.

Jespersen and Renou on 'Future Tense'.

Although the above suggestions must stand or fall on purely synchronic grounds and on evidence internal to Russian, an interesting sidelight is shed on the problem of future tense by historical studies. Jespersen points out that many languages use words denoting volition or intention or obligation to refer to the future and cites English will and shall as being derived from words which originally denoted volition and obligation respectively. Among the Slav languages, Serbo-Croat developed its 'future tense' by using the verb to want, and Ukrainian used the verb have to, imet'. The Russian ja budu rabotat' (I will work) corresponds to the Ukrainian praciuvatimu, which originally meant 'I have to work'. In the history of Russian itself several expressions were adopted, including the verbs want, begin, have to, before the construction with the 'future' form of the verb to be established itself.

With regard to Prediction, Louis Renou has made some illuminating comments on the use of the 'future tense' in the Vedic Hymns. In the earlier Hymns there are fewer verb forms referring to the future than in the later Hymns, one reason for this being that the 'future tense' was still in process of formation. Although many of the forms which are used to refer to the future denote primarily volition
or intention or desire, Renou notes that a great many other forms have none of these modal nuances: 'nous pensons pouvoir marquer que l'usage d'un futur dans une formule généralement dévolue au mode atteste justement le souci d'introduire une prévision, une réalité objective, bien plutôt que celui de poursuivre par d'autres moyens la routine des expressions modales. En tout cas, ces exemples de portée indécise ne doivent pas faire oublier l'existence d'autres futurs notant la conviction, de la part du sujet, qu'un certain fait ... va se réaliser dans un proche avenir.' After discussing various examples, Renou further says, '... les valeurs de certitude ou de conviction l'emportent de beaucoup sur les nuances proprement modales'.

The certitude and conviction of which he speaks are very much presupposed by the term 'Prediction'. People do not make predictions unless they are certain that such-and-such will be the case. The similarities between Renou's analysis and the above analysis of 'future tense' in Russian are worth pointing out, even if they in no way constitute admissible evidence for the analysis.

Statement and Prediction in a Generative Grammar.

4.3 The preceding discussion has taken the form of an informal investigation of 'future tense' in Russian, in the sense that it has highlighted features which would have to be captured by any formalised grammar of Russian. The time has now come to ask how the various proposals could be in-
corporated in a generative grammar of the language. This question was first tackled by Boyd and Thorne (1969), who derive their inspiration from the work of Austin (1962). Since this book of Austin's, a bringing together and summation of his ideas on language, has been subjected to adverse criticism by other eminent philosophers, notably Cohen (1964) and Black (1964), it is worthwhile examining both Austin's ideas and the criticism in order to make sure that linguists are not adopting a faulty notion. This examination is contained in the appendix to this chapter.

Boyd and Thorne suggest that two sentential elements must be postulated in the underlying structure of a given sentence, one carrying the illocutionary potential of the sentence, the other its 'propositional content'. As an underlying structure for

He will go to London tomorrow

they propose, in an ad-hoc notation:

I predict he goes to London tomorrow.

They claim (and the above account of Russian follows them closely in this respect) that English has only two tenses, past and non-past, and that will is not a future tense but marks the illocutionary potential of the sentence. Boyd and Thorne then put forward a new explanation of the modal verbs will, shall, should, must, may, can, might, could in terms of illocutionary potential. For the purposes of this investigation it will be illuminating to compare some of the examples used by Boyd and Thorne with the equivalent Russian examples, since in many cases the surface structure of the latter reflect more faithfully the kind of deep structure which is proposed for English. The English
examples will be given the numbers which they have in the original article.

(27) My cousin is downstairs. He will be wondering what has happened to me.

As Boyd and Thorne point out, the difference between the two sentences is not the result of the speaker having switched tenses (in fact the time reference of both sentences is non-past) but of the speaker's having switched from making a statement to making a prediction. The second sentence could be paraphrased in English either as He will probably be wondering or as He is probably wondering ... The equivalent Russian sentence corresponds closely to the second paraphrase:

\[ \text{он наверно спрашивает себя} \] (lit) he probably is asking himself...

This can tentatively be assigned a deep structure

I state He is probably asking himself...

A statement modified in this way appears to have the same effect as a prediction.

(28) He will sit there for hours doing nothing.

Grammarians have normally interpreted this will as the 'characteristic' or 'habitual' will. But (28) is more or less equivalent to

(29) He sits there for hours doing nothing.

from which it is clear that any feature Habitual is associated with sit and not with will. Boyd and Thorne, arguing that (29) is a statement and that (28) is a prediction, comment that the force of the two sentences is practically the same, since making a statement about someone's habitual behaviour and making a prediction about it are almost
equivalent acts. (28) is similar to the Russian sentences for which the *without fail* modal element was postulated (cf.4.2.2).

(41) He should have gone by now.

which in Russian is

dolžno byt', on uže uexal - (lit) it must be, he has already gone away.

and

(68) He must have passed the examination yesterday
dolžno byt', on včera sderžal eksamen - (lit) it must be,

he passed the examination yesterday

are particularly good examples of how the illocutionary potential which is concealed in the modal verbs in English is made explicit in the surface structure of Russian by means of 'sentence adverbs'. With the preceding two sentences enough examples have been accumulated for the purpose in hand, namely the justification of the informal analyses used earlier. The crucial examples are:

a. *On naverno sprašivaet sebia*...(lit) He probably is asking himself.

b. dolžno byt', on uže uexal - (lit) It must be, he has gone away.

c. byvaet, on pridet k nam...-(lit) It be, he call on us.

d. byvalo, gusyi ujdut v roz' -(lit) It used to be, the geese go off into the rye.

The peculiarities of these sentences are best brought out by trying to devise suitable derivations for them within the 'orthodox' model of transformational grammar. It will be assumed after Rosenbaum (1967) that the phrase structure rules of the base are:
These rules have been slightly altered to allow for sentences such as *It is probable* or *It is a book*. In some approaches the *is* in the second sentence is treated as a transitive verb (cf. Jacobs and Rosenbaum while other linguists (cf. Lyons (1968) hold that the verb 'to be' is simply a dummy superficial element which is brought in to carry tense. A full discussion of all the problems entailed in choosing between the two solutions would go far beyond the scope of the present discussion, and in any case do not affect in any crucial manner the point which is being made about the four Russian examples. Consider first sentence (b). Given the question *čto dolžno byt'*?, (b) can occur as an answer. It is clear that the sentence *on uže vexal* is playing the role of a noun phrase in the sentence in which it is embedded. A clearer idea of the underlying structure of (b) is gained by re-ordering the surface structure to produce *on uže vexal dolžno byt*'. Of the above base rules the only one which permits the introduction of a sentence in 'subject' position is (4). The underlying constituent structure of (b) must thus be:
The above tree is, of course, very approximate—the structure of the embedded sentence is not shown at all—and to a certain extent misleading, since the bottom line shows the sentence as it actually appears in words. In a really detailed tree diagram the items which are inserted into the position of N, V, Det. and so on would be completely abstract, represented in matrices of phonological features.

What is important about the above diagram is that the leftmost N is not realised by any element at all. Faced with a similar problem in English Rosenbaum's solution would probably be to postulate that the N in question is realised by it. This is plausible in English, where one finds It must be that he has gone away. The lack of a suitable surface structure element in Russian is no obstacle to postulating a similar deep structure for the Russian sentence, since it is possible to argue that the it or ono in Russian is obligatorily deleted when the structure underlying dolžno by't' is generated. However, the merits or demerits of this proposal are not immediately relevant to the
discussion, although they would be crucial in the elaboration of a comprehensive grammar of Russian.

What is crucial to the present argument is the exact nature of *byt'*. The rules of the base, whether the above modified ones or the original ones or the ones in Jacobs and Rosenbaum, allow for the generation of sentences with *to be* plus a noun or adjective in their surface structure. The above phrase structure tree provides only for sentences of the general form *Trees are, Lions are*, i.e. for existential sentences. But the examples under discussion are definitely not existential sentences. An alternative underlying structure for (b) must therefore be proposed.

![Phrasal Structure Tree](image)

The only plausible structure is one in which there is an NP to the right of the *V*, and the most plausible realisation of this NP is the *case*. The English term *the case* is used as being the most convenient. Since the elements are completely abstract, and since there is no reason to suppose that in a more sophisticated grammar this element will be represented in terms of constituent structure, it makes no difference whether English or Russian is used.
The purpose of developing the above argument is this: whereas the use of formulae like *it must be the case that*, *it is the case that*, etc. was based on a mere supposition about the semantic structure of these examples, the diagrams illustrating the underlying constituent structure show that a noun phrase is required to the right of the verb if these sentences are not to be taken as existential. Although the demonstration has been carried out within the framework of an orthodox transformational grammar, which the writer does not consider adequate as it stands, the problem of distinguishing between existential and non-existential sentences will arise in any grammar as soon as the level of constituent structure is reached.

The analysis also fits the other examples.

(c) S
   /     \
  NP     Aux
 /     \    / \   /   
Det N   S     Trs V    NP
       /  \    /   
     on prider k nam byvaer
   (it)  (he will call on us)  (is)

Fig. 20

(d) S
   /     \      /     \    
  NP     Aux     V     NP
 /     \     /   \   /  
Det N   S     Trs V    NP
     /  \    /   
   ono byvaer
  (it) (is)
        

Fig. 21

183
(a) becomes interesting at this point because the semantic structure postulated for it was
I state: He probably asking himself...
To bring this sentence into line with the other examples the following alternative structure may be postulated:
I state: It probably the case: He asking himself.

(a)

In the same way the structures for on prieźzaet sevodnja (he arrives today) and on pridet zavtra (he will come tomorrow) were simply given as
I state: He non-past arrive today.
I predict: He non-past come tomorrow.
These structures will now be change to:
I state: It non-past the case: He arrive today.
I predict: It non-past the case: He come tomorrow.
In the above diagrams I state and I predict are not given any representation, mainly because the writer is not yet sure whether the illocutionary potential should be disguised as simply another sentence or whether it should be introduced in a much more abstract form and then mapped onto the constituent structure. According to the diagrams
in his article 'The Role of Semantics in a Grammar', McCawley (1968) envisages its introduction in sentence form and would assign \textit{He arrives today} a structure which might be as follows:

This solution, however, still leaves the problem of determining whether the \texttt{non-past} in the topmost $S$ is referring to present or future time. This would seem to indicate that a more abstract component is needed. What is noteworthy is that in these informal proposals for the Russian examples all the elements connected with tense and mood are specified by the component which determines the illocutionary potential of the sentence and not by the component which specifies the 'propositional content'.

The 'Past' - 'non-Past' distinction coupled with the Statement - Prediction distinction accounts for the phenomena traditionally explained by means of the notions of past, present and future tense, and the locative source of aspect reflects the 'Completed' - 'non-Completed' distinction drawn by many scholars of Russian. The proposals, however, do not deal with all the phenomena connected with tense and aspect.
Consider the sentence:

*On dolgo upravljal zavodom* - He managed the factory for a long time.

This sentence would be assigned a semantic structure:

I state : It PAST the case : He a long time in state : He manage the factory.

Similarly, the sentence

*On budet dolgo pisat' dissertaciju* - He will be writing his dissertation for a long time.

would have the semantic structure

I predict : It non-PAST the case : He a long time in state:

He write dissertation.

In these analyses the distinction between Completed and non-Completed action is basic, but a further distinction between Durative and non-Durative is necessary for the introduction of the appropriate adverbs.

Consider further the sentence

*On dolgo sidel v sadu*

which can be translated into English either as (a) *He sat for a long time in the garden* or as (b) *He used to sit for a long time in the garden*. Although the difference between Habitual and non-Habitual is not marked in the morphology of the verb, the difference does become important in certain contexts. For instance, (a) but not (b) occurs in:

*On dolgo sidel v sadu, potom posal domoj* - He sat for a long time in the garden and then set off for home.

(Sidel is imperfective aspect, posal is perfective aspect).
The (b) sentence occurs in:

Kogda on žil u nas, on dolgo sidel v sadu - When he lived with us he used to sit for a long time in the garden.

One does not find:

Kogda on žil u nas, on dolgo sidel v sadu, potom posel domoi

When he lived with us he used to sit for a long time in the garden and then went off home.

These distinctions might be represented as features $[\text{Durative}]$ and $[\text{Habitual}]$.

The selection of $[\text{Durative}]$ would make possible the introduction of such adverbs as:

dolgo (a long time); dvadcat’let (for twenty years);
del’den’ (a whole day); vsem vsemu (all winter).

The selection of $[\text{Habitual}]$ would enable the following adverbs to be introduced:

važga (always); každjii den’ (each day); často (often);
besprervno (continually); vremja ot vremeni
(from time to time);
raz v mesjac (once a month); radko (seldom).

On dolgo sidel v sadu might then be either

$[\text{Durative}]$, the (a) sentence or $[\text{Habitual}]$, the (b) sentence.

The semantic structure would be:

(a) I state: It Past the case: He $[\text{Durative}]$ in state $[\text{Habitual}]$

He sit in garden.

(b) I state: It Past the case: He $[\text{Durative}]$ in state $[\text{Habitual}]$

He sit in garden.

Other features which might be necessary in a complete
grammar are (1) \([+_\text{Sporadic}]\) (following Boyd and Thorne's suggestion) for sentences such as

On inogda posylает podarki - He sometimes sends presents.

inoj raz najdeš' original'nuju knigu - now and again one finds an original book.

I state: It non-past the case: He \([+_\text{Sporadic}]\) in state:

He send present(s).

I predict: It non-past without fail the case: One

\([+_\text{Sporadic}]\) in state: One find an original book.

(2) \([+_\text{General}]\) for such sentences as:

Zemlia vraščaetsja vokrug solnca - The Earth revolves round the Sun.

I state: It the case: The Earth \([+_\text{General}]\) in state:

The Earth revolve round the Sun.

These informal suggestions have yet to be incorporated into a formal grammar of Russian. It was argued in Chapter One that much elegance could be gained by making the predicador in a sentence govern what types of adverbs could co-occur with it. To achieve this goal the introduction of the features \([+_\text{Durative}], [+\text{Habitual}]\) would have to be carried out by a rule which would operate only if the feature \([+_\text{Egressive}]\) were not attached to LOC, i.e. if the structure NOM-LOC \([+_\text{Egressive}]\) were generated.

It is not clear where these features would appear in the underlying structure. The features \([+_\text{Durative}], [+\text{Habitual}]\), etc. clearly apply to that part of the structure which is glossed as 'being in a state', but it is not at all clear to what category they are to be attached. The only plausible solution, given the categories NOM and
LOC, is to attach them to LOC, but this is not intuitively satisfying. Much more satisfactory would be attaching them to a category COP.

In order to capture the 'timelessness' of sentences like *The Earth revolves round the Sun* or *He sometimes sends* presents, one might make the choice of *[-General]* or *[-General]* very high level, and have a rule *[-General] → [-Sporadic]*. There could be a context-sensitive rule Tense → *[^Past]^ which applies only if both *[-General]* and *[-Sporadic]* are selected.

These, however, are only suggestions, not hard and fast proposals backed up with evidence. If it is granted that these suggestions are plausible, then they seem to indicate that a more abstract model is required than any available at the moment.
Austin held that every act of speaking, except perhaps exclamations like 'ouch' is both a locutionary and an illocutionary act. Qua locutionary a speech act is three acts in one: the (phonetic) act of uttering certain sounds; the (phatic) act of uttering certain words belonging to a certain vocabulary, in a particular grammatical construction, and with a particular intonation; and the (rhetic) act of using these words with a more or less definite sense and reference. To perform such a locutionary act is also to perform an illocutionary act. In order to determine what illocutionary act is performed, one must determine in what way the locution is being used. Is the speaker asking or answering a question? Is he giving information or assurance or a warning? Is he announcing a verdict or an intention? Is he pronouncing sentence? Is he making an appointment or an appeal or a criticism? Austin gives the name 'illocutionary forces' to those different types of function that language has in the performance of an illocutionary act. It is as essential to distinguish force from meaning as it is to distinguish sense from reference within meaning.

In addition to the performance of the locutionary act of saying something, and the performance of an illocutionary act in saying something, we may at the same time perform a perlocutionary act by saying something. Austin calls an act of speaking perlocutionary insofar as it produces certain intended or unintended effects upon the feel-
ings, thoughts or actions of the audience, e.g. 'He urged me to shoot her' describes an illocutionary act and 'He persuaded me to shoot her' describes a perlocutionary act.

Austin argues that, while speaking of 'the use of language for arguing or warning' looks just like speaking of 'the use of language for persuading, rousing, or alarming', the former may be said to be conventional in the sense that it can be made explicit by a performative formula such as 'I argue that' or 'I warn you that', whereas one cannot say 'I persuade you that' or 'I alarm you that'.

Austin emphasises that the illocutionary act is in no way the consequence of the locutionary act, nor does it consist in the production of consequences. To perform an illocutionary act is necessarily to perform a locutionary one - to congratulate is necessarily to say certain words. Whereas a perlocutionary act may be brought off, in the appropriate circumstances, by the issuing of any utterance whatsoever, the range of illocutionary acts that may be brought off by a given utterance is restricted by the conventions of illocutionary force. Austin insists further that the performance of an illocutionary act involves the 'securing of uptake': a man cannot be said to have warned an audience unless it hears what he says and takes what he says in a certain sense. Also, an illocutionary act may take effect in certain ways other than the bringing about of changes in the natural course of events. The naming of a ship 'Queen Elizabeth' has the effect of preventing people referring to it by another name. Verbs typically used in performing illocutionary acts are promise, bet, name, etc. which Austin calls performative verbs and which he earlier
tried to contrast with *constative* verbs such as *assert*, *state*, *say*, as used in, e.g. 'I state here and now that he has never given me any money'. However, this distinction was impossible to maintain, since it appeared that in using these verbs the speaker was *performing* the act of stating something. Thus, one reason why sentences like *I promise to go* and *He's coming today* are different is that they have different illocutionary forces: in uttering the first sentence the speaker is promising; in uttering the second he is stating.

Cohen objects firstly that, although Austin insists that a sentence has an illocutionary force as well as a meaning, he never states explicitly which of the many views about 'sense' and 'reference' he shares. Secondly Austin states that every utterance, except for some exclamations, is both a locutionary and an illocutionary act which presumably means that every utterance has both meaning and illocutionary force. But when an utterance contains an explicit performative, e.g. *I warn you not to go there*, the speaker is also performing an illocutionary act. What, asks Cohen, is the meaning of such an utterance as distinct from its illocutionary force? Cohen comes to the conclusion that where explicitly performative expressions are used, such as *I withdraw* or *I nominate you* the illocutionary force, if such a thing exists, cannot be distinguished from the meaning. Moreover, if the utterance *Your hay stack is on fire* gives a warning that is rendered explicit by *I warn you that your hay stack is on fire*, why should one suppose that it is illocutionary force rather than
meaning that has been made explicit? In Austin's view asking a question is a typical illocutionary act but Cohen argues that, if one produces the utterance Is it raining? and a few moments later I ask whether it is raining, it is impossible to distinguish illocutionary force from meaning. 'What on earth could be the meaning of your locutionary act other than to ask whether it is raining? ... In short, what Austin calls the illocutionary force of an utterance is that aspect of its meaning which is either conveyed by its explicitly performative prefix, it it has one, or might have been so conveyed by the use of such an expression. Any attempt to prise off this aspect of meaning and regard it not as meaning but as something else, leads to paradox and confusion'.

Black, in addition to making the same strictures as Cohen, brings out and contrasts two conceptions of the meaning of 'performative' which are not distinguished sharply enough throughout Austin's work. Austin's earlier explanation of 'performative' suggests to Black the following definition of the notion: 'An utterance is said to be performative when used in specified circumstances, if and only if its being so used counts as a case of the speaker's doing something other than, or something more than, saying something true or false. An utterance that is not performative is called constative.' But, Austin then found himself faced with recalcitrant expressions like I state and I maintain. If a man who says I promise such-and-such is considered to be promising, then a man who says I state such-and-such must be considered as stating. This
problem led Austin to change the original criterion slightly, which suggests to Black another definition of 'performative': 'An utterance of the form $I X$ such-and-such is said to be performative$_B$, when used in specific circumstances, if and only if its so being used counts as a case of the speaker's thereby $X$-ing'. $X$ stands for the 'first person singular present indicative active 'form of a verb. Black proposes keeping the definition of performative$_A$, which answers the needs of those philosophers who have high hopes of the notion. For the utterances which fall within the scope of the second definition Black suggests the term 'self-labelling utterance'. He remarks with great acuity that '...what often seems to be happening in the cases of performatives$_B$ is that the utterance includes some formal marker or indicator of the character of that utterance... and ought not to be confused with the more interesting contrast embodied in definition $A$'.

Another philosopher, Sesonske has, apparently independently, come to much the same conclusions as Black and has suggested that 'the functions of language may usefully be distinguished in terms of the effects of speech acts on human relations, and particularly that the notion of performative can be made clear this way'. Sesonske roughly sketches out three kinds of relationships which may hold between human beings: (1) psychological relations, e.g. $X$ loves, is acquainted with, annoyed with $Y$; (2) generative relations: $X$ pushes $Y$ out of the room, $X$ cures $Y$, $X$ gives $Y$ a lift, etc.; (3) formal relations: 'Two persons are formally related to each other when the
range of appropriate or permissible interaction between them is defined or determined by implicit or explicit conventions or rules accepted within a group, community or culture', e.g. X employs Y, X teaches Y, X and Y are members of the same club, etc. Austin came across an extremely important fact concerning formal relations which was later lost. Sensonske describes this fact thus: 'There are some events that usually cannot occur unless certain words are said or written; the saying of the words in the appropriate context constitutes the event. The events are significant in that they alter the formal relations between persons and render some actions permissible, appropriate, or obligatory that would not have been so before the words were spoken'. All the examples Austin starts with are examples of utterances whose point is to alter formal relations. In 'How to Do Things with Words' the four initial examples are of utterances whose function is to marry, name, bequeath and bet. Later in the book, however, examples appear whose function is to evoke a particular response, i.e. to alter generative relations. Austin, says Sensonske regretfully, not only failed to notice the difference but also misinterpreted the relation of performatives to convention, for he identified the performative (later the illocutionary act) as the performance of a conventional act - but then all speech acts are conventional.

In spite of these criticisms, Austin's work remains valuable, and not simply in the negative sense of illustrating 'the limitations of trying' 'to screw out of ordinary language' all that one can without trying to elaborate a
plausible theoretical framework', as Black would have us believe. The absence of a well-grounded theory of how language works is indeed much to be regretted, because this lacuna in Austin's writings is almost certainly the source of the inconsistencies and slack definitions which disturb philosophers such as Cohen. Linguists accept that the 'meaning' of a sentence is not to be equated simply with the reference of the various words but includes the various relations such as antonymy which hold between the items in the vocabulary of the language, the attitude of the speaker (is he making a statement, or asking a question, or giving a command?), the context in which the sentence is spoken, and so on, and would therefore agree with Cohen that illocutionary potential is to be considered as part of the meaning of a particular sentence and not as something different from that meaning. However, as Cohen himself concedes, Austin would probably have eliminated many flaws if he had survived to take on the task, and it is the opinion of the writer that Austin would have accepted the broad definition of meaning which linguists now use.

Austin's work, then, contains many interesting and valuable observations which the linguist and anthropologist must try to adapt and systematise for their own particular purposes. What immediately captures the attention of linguists working in the field of generative grammar is that Austin's 'illocutionary potential' covers some aspects of meaning which play a particularly important role in determining the superficial form of sentences. For instance, Austin discusses two sentences, *Is it raining? and*
I ask whether it is raining. Now Cohen argues that it is impossible, given these utterances, to distinguish illocutionary potential from meaning and that the utterance with the 'performative prefix' is very different from the utterance without the performative prefix. However, despite Cohen’s assertions, traditional grammar, recognising that the difference in word order between *It is raining* and *Is it raining?* reflects the difference between a statement and a question, found it perfectly easy to distinguish that aspect of meaning which Austin calls 'illocutionary potential'. A generative treatment of English would attempt to capture the relationship between these sentences by assigning the same underlying structure to both, except that the underlying structure of *Is it raining?* would contain an element Q (for question) which would 'trigger off' the appropriate transformations permuting the order of abstract elements. In other words, a generative treatment recognises and treats as a separate syntactic element something which Austin would assign to the illocutionary potential of a sentence. To produce the appropriate surface structure of imperative sentences generative grammars of English have made use of an abstract element Imp (imperative), which also seems an obvious marker of illocutionary potential, and the distinction between statement and prediction which was used informally earlier in the discussion also concerns illocutionary potential.

In this chapter, however, the discussion has concentrated on the problem of incorporating in a generative
grammar the insights about statements, predictions and the without fail modal element. When the question of aspect in imperative sentences is taken up in Chapter Six it will be shown that the notion of illocutionary potential is indispensable to any adequate account.
CHAPTER FIVE

Aspect and Aktionsart

5.1 The following examples give an idea of the problems connected with the distinction between aspect and Aktionsart.

1a Ja čital knigu - I read/was reading the book.
   b Ja čital ves' den' - I was reading all day.

2a Ja pročital knigu - I read through the book.
   b Ja ne budu pročityvat' vse knigi - I am not going to read through all the books.

3 V voskresen' e on počital - On Sunday he read a little.

4 On budet počitat' vo vtornik - He is going to read a little on Tuesday.

5 * On často počital po subbotam - He often read a little on Saturdays.

The form čitat' (read) is imperfective and co-occurs with durative and habitual time adverbs like ves' den' (all day) and často (often). The form pročitat', which consists of the prefix pro plus the root čitati', is regarded in many grammars and dictionaries as the perfective form of čitati', that is čitat' and pročitat' are taken to be identical in meaning apart from the difference in aspect. If this were the case, it would be difficult to explain the existence of the imperfective form pročityvat' in such sentences as On budet pročityvat' dokumenty (He is going to read through the documents) and On dolgo pročityval dokumenty (He was a long time in reading through the documents). The fact that čitat' and pročityvat' both occur
after budat (will) and často (often) lead one at least to suspect a contrast in meaning, especially when one compares these two forms with a pair of imperfective-perfective forms like pisat' - napisat'. The prefix na- is generally taken to be simply a superficial marker of perfective aspect, and there is no imperfective form napisyvat'.

The suspected contrast in meaning becomes obvious when one takes into account the comments of informants, who understand čitat' as meaning 'to read in general', whereas they interpret proštit' as 'čitat' vse do konca' (to read everything to the end). In Chapter Two it was pointed out that a perfective form such as napisat' in on napisal pis'mo (He wrote the letter) could be understood as implying On končil pisat' pis'mo (He has finished writing the letter). The question Vy pročitali roman (Have you read through the novel?) is not, however, equivalent to the question Vy končili čitat' roman? (Have you finished reading the novel?). In answer to the former question one could answer Pročital, no poslednjaja glava očen' trudnaja (I have, but the last chapter is very difficult) or Pročital, no sobirajuš' čitat' ešče raz, poslednjiju glavu (I have, but I intend reading the last chapter again) but not Pročital, no rešil ne čitat' poslednjiju glavu (I have, but I have decided not to read the last chapter). In answer to the latter question, however, one could reply, Končil čitat' - ja rešil ne čitat' poslednjiju glavu (Yes, I have finished reading it - I decided not to read the last chapter).

The crux of the matter is that, whereas pisat' and napisat' are different forms of the same lexical item,
čitat is one lexical item and pročitat' - pročityvat' are two forms of another lexical item.

The form nošitat' which occurs in (3), (4) and (5) is not to be handled in the same way as pročitat'. Nošitat' has no perfective form nošityvat' which if used in (3), (4) and (5) would make these sentences correct. Furthermore, while the difference between čitat' and pročitat' concerns the intrinsic nature of the action, the prefix no- in počital indicates only that the action continued for a short time. To put it more crudely but more succinctly: pro- indicates a difference in quality, no- a difference in quantity.

The notion of Aktionsart is employed in the explanation of forms like nošitat'. An investigation of the notion will concentrate on two main problems: (1) which verbal prefixes are simply superficial markers of perfective aspect and which carry a meaning of their own (the French terms 'préverbes vides' and 'préverbes pleins' are often used for the former and latter types of prefix respective ly); (2) within the class of préverbes pleins a further distinction must be drawn between the pro and no type of prefix.

History of the Notion 'Aktionsart'.

5.1.1 The term Aktionsart, which is used by earlier scholars such as Leskien and Streitberg, (See Isačenko, 1962) is not new in linguistic theory, although the notion itself was
not defined explicitly until the publication of Agrell's work on Polish. Agrell described the préverbes pleins as 'aktionsartbildend' (lit. forming types of action) and distinguished two main types of prefix: (1) prefixes which give the verb a completely new (usually spatial) meaning, e.g. *dat* (give) + *ot* (from) + *dat* (give away); (2) prefixes which do not give the verb an absolutely new meaning but simply indicate that the action is finished. Such prefixes can be subdivided into two groups: (a) prefixes which simply change the aspect of the verb, i.e. which indicate that the action is finished but do not say how; (b) prefixes which specify how the action is completed. Agrell uses the term Aktionsart for the 'semantic functions of prefixed verbs which specify how an action is completed'. While one may object that the phrase 'how an action is completed' seems more appropriate to adverbs such as *angrily, quickly, abruptly*, and that it does not apply to *pocitat*, since this verb does not refer to 'completion', nonetheless Agrell's general types of prefix are still valid.

Mazon, a contemporary of Agrell's, holds much the same view (Mazon, 1963): 'Les préverbes ont un double rôle: préciser le sens du verbe composé par rapport au verbe simple et, en même temps, donner la valeur perfective à toute verbe simple auquel ils sont opposés en le transformant en un composé préverbal'. The significant part of this statement, which will be taken up later, is the assertion that one constant function of verbal prefixes is to turn an imperfective form into a perfective form.
Isačenko proposes the terms 'qualifying prefix' (qualifizierendes Präfix) and 'modifying prefix' (modifizierendes Präfix) corresponding to 'préverbe plein' and 'préverbe vide' respectively. He describes the effect of a préverbe plein in slightly different terms from those used by Mazon and Agrell. A verb formed by the addition of a préverbe plein to a simple verb becomes independent of the simple verb. This independence is formally marked by the tendency to form a complete verbal paradigm, which in Russian means that the perfective form consisting of a prefix and a root acquires a corresponding imperfective form, usually by suffixation, and that the same 'Realbedeutung' is expressed in both aspects, e.g. čitat’/procitat’ - pročityvat’. Isačenko gives three criteria for determining when a verb form expresses an Aktionsart. (1) The meaning of an Aktionsart form represents a modification of the meaning of the root to which the prefix is added. (2) A modifying suffix or prefix is added to an independently existing verb. This verb is usually a 'simplex', i.e. a root. (3) A form which expresses an Aktionsart is not a member of an aspect pair. This is essentially the position adopted by Ward, who agrees with Isačenko that, although the Russian verb might seem at first sight to have many aspects, many of these apparent aspects are lexical classes and all of them may be classed as perfective or imperfective. To sum up, 'aspect' in Russian is a grammatical category which enables a process or action to be expressed either in its on-going or as a completed whole. The Aktionsarten' in Russian are general verb meanings which concern the 'manner' in which the process or action develops.
Although the distinction between aspect and Aktions-art might seem to have been clearly and precisely drawn by the linguists mentioned in the preceding paragraphs, one or two rather crucial points remain vague. The terms 'lexical' and 'syntactic' are not precise because they are not being used with reference to any well defined theory of grammar. Presumably the term 'lexical' is meant to indicate that the feature it refers to is best handled by being incorporated in the appropriate entry in a dictionary of Russian. Presumably the feature is thought to be best handled in this way because it is peculiar to one verb or to a group of verbs rather than being a general characteristic of the verb system. However, terms like 'lexical' and 'syntactic' acquire a more specific sense in a generative grammar. A superficial prefix may indeed be the realisation of a feature which is part of a lexical entry, but other prefixes may indicate that certain other elements co-occur with PRED in the base. Some prefixes may seem appropriate to a lexical entry but have to be introduced in the base as they cause extra structure to be generated.

What I propose to do is examine the types of Aktionsarten cited by Isachenko to see how they might best be handled by a generative grammar.

'Resultative' Aktionsart.

5.2 Isachenko takes 'resultative' to be a cover term concealing various nuances of meaning.

a 'Genuine resultative meaning' (Eigentlich resultative Bedeutung)
This refers to actions that have been successfully carried out (erfolgreich zu Ende geführt). As examples Isachenko gives (imperfective form first): brit'sia - pobrit'sia (shave oneself); kinjatit' - vakinjatit' (bring to the boil); pravit'sia - ponpravit'sia (please); činit' - nočinit' (repair); soveršenstvovat' - psoveršenstvovat' (complete).

b 'Terminative' meaning.

Pet' (sing) - propet' (have finished the singing); bit' (strike, of clock) - prohit' (to have struck), e.g. časy probili polnoč' (The clock struck midnight).

c 'Perdurative' meaning.

This refers to the end of a process which lasted for a definite length of time: žit (live) - prošit' vsiu žizn', v derevne (live one's whole life in the country); spat' (sleep) - prospat' vsiu noč' (sleep the whole night).

d 'Finitive' meaning.

This refers to the fact that the action has been brought to a close and 'broken off': obedat' (have lunch) - otopedat' (finish lunch); dežurit' (be on watch) - od-dežurit' (finish being on watch).

e 'Exhaustive' meaning.

Begat' (run) - ubegat'sia (run oneself into the ground).

f 'Total' meaning.

This refers to an action which has affected the whole object or all the objects: ranit' (wound) - izranit' (cover with wounds); xodit' (walk) - isxodit' vas' les (walk through the whole wood).

g 'Saturative' meaning.

Begat' (run) - nahegat'sia (run to one's heart's content); also smejat'sia (laugh) - nasmegat'sia,
kurit' (smoke) - nakurit'sia, xodit' (walk) - naxodit'sia.

'Cumulative' meaning.

(1) Genuine cumulative verbs formed from intransitive roots: letat' (fly) - naletat' 10,000 kilometrov (fly 10,000 kilometres).

(2) 'Partitive-cumulative' verbs formed from transitive roots. The object is either in the genitive case or is combined with a mass noun.

Varit' (cook) - navarit' kaš (make some porridge); kupit' (buy) - nakupit' massu vešče (buy a mass of things); rubit' (chop) - narubit' drov na zimu (chop wood for the winter); čitat' (read) - nacitat'sia všjakix romanov (to have read lots of novels of all kinds).

Isačenko cites other examples which he classifies as a sub-type of the 'partitive-cumulative' verbs. He uses the term 'cumulative-distributive' to refer to the verbs in such sentences as nonaexali gosti (crowds and crowds of guests kept arriving). Such verbs are formed by adding no- to a root which has already been prefixed. In this case, the root verb is exat' (travel) and the first prefix is na- (cf. the cumulative verbs).

'Ironic-resultative' refers to such verbs as dokatat'sia, derived from do (as far as) and katat'sia (ski): On dokatal'sia do nasmorka (lit. He skied as far as a cold, i.e. till he caught a cold). Isačenko uses the term 'ironic' because the action is prolonged till it has unwished for consequences.

'Resultative-qualifying' refers to verbs like izvor-ovat'sia, which is formed from vor (thief) and the prefix
iz -; Malčik izvorovalsja (The boy has become a perfect little thief). The term 'qualifying' indicates that the subject is characterized by the verb.

'Genuine resultative meaning'

5.2.1

This meaning is of great importance in aspect studies as verbs in perfective aspect are often explained as denoting the result of an action. Spagis, for instance, describes the perfective form of the following pairs of verb forms as referring simultaneously to the completion of an action and its result: vjazat' (knit) - svjazat', gladit' (iron clothes) - pogladit'/vygladit', gotovit' - (prepare) - prigotovit', delat' (do/make) - sdelat', dobivat'sia - dobit'sia (the imperfective form is usually translated as strive towards the perfective form as achieve), zapisyvat' (write down) - zapisat', kormit' (feed) - nakormit', kosit' (mow hay) - skosit', naxat'(plough) - vspnaxat', nerepisyvat', (rewrite) - nerepisat', pisat'(write) - napisat', rešat' (solve) - rešit', risovat'(draw) - narisovat', snisyvat' (copy) - napisat', stroit'(build) - noprostit', uheždat'(convince) - uhežit', ubirat'(gather in the harvest) - ubrat', učit' (learn) - vyučit', čitat' (read) - pročitat'. Other examples often adduced in support of the assertion that perfective aspect has to do with the result of an action are tolstet' (grow fat) - potolstet', krasnet' (become red/blush) - pokrasnet'.

The first point which must be made is that sentences like On napisal roman (He wrote a novel), Ona narisovala portret (She drew a portrait), My naystroili dom (We built
a house), and Mat'sdelala sebe kostium (Mother made herself a costume) have been discussed by various linguists in connection with the notion 'object of result' or 'effiziertes Objekt'. Jespersen (1924) argues that the objects of make, produce, create, construct are obviously 'objects of result' in that the things denoted by the object noun are produced by the action denoted by the verb, and that the really interesting verbs are those which can take both an 'effiziertes' and an 'affiziertes Objekt' without really changing their own signification, e.g. dig the ground (ground is an 'affiziertes Objekt') and dig a grave (grave is an 'effiziertes Objekt'), strike the table - strike a bargain, conclude the business - conclude a treaty. Fillmore points out that the notion 'object of result' is relevant for syntax, since (a) one can say What John did to the table was ruin it but not *What John did to the table was build it; (b) John ruined the table is a possible answer to the question What did John do to the table? but John built the table is not. To account for these facts Fillmore (1968) postulates a deep structure case which he labels 'factive', 'the case of the object or being resulting from the action or state identified by the verb, or understood as part of the meaning of the verb'. Anderson (1970) has suggested that sentences like He made the box be derived from an underlying structure which may be glossed as 'He caused it: The box exist'. The underlying causative element would be realized as write, make, build, etc., depending on which lexical item was substituted for the noun in the embedded sentence.
Anderson's proposal differs from Fillmore's in that it involves the generation of more structure, whereas Fillmore uses the same structure as for sentences like *Bill kicked the car*, except that the verb is accompanied by the cases Agentive and Factitive instead of Agentive and Objective as in the above example. Whatever solution is eventually adopted, it is clear that of the verbs given by Spagis *gotovit'* (prepare-a meal), *delat'* (do), *pisat'* (write), *risovat'* (draw) and *stroit'* (build) should be put in a separate list. Since the actions denoted by these verbs involve the creation of something, it is obvious that both the perfective and imperfective forms of a verb like *pisat'* (write) may carry the notion of result. The perfective form always carries it, since the basic notion expressed by perfective aspect is 'completion', and the imperfective form may or may not carry it, since imperfective aspect does not express definite non-completion but simply does not say whether an action was completed or not. One finds *On pisal roman* (He was writing a novel) and *On pisal roman každye tri mesjača* (He wrote a novel every three months). On Fillmore's proposals the peculiar meaning of these verbs would be marked in the lexicon by means of the cases accompanying the verb. On Anderson's proposal, PREP would be assigned a feature, *Causative*, which would lead to the embedding of an existential sentence. The former solution, within the framework of a generative grammar, is lexical, the latter is syntactic. In either case, the notion Aktionsart, defined as a general verb meaning which concerns the manner in which the pro-
cess or action develops, hardly seems appropriate.

Of the remaining verbs in Špapis' list, pročítat' has been shown to be not the perfective form of čítat' but a separate lexical item with an imperfective form pro-
čítuvat'. By the same criteria that were used in assessing the status of pročítat', vyučit' should not be regarded as the perfective form of učit' but as a separate verb with an imperfective form vyučivat'. Učit' is understood as denoting the process of learning in general, whereas vyučit' - vyučivat' means 'to learn something thoroughly, to the end'. Učit' and vyučit' are both translated into English as 'learn', but the difference between a process in general and a process carried out thoroughly or to the end may be brought out in English by the use of different verbs. For example, lečit' means 'to treat medically', but the treatment done thoroughly is denoted by vylečit', which is translated as 'to cure'. The imperfective form of this verb is vylečivat'. Although the adjective 're-
sultative' has some force when applied to napisat', etc. since novels and letters are brought into existence as the result of certain actions, it cannot be naturally app-
lied to vyučit' or pročítat', which denote completed ac-
tions and whose lexical entries contain a feature which may be glossed as 'thoroughly'. In this connection, it is interesting that Mazon glosses the preverbe vy as expressing 'achèvement total (d'où la nuance de l'action bien accomplie)'.

Gladit' may also be removed from Špapis' list, since the action of ironing, done thoroughly, is denoted by vygladit', which has an imperfective form vygláživat'.

210
Other verbs denoting actions in general are krasit' (paint), kroit' (cut out), mvt' (wash), poloskat' (rinse, polot' (weed), soxonut' (dry), stroit' (build), sušit' (make dry), čistit' (clean). To these verbs are related the following pairs of perfective and imperfective forms which denote the action done thoroughly: vvkrasit' - vvkrasivat', vvkoit' - vvkoivat', vvmvt' - vvmvat', vypoloskat' - vypodaskivat', vypolot' - vypalivat', vysoxonut' - vysyzvat', vyvstroit' - vyvstraivat', vvyušit' - vvyušivat', vyčistit' - vyčiščat'. These pairs of forms, like vvnčit' and vvnčivat', must be treated as separate lexical items which are in a sense independent of the prefixless verbs denoting the action or process in general.

Before the investigation of 'resultative' verbs is taken any further, one feature of the structures postulated as underlying the various aspect forms of Russian needs to be clarified. Although the initial string NOM - AUX - LOC is sometimes realized superficially, the features [+Ingressive] and [+Egressive] are never so realized and are not to be considered as underlying the actual lexical items, begin, finish, become, etc. From the fact that these verbs themselves have perfective and imperfective forms it is clear that [+Ingressive] and [+Egressive] represent a superordinate system which determines aspect. This does not contradict the assertion made in Chapter Two that a sentence Ja uža pisan pis'mo (I was already writing the letter) may be interpreted and even paraphrased as Ja uža stalin pisat' pis'mo (I had already begun writing the letter). In the former sentence [+Ingressive] is attached
to LOC dominated by the topmost S, while in the latter [+Ingressive] is attached to PRED in the string dominated by the second highest S and brings about the embedding of a third S. (To distinguish the two features notationally, the second [+Ingressive], which determines that PRED is to be realized or stat' or načat', will be replaced by [+Inchoative].) The exact details of this process will be discussed in connection with the Inchoative Aktionsart. What is crucial is that [+Ingressive] and [+Inchoative] have the same semantic value in the strings in which they appear. The only difference between the sentences is the latter causes extra structure to be generated, whereas the former does not. The same arguments hold for [-Egressive]. What is immediately relevant to the discussion is that both [-Egressive] and the lexical item končit' (finish) are usually understood as 'completing successfully'.

This interpretation of 'completing successfully' explains in part the 'resultative' meaning attributed to dobit'sia and rešat'. Dobit'sia is interpreted as 'arriving at a goal after struggling towards it' and rešit' is interpreted as 'arriving at a solution'. The corresponding imperfective forms cannot be interpreted as expressing non-arrival at a goal or solution. Student rešal problemy, outside a context, could mean either The student used to solve the problems or The student was tackling the problems. With the addition of vsegda (always) and hystro (quickly) the sentence becomes Student vsegda hystro rešal problemy (The student always solved the problems quickly). That the imperfective form is capable of supporting two interpretations might be explained by some sort of seman-
tic rule which states that, given the structure NOM - AUX - LOC [+ingressive], the feature [+Egressive] may or may not be understood from the context. Since linguistic theory has not yet advanced to the point of understanding, far less formalizing, the exact role of semantics in a generative grammar, one can only mention the two possible interpretations and leave the theoretical problem unsolved.

At least the problem has been discussed explicitly and the discussion has made it plain that the notion of 'result' is no more appropriate to the perfective form resit' than it is to the perfective form priexat' (arrive). The notion of result is equally irrelevant to most of the other perfective verbs cited by Spagis, viz. zapisat' (write down), nakormit' (feed), skosit' (mow hay), vspaxat' (plough), nerepisat' (rewrite), snisat' (copy).

The notions of 'completing an action successfully' and 'carrying out an action thoroughly or to the end' may coincide in the case of certain verbs, whose perfective form consists of vy- plus the root. Among such verbs are branit' (scold), lepit' (sculpt/mould), pačkat' (stain), rugat' (curse), stirat' (wash clothes). The sentence Ona stivala bel'e (She washed the clothes) whereas Ona vystir- ala bel'e has the force of 'She washed the clothes thoroughly'. Similarly, Mal'čik pačkal rubašku means 'The boy stained his shirt', whereas Mal'čik vypaškal rubašku has the force of 'The boy stained his shirt good and proper'. The coincidence of the two notions is made possible by the meaning of the verbs. One can 'be in a state of sending a parcel' without actually getting the
parcel sent off, and the parcel will be just the same as it was before. However, it is difficult to conceive of someone 'being in a state of staining a shirt' or 'being in a state of scolding a rascal' without the shirt ending up with some stains on it or the rascal hearing at least some of the imprecations. These arguments support Mazon's gloss of the preverbe vy- and explain why vy- (and iz-, which also means 'cut') are used to form the perfective aspect of these verbs. The question immediately arises as to whether vypačkat' is really the perfective form of pačkat'. If aspect is a grammatical category which does not change the lexical meaning of a verb but simply presents the action or process as ongoing or completed, then vypačkat' is not the perfective form of pačkat'. On the other hand, it may be argued that what appears to be the additional meaning of 'thoroughly' is just the meaning of 'successful completion' which comes through particularly strongly and with a peculiar interpretation imposed by the meaning of the verb.

The latter view, that vypačkat' and ispačkat' are (alternative) perfective forms of pačkat', will be adopted here because it saves several lexical entries yet still explains the use of vy-.

Another verb which may be said to denote an action in general is mit' (drink). Most, if not all, grammarians and lexicographers take the view that the form vymit' is the perfective form of mit'. Ožegov's dictionary pairs these two forms and puts another imperfective form, vypivat', in a separate entry. According to Ožegov, vypivat' is not
paired with any perfective form. The reactions of informants to sentences containing these forms suggest that Ožegov's treatment is mistaken. First of all the informants were asked to translate two sentences from English into Russian: *I sat down at the fire and drank a bottle of beer* and *On Sundays they always drank a bottle of beer.* All the informants produced the translations: *Ja sel u ognja i vypil butylku piva* and *Po voskresen'jam oni vsegda vypivali butylku piva.* The noteworthy feature of the translations is that nobody produced for the second sentence *Oni vsegda nili butylku piva,* i.e. nobody used the form which may be interpreted as denoting the action in general. Further testing produced the following set of acceptable and unacceptable sentences:

1. **Po voskresen'jam on ljubil pit' pivo** - On Sundays he liked to drink beer.
2. *Po voskresen'jam on ljubil vypit' pivo* - ...
3. **Po voskresen'jam on ljubil vypit'/vypivat' butyločku piva** - On Sundays he liked to drink a bottle of beer.
4. *Po voskresen'jam on ljubil pit' butyločku piva* - ...
5. **Kajdvij iz nas vypival po butylke piva večerom** - Each of us used to drink a bottle of beer in the evening.
6. *Kajdvij iz nas nili po butylke piva večerom* - ...
7. **Ja reguljarno nili po kružke nered obedom** - I regularly drank a pint before dinner.
8. **Po voskresen'jam on vypival tri butylki piva** - On Sundays he used to drink three bottles of beer.

(One informant said that *nili* was possible in (8) but that she herself would use *vypival*).
Kogda ja vošel v komnatu, on vypival butylku piva —
When I came into the room, he was drinking a bottle of beer.

When I came into the room, he was drinking a bottle of beer.

Ne xotite li vy vy pit' čaj? — lit. Would you like to drink tea?

Would you like to drink some tea?

Would you like to drink a cup of tea?

Would you like to drink a cup of tea?

From these sentences it is clear that *pit*' is used when the sentence has to do with the general activity of drinking beer or drinking tea. *Vypit'/vypivat' are used in sentences containing a measure noun, such as čaška (cup), butylka (bottle), riumpka (glass), litr (litre), followed by a noun denoting a liquid, such as pivo (beer) or čaj (tea). Given the morphological parallel *myt'/vymyt' — vymyvat' : *pit'/vypit' — vypivat' one may speculate that the basic meaning of *vypit' — vypivat' is 'drink up' (i.e. 'drink to the end') and that, since 'drinking up' is associated with a specific quantity of liquid, these forms came to be used with phrases like čašku čaju (cup of tea). If the lexical entry for *vypit' — vypivat' reads approximately 'drink up a quantity of liquid', this further explains why in (11b) *vypit' co-occurs with a noun in the genitive case, the 'partitive-genitive' which is traditionally said to denote a quantity of the substance referred to by the noun. This not implausible explanation
is of the form 'Verb X co-occurs with phrases Y and Z because X has such-and-such a meaning', which accords with the general form of grammar suggested in Chapter Two, that is with the notion that the verb is the governing element in the sentence. It may be suggested that if the PRED for which these forms vypit' - vypivat' can be substituted is assigned the feature [{Quantitative}], then this feature causes the generation of whatever structures underlie phrases like riumka vodki (glass of vodka) or caju (some tea). This account of the lexical entry for vypit' - vypivat' and the underlying structure into which they can be inserted explains the fact, noted by many linguists, that the question Vy pili lekarstvo? (Did you drink the medicine?) usually has the force of 'Did you drink any of the medicine when you were ill?', whereas Vy vypili lekarstvo? (Did you drink/Have you drunk the medicine?) usually has the force of 'Have you drunk up that medicine I poured out for you?'

Analogous arguments apply to 'est' (eat). S'est' is usually described as the perfective form of est' but tests with informants showed that this is not so. When asked to translate into Russian the English sentences He always ate two pies and He ate three sandwiches, the informants produced On vsegda s'edal dva pirožnyx and On s'el tri buterbroda. Nobody used el in the first sentence instead of s'edal. Commenting on the sentence Za obedom on vsegda s'edal tri jabloka (At dinner he always ate three apples) one informant said that el was possible but that s'edal 'sounded more Russian'. Similar comments
were made about the sentence Po voskresen'jam on vsegda s'edal tri porcii moroženovo (On Sundays he always ate three helpings of ice-cream). It is evident that there is a very strong tendency to use est' to refer to 'eating in general', as in Vy edite jabloka? (Do you eat apples?) or V etoj strane edat' lošadei (In this country they eat horses). S'est' s'edat' are the perfective and imperfective forms respectively of a separate verb whose basic meaning is 'eat up' but which, like vypit', has acquired the meaning 'eat up a quantity of something'.

The perfective forms of tolstet' (grow fat) and krasnet' (become red/blush) are said by some grammarians to have a resultative meaning. These verbs, along with the examples nonravit'sia, vskipiatit' and nočinit' cited by Isačenko, are inchoative verbs which derive from a structure 'go into a state' or 'cause to go into a state' and will be discussed in detail in the section on the Ingressive Aktionsart. 'Result' is connected with these verbs in the sense that one can talk of processes resulting in states, e.g. one can think of someone being in the state of being fat as a result of having become fat. To apply the notion of 'resultative Aktionsart' to these verbs is to obscure their essentially inchoative meaning.

Terminative meaning.

5.2.2
Isačenko is correct in describing his examples, proset' pesnju (finish singing a song) and časy probili polnoč' (The clock struck midnight) as expressing the
termination or conclusion of a process or action (die Beendigung des Vorgangs) but it is not clear in what way the sentences qualify as instances of a sub-type of resultative Aktionsart.

An understanding of these forms may be gained by examining other verbs with the prefix *pro-* The imperfective verb *kisnut* is related to the pair of forms *prokisat* - *prokisnut*. All three forms have the meaning 'turn sour' but the prefix *pro-* gives the latter two the meaning of 'through and through'. *Kisnut* always means 'to be turning sour'. If milk is turning sour, and if the process is subsequently completed, then the milk will have become thoroughly sour. As with the verbs *packat*, *rugat*, etc. the notions of completion, because of the meaning of the verb root, carries with it the notion of 'thoroughness'. It is this new shade of meaning in the perfective which led to the formation of the independent pair of forms *prokisnut* - *prokisat*. Other roots which are similarly related to pairs of perfective and imperfective forms are: *budit*/ *probudit* - *probuždat*; *tuxnut* (become rotten)/ *protuxnut* - *protuxat*; these verbs derive from two types of structure: 'cause someone to be in a state' (*budit*) and 'go into a state' (*kisnut*, *tuxnut*). In other words, an essential part of the meaning of these verbs is their inchoativeness. The derived forms with *pro-* are also inchoative, the *pro-* simply being the superficial realisation of a feature 'thoroughly'.

This assertion about the function of *pro-* is supported by Isačenko's examples. *On propel nesnju* does not just
mean 'He sang the song' but 'He sang the song through'. There are a number of other verbs like propet'. Golosovat' rezoluciju means 'put a resolution to the vote', but progolosovat' rezoluciju means 'vote through a resolution'; vejet' zerno is 'winnow the grain' but provejet' - proveivat' zerno is 'winnow out the grain'; informirovat' is 'inform' but proinformirovat' is 'give full information'; repetirovat' rol' is 'rehearse one's part' but prayerpetir- ovat' rol' is 'rehearse one's part thoroughly'; fil'trovat' vodu is 'filter the water' but profit'trovat' vodu is 'filter the water thoroughly'. Mazon glosses pro- as 'à travers, le long de ...'. Pro- has a concrete meaning in proiti čerez ulicu (go across the street) and probit' otverstie v stene (knock a hole through a wall). The concrete spatial meaning is used figuratively in propit' svoj den'gi (lit. drink one's money through) and proslušat' lekciju (lit. listen the lecture through). Other perfective forms with pro- are prodiktovat' (dictate), pro-instruktirovat' (instruct), prokommentirovat' (comment on), prokontrolirovat' bilaty (check tickets).

On the basis of these examples it is impossible to accept Isačenko's label 'terminative' as he defines it. The verbs with pro- express not just the completion but the thorough carrying out of an action or the thoroughness of a process. Given the definition of Aktionsart as 'the way in which an action or process develops', these pro- forms are undoubtedly candidates for the status of Aktionsart, although in many cases an imperfective form has been derived from the perfective form with pro-.
Finally, one may speculate that, since sentences like on pročital knigu (He read through the book) and on čital knigu ot načala do konca (He read the book from beginning to end) are understood in the same way, at some very abstract level of grammar there is a feature which can be realized either as pro- or ot načala do konca.

**Perdurative Meaning**

5.2.3 The type of verb for which Isačenko uses this label is quite common. In addition to Isačenko’s examples, one finds sentences like ona prostoijala tam celve tri časa (She stood there for a whole three hours), on prokašijal vsu noč’ (He coughed all night), oni proezdili vsiu voju v sanitarnom avtomobile (They travelled through the whole war in an ambulance), my probylí mesiac v Krymu (We were a month in the Crimea), deti probrodili ves’ den’ (The children roamed about all day), on prožil tri goda na severe (He lived three years in the North), my proigrali ves’ večer v šaxmaty (We played at chess the whole evening).

The prefix pro- in these examples co-occurs with phrases consisting of a quantifier, such as tri (three), ves’ (all), and a noun denoting a length of time, such as čas (hour), god (year). Since one also finds sentences like on žil tri goda na severe (He lived three months in the North) in which the verb žil has no prefix, and since there are no imperfective forms probyvat’, proživat’ derived from the perfective forms, (at least with this meaning,
since there is a verb proživat' - prožit' (dengi) - to expend (money)) it appears that pro- is an optional element which may be added to the verb in the environment of a phrase containing a quantifier. (In sentences like On dolgo probyl tam (He was there for a long time) there seems to be no phrase consisting of a quantifier and a noun. The superficial form of the sentence is deceptive, however, because dolgo derives from an underlying structure, consisting of a quantifier and a noun, which can also be realized as dolgoe vremja (a long time). )

Since forms like prostojat', proizvat', etc. do not co-occur with adverbs such as često (often) or reguljarno (regularly), they are usually described as being in perfective aspect, a supposition which is supported by the fact that the addition of a prefix to a root always seems to produce a perfective form. It is at this point that one wants to question Mazon's statement to the effect that the preverbes have a dual role, both affecting the meaning of the root and making the root perfective. Such a statement is made with respect to the surface structure. With reference to a generative model one would have to say that a prefix indicates that perfective aspect is present in the deep structure. However, forms like prožit', prostojat' and prospanat' are derived from žit', stojat' and spanat', that is from verbs which occur only in static sentences, the rules for which cannot generate the structures underlying perfective forms. The only possible conclusion, granted the validity of the proposals in Chapter Two, is that prožit', etc. are not perfective forms. It may be
objected that, if these forms are not perfective, it is very difficult to explain why they cannot co-occur with často (often) or with hudu (I will), etc. Such an objection is irrelevant, since the crucial feature of forms like prostojet' is that the sentence in which they occur must contain a quantifier before the pro- can be added. Isačenko accurately describes the status of such forms: 'It would be naive to assume that the verbal prefixes have a magic power which enables them to 'change' an imperfective into a perfective verb. The addition of a verbal prefix to a simple root always has the effect of determining and delimiting the root. The meaning of a prefixless verb is much more indeterminate, much more 'diffuse' than that of a prefixed verb. This limitation in meaning, achieved by prefixation, is bound up in the Slavonic languages with the general meaning of perfective aspect. A prefixed verb expresses the action as whole, condensed...'. Mazon had much the same idea in mind when he asserted that the perfective forms which co-occur with phrases like celnuj noč' (the whole night) 'concentrent l' action verbale, ... la ramasse ... en un bloc'. The heart of the matter seems to be that in the surface structure the elements which express perfective aspect and the prefix pro- are interpreted as having, in one respect, identical semantic values, which has led linguists to assume that prostojet', etc. are perfective.

Although Isačenko's term 'perdurative' might seem inappropriate since pro- is interpreted as presenting the action as 'condensed', it cannot be denied that a sentence
like My proigrali ves' vecher v šaxmaty (We played at chess the whole evening) does express the length of time during which the action took place without interruption. The problem is to decide which element in the total meaning of proigrali is stronger - The action presented as condensed or the duration. Since to the intuition of Mazón and his informants the former element is the stronger, 'perdurative' cannot be accepted as a suitable description of these verbs. Indeed, it may be asked whether the term Aktionsart is suitable, since these forms do not describe how the action developed and in most cases have nothing to do with actions but denote states.

Pro- in these examples is essentially the same pro- which occurs in prokisnut' and prorepetirovat', the only difference being that the feature 'thoroughly' is applied to a stretch of time. In the absence of a well-developed theory of semantics and semantic interpretation, the preceding observations must be left somewhat discrete, unorganized into a coherent pattern. This lack of pattern does not affect in any crucial way the validity of the comments.

Finitive Meaning.

5.2.4 Isačenko's explanation of the 'finitive' Aktionsart as expressing the bringing to an end and breaking off of an action is not entirely acceptable. Firstly, this definition applies equally well to all perfective forms de-
noting actions. Secondly, Isačenko's intransitive verbs whose perfective form is derived by means of the prefix ot-: Splički otsyreli (The matches have got damp), Koža otmjakla (The leather has softened), Pal'cy otmerzli (My fingers have frozen), Vetka otsoxla (The twig has dried up). These verbs are all inchoative and are to be interpreted as 'have gone into a state of being damp/soft/frozen/dry'. Otsyreli' is not paired with any imperfective form otsyrevat', but otmjaknut' is paired with otmjakat', otmerznut' with otmerzat', otsoxnut' with otsoxat', and the pairs of verbs are derived from the base forms mjaknut' (become soft), merznut' (become frozen), soxnut' (become dry). The inchoative meaning of the forms with ot- is present in the base forms and is not contributed by the prefix. Ot- in these examples has the force of 'finish' ('through', 'thorough') or 'completely' and cannot be easily distinguished in meaning from pro-. The perfective forms indeed express the result of a process, but their resultative interpretation is produced by the combination of inchoativeness and perfective aspect, and it is the inchoativeness which is crucial.

There are a number of verbs with ot- which are to be interpreted as 'causing someone/something to go into a state', e.g. (a) othelivat' - othelit' (whiten), otkarmlivat' - otkormit' (fatten), otmačivat' - otmačit' (soak leather); (b) lakirovat' - otlakirovat' (polish shoes), polirovat' - otopirovat' (polish table), šilivat' - ošilivat' (polish diamonds, grind lenses).

In the (a) group of verbs ot- has only one function - to indicate the thoroughness of the process or action, where-
as in the (b) group of verbs \textit{ot-} both indicates 'thoroughness' and marks perfective aspect. It was observed earlier that completion of an action or process, the feature Egressive is interpreted as 'successful completion'. 'Successful' may be understood in various ways depending on the meaning of the root. In this case it is understood as 'thorough'. It seems to be the case that when the need arises to distinguish 'completeness' from 'thoroughness' the perfective form with \textit{ot-} is separated from the root verb by the formation of an imperfective form with which it is paired, e.g. \textit{kormit'} (feed)/\textit{otkormit'} - \textit{otkarmlivat'} (fatten up).

Thirdly, although 'result' is a secondary element in the meaning of inchoative verbs, there is a large number of perfective verbs with \textit{ot-} which cannot be said to express result at all but only 'thoroughness' or 'completeness': \textit{prazdnovat'} (celebrate) - \textit{otprazdnovat'}; \textit{redaktirovat'} (edit) - \textit{otredaktirovat'}; \textit{gadat'} (make a guess)/\textit{otgadat'} - \textit{otgadyvat'} (guess something correctly); \textit{žit'} (live)/\textit{otžit'} - \textit{otživat'} svoj vek (live out one's time); \textit{nečitat'} (print)/\textit{otnečitat'} - \textit{otnečatyvat'} ves' tiraz knigi (print the whole issue of a book); \textit{stojat'} (stand)/\textit{oststojat'} - \textit{ostataiyat'} ves' koncert (stand during the whole concert). (Whereas the \textit{pro-} in \textit{prostojat'} ves' koncert marks the presence of a quantifier, in this case \textit{ves'}, the \textit{ot-} in \textit{oststojat'} ves' koncert, with its 'complete' or 'thorough' meaning, emphasizes the standing right through to the end of the concern.)
The examples which Isacenko gives of the 'totale Bedeutung' are *ranit* (wound) - *izranit* (cover with wounds), *xodit* (walk) - *isxodit* *ves* *les* (walk through the whole wood). The force of *iz-* in these examples does not seem to differ from the force of *ot-* or *pro-* or *vv*, and the term 'total' itself is much more appropriate to all the examples discussed than 'perdurative', 'terminative' or 'finitive'. Other verbs in whose perfective form *iz-* both marks perfective aspect and 'totality' are: *kalečit* (cripple) - *iskalečit*; *kovar* (distort) - *iskovar*; *komkat* (crush) - *iskomkat*; *mjat* (crumple) - *izmjat*; *peč* (bake) - *ispeč*; *port* (spoil) - *isport*; *nugat* (frighten) - *isnugat*.

**Genuine cumulative and Partitive cumulative.**

To the first type Isacenko assigns *naletal* in Letčik *naletal 10,000 kilometrov* (The pilot flew 10,000 kilometres), while to the second type he assigns such verbs as *narvat* in *My narvali cvetov* (We picked some flowers). The difference between these sentences lies in their superficial form. PRED in the underlying structure of both types of sentence has associated with it a feature [+Quantitative]. This feature in turn can be associated with the feature [+Definite] or [-Definite]. [+Definite] is realized by such phrases as *sto kilometrov* (a hundred kilometres), *dvadcat mašin* (twenty cars), while [-Definite] is realized as *some*.
any, a crowd, much, many, amass, or by the partitive genitive. The 'genuine' cumulative verb are derived from a PRED marked [-Quantitative], [+Definite], the 'partitive cumulative' verbs from a PRED marked [+Quantitative], [-Definite]. 'Partitive' seems to have been adopted from the traditional label for such uses of the genitive case, and 'cumulative' seems best handled either as a feature which is optionally attached to PRED if [+Quantitative] is already present, or as part of the interpretation of sentences containing Quantifiers. Na- is the prefix selected when a sentence contains a verb in perfective aspect and [-Quantitative].

Saturative meaning.

5.2.6
Isačenko assigns a 'saturative Bedeutung' to verbs like nabegat'sia (app. run to one's heart's content), naxvalit'sia (cover oneself with praise). It seems reasonable to suppose, given the prefix na- and the notion of 'great quantity' associated with these verbs, that these forms represent an extension of the quantitative verbs described by Isačenko as cumulative.

(Mazon glosses na- as '...quantite, abondance et satiete.')

What Isačenko calls the 'ironisch-resultative Bedeutung', manifested in such sentences as On dokataisja do nasmorka (lit. He skied as far as a cold), and the 'resultative-qualifizierende Bedeutung', exemplified in izolgat'sia (become a proper little liar), are both inchoative.
The outcome of this discussion of the 'resultative Aktionsart' is as follows. (1) The term 'resultative' is appropriate only to those verbs which take an object of result. Of the remaining so-called 'resultative' verbs, some are more correctly described as denoting the action performed thoroughly or a process whose effect is total, and others are more accurately described as 'quantitative' or as deriving from a deep structure containing a quantifier. A number of verbs are inchoative. (2) The deep structure in terms of locatives outlined in Chapter Two explains certain relationships between sentences and provides a satisfactory source for the notions of 'completion' and 'non-completion'. 'Completion' is understood as 'successful completion' and the notion 'successful' may be interpreted as 'thorough' and be more or less emphasized depending on the meaning of the verb. If completion implies thoroughness, the prefixes пр-, вр-, из- or ор- are used. If necessary, Russian has the means of emphasizing the 'thoroughness' still more by creating a secondary imperfective from the prefixed perfective form. This has the effect of reducing the role of the prefix from the expression of perfective aspect and 'thoroughness' to the expression of the latter alone, completion or non-completion being marked by the absence or presence of a suffix. (Non-completion is to be understood as 'possibly completed or not completed'.) These observations point to the need for some kind of semantic component which can 'build up' meanings and a method of handling word-derivation, which reflects these semantic processes.
This Aktionsart is of immediate interest, since the superficial verbs described as ingressive or inchoative (the latter term will be used here to avoid confusion with the feature [-Ingressive] derive from an underlying constituent structure which can be postulated with a certain degree of confidence. Isačenko classifies the verbs expressing this Aktionsart by listing the various prefixes which have inchoative meaning, grouping the verbs according to the prefix they take and then sub-dividing the groups of verbs according to their meaning. For verbs which take the prefix za- he sets up the following sub-groups. (a) Verbs denoting sounds: zavizzat' (begin to whine), zagromyvat' (being to thunder), zasmejat'sja (begin to laugh); (b) Verbs denoting smells: zavoniat' (begin to stink), zapaxlo senom (it began to smell of hay); (c) 'Indeterminate' verbs of movement: zaxodit' (begin to walk), zapolzat' (begin to crawl); (d) Verbs which cannot be assigned to any particular group: zadvyšat' (begin to breathe), zažit' (begin to live), zakurit' (begin to smoke), i.e. light a cigarette) zatancevat' (begin to dance).

A small number of verbs take the prefix vz-/voz-. Of this number the genuinely Russian verbs do not belong to the literary vocabulary: vzgolosit' (begin to wail), vzrevet' (begin to roar), vzhusevat' (begin to rage). The remaining verbs are of Church Slavonic origin: vozliubit' (begin to love), voznenavidat' (begin to hate), vozmačtat' (begin to dream).
The prefix *po-* is used mostly with determinate verbs of motion: *nobežat'* (begin running), *poletet'* (begin flying, fly off), *poskakit'* (begin to gallop, gallop off). Two exceptions to this usage are *noljubit'* (begin to love) and *počuvat'vovat'* (begin to feel).

These prefixed verbs can be paraphrased by *stat'/nač-\textit{inat}' - *načat'* followed by an imperfective infinitive, e.g. *On zasmjašla - On stal/načal smjašt'ia* (He began to laugh), *Sobaka zalašjala - Sobaka stala/načala lašat'* (The dog began to bark), *Soldatv zakurili - Soldatv stali/načali kurit'* (The soldiers began to smoke), *Veter vzuševal - Veter stal/načal bruševat'* (The wind began to rage).

Syntactic reasons were given in Chapter Two for deriving *stat' and načinat' - načat'* from an underlying structure which was glossed as 'go into a state'. *Sobaka zalašjala* may be glossed as 'The dog went into a state; The dog bark'. The first part of the gloss, 'The dog went into a state', refers to the structure dominated by *S* and *S*_1. That this is so is clear from the fact that both *stat'* and *načat'* have imperfective forms: *On stanovilšia ubešium* (He was becoming gloomy), *On načinal pisat' piesu* (He was beginning to write the play). The feature \[+Inchoative\] must be attached to the PRBD dominated by *S*_1 in order to bring about the embedding of a third *S* which is needed to generate the structure glossed as, e.g. 'The dog bark'. The phrase structure tree of the sentence *Sobaka zalašjala* is

231
The structure dominated by $S$ and $S_1$ can be realized either as $\text{stal}/\text{načal}$ or as the prefix $\text{za-}$. As Isačenko points out, $\text{za-}$ in this meaning combines only with intransitive active verbs. Since forms like $\text{zalalala}$ can be paraphrased only by $\text{načal laja}'$ and not by $\text{načinala laja}'$, i.e. not by the imperfective form $\text{načinat}'$, it follows that part of the structure realized as $\text{za-}$ must be $\text{LOC } [+\text{Ingressive}],[+\text{Egressive}]$. The problem arises as to how this realisation is to take place, in particular as to what governs the rules - the features attached to the categories in the structure generated by the base rules or the individual lexical items substituted for $\text{PRBD}$. Several considerations are relevant.

Firstly, there are verbs like $\text{lžbit}'$ which can take either $\text{na-}$ or $\text{vz-}$ or can co-occur with $\text{staj}'$, verbs like $\text{revet}'$ which can take either $\text{za-}$ or $\text{vz}$ or can co-occur with $\text{staj}'$, and verbs like $\text{kuševat}'$ which takes only $\text{vz}$ of the prefixes and can co-occur with $\text{staj}'$. The choice of prefix is obviously governed by the individual lexical
Secondly, the phenomenon of inchoativeness is far more widespread than would appear from Isačenko's account, which is inconsistent on one point in particular. Isačenko maintains that verbs which do not denote actions cannot give rise to an inchoative form, and gives as examples: *viset'* (hang), *sidet'* (sit), *torčat'* (bristle), *skoit'* (cost), *znat'* (know), *byt'* (be). The meanings of these verbs are incompatible with the notion of an action being engaged upon. On the next page, however, he gives as examples of verbs with *voz-*: *vozlijubit'* (begin to love), *voznenavidet'* (begin to hate), *vozmečtat'* (begin to dream), on semantic grounds, the verbs to which *voz-* is added cannot be said to denote actions any more than *znat'* or *sidet'* can be said to denote actions. Moreover, in Chapter One it was argued that *lijubit'* was a stative verb and that *pollijubit'* was an inchoative verb deriving from a structure 'go into a state: to love'. Similarly, *voznenavidet'* which can be paraphrased as *stati* *nenavidet'* derives from a structure 'go into a state: to hate'. Other verbs interpreted as inchoative are *nonimat'* - *noniat'* (come to understand), *nonimat'* deriving either from a stative *PRED or from an inchoative *PRED), *nznovat'* - *nznat'* (come to know, i.e. find out), *osoznavat'* - *osoznat'* (come to know, realize), *nonrapit'sja* (come to please).

Other candidates for inchoative status are those verbs which are traditionally said to derive from adjectives and which denote changes of state, e.g. *tolstet'* - *notolstet'* (become fat), *svret'* - *otsvret'* (become damp),
feraanet' - nokrasnet' (become red), sedet' - posedet' (become grey-haired), redet' - poredet' (become sparse).

Not only are nokrasnet' and stat' krasnym understood in the same way, but they are subject to the same selectional restrictions with respect to adverbs, and the same holds for the other verbs in the list and their paraphrases with stat'. As was mentioned in the discussion of the resultative Aktionsart, it is perfective forms like nokrasnet' which have led some linguists to imagine that the basic meaning of perfective aspect is result. The sentence Nebo nokrasnelo (The sky became/has become red) implies either Nebo byl krasnym (The sky was red) or Nebo krasnoe (The sky is red), and one can regard the state of the sky as resulting from the process of becoming red. It was also pointed out that 'result' is not peculiar to the perfective forms, since an imperfective form such as tolstal may or may not imply a resulting state depending on the context: compare General vsedda tolstal na Rozdestvo (The general always got fat at Christmas) with General tolstal no brosil est' konfety (The general was getting fat but gave up eating sweets). The former implies Posle Rozdestva general byl tolstyi (After Christmas the general was fat) whereas the latter implies that the general did not actually get into the state of being fat.

Bvt' (be), sidet' (sit) and ležat' (lie) are also linked with inchoative verbs. The sentence Ivan stal doktorom (Ivan became/has become a doctor) implies either Ivan byl domtorom (Ivan was a doctor, or Ivan doktor (Ivan is a doctor). If $S_2$ in the type of structure shown in Fig.13 is expanded into a copular sentence, stat' can be
glossed as 'begin to be'. The static verbs *sidet'* and *ležat'*are connected with the pairs of inchoative forms *sadit'sia-SENT* (sit down) and *ložit'sia-leč* (lie down). The sentence *Ona sela na divan* (She sat/has sat down on the sofa) may imply either *Ona sidela na divane* (She was sitting on the divan) or *Ona sidit na divane* (She is sitting on the sofa).

Some ways in which [+Inchoative] may be realised.

5.3.1 As the range of inchoative structures has now been considerably widened, the phrase structure tree in Fig. 13 is seen to be relevant only to one type of structure. The main types of superficial inchoative constructions are: (1) constructions with *stano vit'sia-stat'* followed by an adjective: *On stal izvestnym* (He became well known); (2) constructions with *načinat'* - *načat'* or *stat'* followed by the infinitive form of a verb. (a) *On načal bojat'sia* (he began to be frightened), which can be paraphrased as *Emu stalo boiazno* (lit. to him became fearful). *S2* is [+stative]. This sub-type includes *On stal ljubit'ee* (lit. He began to love her) and *On ponial knigu* (He had understood the book); (b) *My sela na skamejku* - (We sat down on the bench). Strictly speaking, this sentence does not fall within the general classification of construction types given above since neither *načat'* nor *stat'* occurs in this type of sentence. In the case of this sentence *S2* is static; (c) *Sobaka načala/stala lajat'* (The dog began to bark), *Sobaka unala* (The dog fell). In the case of the
former $S_2$ is [+ergative, [+agentive]], in the case of the latter [+ergative, [-agentive]].

Further peculiarities which must be taken into account, apart from the problem of prefixes, are to be found in the underlying structures which can be realised either as stanovit' sia - stat' followed by an adjective or as a verb, e.g. On stal tolstym (He became fat) and On potolstel.
Such sentences are a sub-type of (2b).

The writer now wishes to sketch a possible set of realisation rules. The operation of these rules is best described with reference to a phrase structure tree containing only the categories and features essential to inchoative structures.

![Phrase structure tree](image)

Fig. 25

5.3.2 There are three main sets of realisation rules: The first main set applies to structures in which $S_2$ is [+ergative].

Sequence 1 This sequence operates on structures containing LOC [+Ingressive]. The first rule substitutes max-
(i.e. the base form of načinat' - načat' from which other forms are built up) for PRED in S₁. A second rule transforms nač into način, the imperfective form to which various endings are attached.

(Any handbook of Russian verbs will describe the many ways in which perfective forms are derived from simple roots and yet more imperfective forms derived from prefixed perfective forms. It may be assumed that this information is incorporated in a set of rules, from which this second rule is chosen. The entry for the lexical item being inserted in the structure will specify which of this set of rules applies. It may be that these rules will apply only to forms which are not simple roots. For instance, if pis, the form which appears in the entry for pisat', were being substituted for PRED, no rule would be required, since pis is the imperfective form to which endings are attached. But if perepis- were being substituted, i.e. the form which appears in the entry for perepisat' (rewrite), the rule which adds the suffix - yu - would have to apply.

There will be a corresponding set of rules for perfective verbs. These rules will apply mostly to simple roots from which perfective forms are being derived. One rule which adds the prefix na- would apply to pis, but no rule would apply to perepis, since that is the perfective form to which endings are attached.)

An as yet unknown number of rules add the appropriate verb ending. To do this, they must check whether the feature past or non-past statement or prediction are present in the illocutionary potential component. If past, the rules must verify the number and gender of the
noun with which the verb is to 'agree'; if non-past, the person and number of that noun.

Further rules apply to $S_2$. These delete the cases accompanying PRED, select the appropriate imperfective form for the lexical item being substituted for PRED and assign that form the correct infinitive ending. It may be assumed that the rules are so ordered that the grammar, for every PRED, verifies the necessary information concerning the nouns with which the verb is to 'agree'. In the example under discussion the cases have been deleted, which means that there is no noun for the verb to agree with. In this situation the verb is assigned an infinitive ending.

**Sequence 2**

This sequence operates on structures containing $\text{LOC [+Ingressive],[+Egressive]}$. The sequence consists of several series of rules.

The first series produces the superficial forms consisting of a prefix added to a root, e.g. $\text{pobezat'}$, $\text{vzrevet'}$. The first rule in the series realises PRED in $S$ and $S_1$ as $\text{na}$, the second as $\text{za}$, and the third as $\text{vz}$. These three rules are optional and which rule operates is specified in the entry of the lexical item being substituted for PRED in $S_2$. If none of these rules applies, then an optional rule substitutes $\text{sta}$ for PRED in $S_1$. If this rule does not apply, an obligatory rule substitutes $\text{nak}$. The remaining rules in the sequence carry out the same operations of assigning the correct verb endings as the rules in Sequence 1, the only difference being that the perfective form of $\text{nak}$ is involved and not the imperfective form.
5.3.3

The second main set of realisation rules apply to structures in which $S_2$ is [-static].

**Sequence 1**

The first sequence of rules applies to structures containing LOC [+Ingressive]. The last group of rules in the sequence assign the correct verb or adjective endings, the lexical items which can be inserted into static sentences being specified in the lexicon as [+Verb] or [+Adjective].

The first group of rules in the sequence are brought into operation by lexical items such as $sadit'sia$ - $sast'$ (sit down), $zasypat'$ - $zasnut'$ (fall asleep). These rules do not realise PRED in $S$ and $S_1$ as separate superficial morphs but incorporate the information contained in that part of the structure in the appropriate form of the lexical item substituted for PRED in $S_2$. For instance, if the lexical entries for $sidet'$ (sit) and $ležat'$ (lie) are $s_d$ and $l_x$, (these lexical entries are presented here in a highly simplified form) the rules transform these into $sadit'sia$ and $ložit'sia$ if [-Inchoative] is attached to PRED in $S_1$, otherwise they are realized as $sidet'$ and $ležat'$. It may well be, of course, that any attempt to build up forms in this way for such eccentric, though obviously related items will lead to unprofitable complications and that the realisation rules should simply substitute the complete items $sadit'sia$ and $ložit'sia$ for $sidet'$ and $ležat'$. This certainly seems to be the only way of handling $zasypat'$ - $zasnut'$ which are related to, but not easily derived from, $apot'$ (sleep).
The second and third groups of rules operate if the lexical item substituted for PRED in $S_2$ is marked $[+\text{Adjective}]$. The second group of rules realise PRED $[-\text{Inchoative}]$ in $S_1$ as the vowel $-e$- to which are added the endings of verbs in $-at'$. From the entry $tolst$- is formed $tolate$-, to which are added $-ju$, $-jes'$, $jet$, etc.

The third group of rules realise PRED $[+\text{Inchoative}]$ as $-n$- to which the same endings are added as for $tolst$-. From $slep$- (blind) is formed $slepn$- to which are added $-ju$, $-jes'$, etc.

If the lexical item substituted for PRED in $S_2$ is marked $[+\text{Adjective}]$, and if neither the second nor the third groups of rules have applied, an obligatory rule substitutes $sta$ for PRED in $S_1$ and a further rule specifies the imperfective form $stanov$-. Once the appropriate verb endings have been added, a group of rules ensures that the correct adjective endings are added to, e.g. $tolst$- in $S_2$.

If PRED in $S_2$ is marked $[-\text{Verb}]$, an obligatory group of rules substitutes $nac$- for PRED in $S_1$, specify the imperfective form and add the verb ending. The same operations are carried out as in the first set of rules in order to realise in its infinitive form the lexical item substituted for PRED in $S_2$. These rules produce sentences like $On nacinal negodorovat'$ (lit. He was beginning to be indignant).

**Sequence 2**

This sequence operates on structures containing LOC $[-\text{Ingressive}],[+\text{Egressive}]$.

The first group of rules produces perfective forms like $sost'$ (sit down), $leč'$ (lie down), $zasnut'$ (fall asleep).
The second group of rules carries out the same operations as group two in sequence 1, except that LOC [+Ingressive], [+Egressive] is realised as the prefix no- (notolstet', nokrasnet') or as the prefix o- (okamenet' (turn to stone), obednet' (become poor). The entry for each lexical item will specify which rule applies.

The third group of rules is the same as the third group of rules in Sequence 1, except that LOC [+Ingressive], [+Egressive] is realised as o- (oseplenut' (become blind), oxripnut' (become hoarse).

The final groups of rules are the same as in Sequence 1 except that they produce a perfective form of stat' or načat'.

5.3.4

The third main set of rules applies to structures in which S is stative. Before any of the realisation rules can apply topicalisation must take place in S2 to determine whether the final superficial sentence is to be of the form On ponial teoriju (He had understood the theory) or Teorija stala emu ponjatnoj (The theory became to him understandable). If the animate noun is made topic, PRED is marked [+Verb]; if the inanimate noun is made topic, PRED is marked [+Adjective]. The structure underlying sentences like On ponial teoriju is
It should be noted that although the features [+Adjective] or [+Verb] are attached to PRED in S₂ depending on which noun is made topic, the cases are not changed in the deep structure. If the animate noun dominated by LOC is made topic, it is realised by a noun in the superficial nominative form. This is very different from saying that LOC is changed to NOM in the underlying structure.

**Sequence 1a** This sequence applies to structure containing LOC[Ingressive], if the animate noun is made topic. The first group of rules applies if non-, ver-, or zna- are substituted for PRED in S₂. For the first two verbs, the PRED in S and S₁ are realised as the appropriate imperfective form nonima or ver- to which the verb ending is added. These rules are optional for nonimat' and verit' since one does find On načināl nonimat' (He was beginning to understand) and On načināl verit' (He was beginning to believe). The lexical entry for zna- must specify how the knowledge was arrived at in order that the rules select the correct inchoative form uzna-, såzna- or osozna-. The prefixed elements may be regarded as the realisation of
PRED Inchoative.

The second group of rules operates if these have not applied and realises PRED [Inchoative] as načina.

Sequence 1b This sequence applies if the animate noun is not made topic. The rules in this sequence realise PRED [Inchoative] as stanov- plus the appropriate verb ending and PRED in S₂, which is marked [Adjective] as a superficial adjective either with a 'neuter' ending (it may be argued that the 'neuter' ending is added because there is no noun for the adjective to agree with) or the ending determined by the noun with which the adjective agrees. These rules apply in the realisation of sentences such as v gorode stanovilos' dušno (lit. in town was becoming stuffy), in which both verb and adjective have neuter endings because there is no noun for them to agree with, and in the realisation of sentences such as Teorija stanovilos' emu poniatnoi (The theory was becoming to him understandable), in which the verb agrees with the noun teorija and the adjective agrees with teorija in gender but not in case, since the adjective takes instrumental case after stanovils'ia - stat'.

Sequence 2a This sequence applies to structures containing LOC [Ingressive], [Egressive] and if the animate noun in S₂ has been made topic. Most of the rules are the same as the rules in Sequence 1a except that they are realising the inchoative structure as forms of the perfective verbs of nonjat', uznat', poeverit'. In addition, these rules introduce the inchoative perfective form pol-lubit'. There is an extra group of rules which realises
the perfective inchoative structure as the prefix voz-, as in vozliubit' and voznenavidiť'.

Sequence 2b This sequence applies to the same type of structure as Sequence 2a except that the animate noun has not been made topic. The rules carry out the same operations as the rules in Sequence 1b except that they introduce forms of the perfective verb stat'.

Some problems in the realisation of cases

5.3.5 In addition to the realisation rules outlined above, there are sets of rules which realise the various cases and the nouns they dominate. Since an investigation of these rules is not essential to this study, they will be neglected. It may be pointed out that part of their task is to realise two or three underlying cases and nouns as one superficial noun in a superficial case. The structure underlying Lev zarevel (The lion began roaring) contains a NOM in S and an AG in both S₁ and S₂. These three cases and nouns are realised as one noun in the superficial nominative case.

The realisational rules for PRED will be even more complicated in a complete grammar of Russian. In fig.14 the V dominated by PRED in S₁ is marked [+Directional]. There must be optional rules which realise this verb as a verb of motion prišodit' - priiti (come in), in order to produce sentences such as On prišel v negodovanie (lit. He came into indignation). Whether this realisation rule
can apply will be specified in the lexical entry for each item.

It was stated that in an S marked [+stative] PRED is specified as [-Adjective] if the animate noun is not made topic. This statement was not accurate, since PRED under these conditions is marked [-Adjective] only if the lexical item is not dumaetsja, veritsja or prinadležit.

In Fig. 14 PRED in S₁ is not specified as [+Agentive] or [-Agentive]. This feature cannot be specified until the PRED in S₂ is known to be [+stative] or [+static] or [+ergative]. While one would characterise the inchoative process as 'agentive' in Malčik nošel (The boy set off), one would not describe it as 'agentive' in On pol'jubil ee (He fell in love with her). There must be a rule which attaches the appropriate feature to PRED in S₁ after PRED in S₂ has been specified.

A lexicalist or transformationalist approach?

5.3.6

This discussion of the inchoative Aktionsart would not be complete without a mention of the many structures which are both causative and inchoative. In 'Aspects of the Theory of Syntax' Chomsky, discussing such related words as horror - horrid - horrify, terror - (terrid)-terrify, candour - candid - (candify), and also words like frighten, points out that the lack of really general rules to produce these derived items means that the
items must be entered in the lexicon directly. 'This, however, is a very unfortunate conclusion, since it is clear that from the point of view of both the semantic and the phonological interpretation it is important to have internal structure represented in these words. Their meaning is clearly to some extent predictable (or at least limited) by the inherent semantic properties of the morphemes they contain'. Chomsky suggests that one can regard the gaps (e.g. terrid, sandify) as accidental and formulate 'overly general' rules which allow for such non-occurring cases as well as for actual cases. Alternatively, the relatively simple lexical rules which he outlines may have to be made more complex to allow some 'internal' computation. Thus, frighten might have a lexical entry (Stem$_3$ en, H$_1$, ... ). There would be another entry: (fright, +N, +Stem$_3$, ... ). The general lexical rule would introduce the first entry into a string, and into the resulting string would insert the latter entry. These derivations within the lexicon would depend, furthermore, on the 'feature composition' of the lexical item. 'Stem$_3$ can be rewritten fright in the context -en only when the features H$_1$, H$_2$, ... indicate that it is a pure transitive, takes only Animate Object, etc. In other words, provision must be made for the fact that frighten is not a Verb of the same type as reden or soften...'.

Chomsky then proposes that 'one might seek syntactic justification for a transformational analysis from an underlying causative construction so that 'it frightens John' would derive from the structure underlying 'it makes John
afraid', this in turn deriving from the abstract structure 'it makes S', where S dominates 'John is afraid'.

Chapter Two contains much syntactico-semantic justification for deriving sentences such as Ivan stal boiat'sja (Ivan began to be afraid) from the underlying structure 'Ivan went into a state: Ivan was afraid'. To treat the Russian verb corresponding to frighten, as in These words frightened Ivan, by means of special 'computational' rules in the lexicon would be to complicate the grammar most unnecessarily, since the underlying structure postulated for sentences containing inchoative verbs can be extended to handle causative sentences in an extremely simple manner, by embedding an S +Causative between S and S1 in the tree shown in Fig.27.

![Fig.27]

The structure in Fig.27 underlies the Russian sentence corresponding to These words frightened Ivan. The structure may be glossed as 'These words caused it: Ivan went into a state: To Ivan was fearful'.

247
S in Fig. 27 could be either Ivanu bojazno or Ivanu strašno, strašno being derived from the noun strax (fear). There is also a verb ustrasić (frighten) which is derived from strax. The structure in Fig. 16 accounts for the fact that the sentence Eto ustrasišlo Ivana (This frightened Ivan) is understood in the same way as Eto privalio Ivana v strax (lit. This led Ivan into fear), since V dominated by PRED in S2 is [+Directional]. (This derivation of lead, in a figurative sense, from "cause to go into" presumably holds also for lead/bring into in a concrete sense. Cf. Lyons (a) pp. 397-399.) The structure also accounts for the fact that Eto ustrasišlo Ivana and Eto vzzvalo strax u Ivana (lit. This called out fear at Ivan) are equivalent in meaning. Strax is produced by the nominalisation of PRED in S3 and u Ivana is the realisation of (LOC (k+N Animate )) when PRED has been nominalised. Vzzvalo is the realisation of PRED [+Causative] when PRED in S3 is nominalised.

The case for deriving ustrasić' from an underlying structure containing a causative PRED and an inchoative PRED is further supported by the source of some superficial reflexive verbs. Consider the sentences Ugroz u strašili Ivana (The threats frightened Ivan) and Ivan ustrasišalja ugrož (Ivan was frightened by the threats). Sia is the reflexive ending and ugrož is the genitive plural of 'threats'. These sentences are understood in the same way and consist of the same lexical items, although the case and verb endings differ. The writer wishes to propose that these two sentences derive from the
same underlying structure, which may be glossed almost exactly like the structure in Fig. 16: 'The threats caused it: Ivan went into a state: To Ivan was fearful'. If 'threats' is made topic of the sentence, then that lexical item is realised in the superficial nominative case as угроза, the causative and inchoative PREDs are realised in the prefix у- and the vowel ă which are added to астраш-. The verb agrees with угроза in number and gender and 'Ivan' is realized in the accusative case. If 'Ivan' is made topic of the sentence, then 'Ivan' is realised in the superficial nominative case, the verb is assigned a reflexive ending and agrees with 'Ivan' in number and gender, and 'threats' is realised in the genitive case, which may be taken as a superficial marker of cause. Cause is even more distinctly marked in the surface structure of such sentences as из-за угроз Ivan ustrašilja (lit. From behind the threats Ivan became frightened) in which it is realized both as из-за and the genitive case. The sentence Ivan ustrašilsja (Ivan became frightened) derives from the same type of structure as that shown in Fig. 16 the nominative case of Ivan and the reflexive ending of the verb show that the topic of the sentence is 'Ivan', and the reflexive ending also indicates that the AG associated with the causative PRED has been deleted. This AG can never be deleted when it is the topic of the sentence. This type of structure, with the AG deleted from S₁, also seems to be the source of such sentences as Ivan smejalsia (Ivan laughed), Ivan bødalsja (Ivan was afraid), Ivan удивилсja (Ivan was astonished), Ivan улыбilsja (Ivan was smiling), Ivan şordilsja
(Ivan was proud). These sentences may be interpreted as 'Someone/something made Ivan laugh/afraid/astonished/smile/proud'.

It is clear, therefore, that a number of phenomena in Russian can be explained in a natural manner only if the method of 'lexical computation' is avoided (at least with respect to verbs with a causative meaning) and if causative verbs are derived from a definite underlying structure containing a causative PRED and an inchoative PRED.

Some causative verbs in Russian

5.3.7. Some of the more common Russian verbs which derive from causative structures are:

- **vosplamenit'** - set on fire (lit. cause to go into flames. 
  
  Voz = in and plamja = flame)

- **vosplamenit'sja** - burst into flames.

- **vospaltit'** - inflame a crowd (palit' = cause to burn/scorch, 
  
  palit'sja = become burnt/scorched).

  Vospalit' is explained in Ožegov as **privasti v sil'noe vozbuždenie** (lead into great excitement).

- **Utverdit'** - ratify, uphold (lit. cause to become hard. 
  
  Tverdyj = hard).

- **Ubedit'** - convince. The past participle of this verb, 
  
  uběžden, occurs in On uběžden (He is convinced) and is derived from the structure 'Someone/something caused it: He go into state: He be convinced'.

- **Ujasnit'** - make clear (jasnyj = clear)
Ukrotit' - tame (lit. cause to become meek. Krotki = meek/mild)

Utostnit' - make precise (lit. make sharper. Tochnyi = sharp).

Usypit' - make sleep (cf. snat' (sleep), zasypat' (fall asleep)).

Uravnit' - make equal (ravnyi = equal)

Udohrit' - fertilize soil (lit. make good. Dobryi = good)

Umortvit' - kill a nerve, mortify the flesh (Mertyyi = dead)

Ukazat' - show. Ja ukazal emu derevo (I showed him the tree) has an underlying structure 'I caused it: He go into state: To him the tree visible'.

Oţegov lists over thirty five such causative verbs with the prefix у-. Other candidates for causative status are bring, lead, send, roll (a barrel). It may be noted here that Mazon also uses the term 'causative' but in different sense. By 'causative' he understands 'factitifs deverbatifs' such as noit' (cause to drink) and 'denominatifs transitifs' such as kosit' (cut with a sickle).

Mazon thus classes as causatives poglatit' (swallow) which cannot be classed as causative in the sense of deriving from the type of structure in Fig.27. Among Mazon's verbs which are causative in this sense are portit' (spoil), čistit' (clean), gladit' (smooth, iron), obazatit' (enrich), narabotit' (enslave), znakomit' (acquaint something with something), pvlit' (make dusty), trevožit' (to alarm, cf. vse v trevage - lit. everybody is in alarm), rušit' (pull down a house).
To this list may be added nozorit' - onozorit' (to shame), noročit' - oppročit' (discredit), radovat' - ohradovat' (make glad), sadlat' - osadlat' (to saddle), ostužat' - ostudit' (freeze), carapat' - ocarapat' (to scratch, i.e. to cause someone to go into a state of having a scratch on him).

As examples of 'preverbes vides' Mazon gives s in s'ast' (to eat up), q in oslepnat' (he will go blind), vz/voz in vzvolnetai (he will become alarmed), yskipit (will boil), and u in uvidit' (he will see) and uslyšit' (he will hear). In the section on resultative verbs it was argued that s in s'ast' is the superficial realisation of a feature 'thorough' or 'complete'. The preceding discussion of inchoatives makes it clear that q is also a realisation of this feature 'thoroughly' and that vz/voz mark inchoativeness. In Chapter One it was suggested that videt' and slyšat' are stative verbs and that stative verbs have no perfective forms, the forms that are usually described as perfective being in fact inchoative. The sentences On uvidit' dom (He will see the house) and On uslyšit' zvuk (He will hear the sound) are derived from 'He will go into state: The house to him be visible' and 'He will go into state: The sound to him be audible'. U in these verbs is to be regarded as marking inchoativeness. In the causative inchoative verbs with u, u marks the inchoativeness and the endings mark causativity. Cf. njasnit' (to clear up) and jasnet' (become clear), utverdit' (ratify) and tverdet' (become hard).
Inchoative verbs, stative verbs and static verbs

5.3.8. With respect to inchoative verbs, it was pointed out that not only ergative verbs are associated with the 'ingressive Aktionsart' but also stative and static verbs. The static verbs have very distinctive inchoative forms, \textit{sadj\,sja-sest}\text{'} etc. and it is not entirely unexpected that the static verbs should have very distinctive causative inchoative forms. Consider the following sentences:

1a \textit{Lampa stojit na stole} - The lamp is standing on the table.

1b \textit{Ja postavil lampa na stol} - I stood the lamp on the table.

2a \textit{Kartina visit za dver\text{'}ju} - The picture is hanging behind the door.

2b \textit{On povesil kartinu za dver\text{'}ju} - He hung the picture behind the door.

3a \textit{Vse gosti sideli za stolom} - All the guests were sitting at table.

3b \textit{Vse gosti sela za stol} - All the guests sat down at table.

3c \textit{On posadil vsex gostej za stol} - He sat all the guests down at table.

4a \textit{Rebenok le\v zal na posteli} - The child was lying on the bed.

4b \textit{Rebenok leg na posteli} - The child lay down on the bed.

4c \textit{\vzen\vscina polozila re\vbanka na postel\v'} - The woman lay the child on the bed.

(4c) may be glossed as 'The woman caused it': The child
go into a state: The child lie on the bed. The verbs *sidet* and *ležat* appear to have both inchoative and causative inchoative forms. However, when one examines the imperfective forms of the former, *sadit'sia* and *ložit'sia*, one is struck by the similarity between them and the causative forms *posadit* and *noložit*, which consist of the prefix *po-* plus the roots *sadit* and *ložit*. The -*it* ending is a feature of causative forms as opposed to the -*at* ending of the inchoative forms. *Sadit'sia - set* and *ložit'sia - lež* may be regarded - and this is only speculation - as causative-inchoative rather than as simply inchoative forms, i.e. as meaning 'cause oneself to be in a state of sitting'.

One stative verb, *znat*, can be related to the causative-inchoative forms *izveščat* - *izvestit* (inform). On *izvestil menja o novosti dni* (He informed me about the agenda) derives from a structure: 'He caused it: I go into a state: To me the agenda known'.

The causative forms which have been discussed are all connected with static or stative PREDs. The causative verb which occurs with ergative PREDs is, of course, *force* or *compel*, and one would expect the Russian verb to derive from the underlying structure which has been posited for the other causative forms, that is one would expect a structure which could be understood as forcing someone to go into a state of doing something. In view of this, it is curious that the Russian verb 'force' is *zastavit*, a form which consists of the root *stavit* which occurs in *postavit* - 'cause to be in a standing position', cf. (1b) above -
plus the prefix za-, which may be assumed to carry the meaning 'action carried out to its limits'. The basic—better perhaps, the original—meaning of 

\textit{zastav\i t} seems almost certainly to have been 'put someone in a position'. That this is the case is difficult to prove, but the morphological parallel with \textit{nostav\i t} and the fact that the conjectured meaning accords with the underlying structures put forward for other verbs and on other grounds are not easily ignored.

**Participles formed from inchoative verbs.**

5.3.9 This study of inchoatives in Russian can be concluded by mentioning a special type of participle associated with inchoative verbs. \textit{Čitat} (read) may be taken as a typical example of a Russian verb. The present participle of this verb is \textit{čitajuščii} and the past participle is \textit{čitavšii}. These participles often correspond to relative clauses in English, e.g. \textit{Čitajuščii gazetu soldat ne zametil nas} (lit. The reading a newspaper soldier has not noticed us, i.e. the soldier who is reading a newspaper ...). \textit{Čitavšii gazetu soldat ne zametil ego} (lit. The reading a newspaper soldier did not notice him, i.e. the soldier who was reading a newspaper ...). Participles such as these are the realisation of a sentence embedded into another sentence. For instance, the first example derives from \textit{(Soldat (Soldat čitaet gazetu) ne zametil nas) - (The soldier (The soldier is reading a newspaper ) has not noticed us )}. If the embedded sentence is restrictive it may be
realised as a participle or as a relative clause. By restrictive is meant that the first sentence is interpreted as, 'The soldier, that one who is reading a newspaper...' and is understood to imply that there is more than one soldier. If the embedded sentence is non-restrictive, i.e. if the sentence is interpreted as 'The soldier, who happens to be reading a newspaper...', it is realised as a relative clause.

Suppose that the following underlying structure has been generated, in which the embedded sentence is restrictive: (He crushed the flower (The flower had gone into a state (The flower be faded)) ). In Russian S and S would be realised as vialyi and the whole superficial sentence would be On davil vialyi avetok (He crushed the faded flower). There is a whole range of participles ending in -li which derive from structures which would otherwise be realised as the perfective forms of inchoative verbs. A paraphrase of the example is: On davil cvetok, kotoryj uvjanul (He crushed the flower which had faded) - uvjanut' being the perfective form of vianut' (fade). Forms such as vialyi are here being termed participles not for any historical reasons but because their derivation is identical with the derivation of 'regular' participles.

Other such inchoative participles are: bleklyj (faded) - bleknut' - nobleknut' (to fade), merzlyj (frozen) / merznut' (to freeze), tuxlyj (rotten) / tuxnut' (go bad), zapotelyj (misted up) / potet' - zapotet' (to mist up), okamenelyj (petrified) / kamenet' - okamenet' (turn to stone), začerstveliyj (stale) / čerstvet' - začerstvet'
(become stale), zrel' (ripe) / zret' - sozret' (ripen), ocepenel' (numb) / ocepenet' - ocepenet' (grow numb), zapozdal' (belated) / zapazdvat' - zapozdat' (be late) (this verb is not usually interpreted as inchoative but it can be understood, without any forcing, as 'go into a state of being late'), polinjal' (faded) / lin'at' - polin'iat' (to fade), oblez' (shabby) / oble'zat' - oblez' (grow bare), zaležal' (stale) / zaleživat'sja - zaležat'sja (become stale by lying), ustal' (tired) / ustavat' - ust'at' (become tired).

The 'delimitative' and 'semelfactive' Aktionsarten

5.4 Of the other Aktionsarten cited by Isačenko the most important are the 'delimitative' and the semelfactive. By 'delimitative' Isačenko means such forms as porobotat' (do a little work), which Ward calls 'attenuative'. Porobotat' occurs in two types of sentence: V subbotu ja porobotal (On Saturday I did some work) and On porobotal nad knigoj neskol'ko lat (He worked on the book for some years). Porobotat', therefore cannot simply be entered in the lexicon as a separate item meaning 'do a little work'. Isačenko explains that the essential function of po- is to indicate that the action is limited in time (der Ausdruck einer zeitlichen Einschränkung des Ablaufes der Handlung). In other words, a sentence like ja porobotal is understood basically as 'I worked for some time'. It may be that such verb forms derive from an underlying PRED
marked [+Quantitative] and [-Durative], which two features in some way 'trigger off' the generation of structure which may be realised as neskol'ko vremen (a little while) or as more specific time expressions such as čas (an hour), tri goda (three years). The prefix no- may be regarded as a superficial marker of the features +Quantitative and -Durative. As was argued in the discussion of 'resultative' verbs, the essential feature of no- is not to produce a perfective form of rabotat'. Forms like porabotat' indicate temporal limitation of an action and have, in this respect, the same semantic value as verbs in perfective aspect. It must be stressed that the identity is semantic, since the structure underlying a form like porabotat' has an initial string NOM LOC [+Ingressive], whereas the structure underlying kupit', the perfective form of nokupat' (buy), has an initial string NOM LOC [+Ingressive], [+Egressive].

Since attenuative forms cannot be derived from causative-inchoative verbs, inchoative verbs, stative verbs or modal verbs, it seems likely that a general rule can be formulated which determines when the features [+Quantitative] and [non-Durative] can be realised as no- or as a time expression.

Traditionally there is said to be a class of semelfactive verbs which denote a single action, e.g. glotnut' (swallow once), doxnut' (take a breath), dernut' (give a tug), kol'nut' (stab once), pryvnut' (take a jump), gar-knut' (give a croak), stuknut' (give a knock), kriknut' (give a shout), mel'knut' (flash), blesnut' (flash). These forms are related to the imperfective forms glotat'.
dyšat', derzat', kolot', prveat', garkat', stučat', kričat', mel'kat', and blestat' respectively. The semelfactive forms have the suffix nu-.

A second group of semelfactive verbs are formed by means of the suffix -anu/-ianu (e.g. kašljat' (cough) - kašljanut' (give a cough), rezat' (cut) - reznut'/rezanut' (give a cough); and a third group take the prefix s-, e.g. ostrit' (make witty remarks) - sostrit' (make a witty remark), pajasničat' (play the buffoon) - spajasničat' (act the buffoon once), rabotat' (work) - arabotat' (Motor arrahotal-
The engine fired).

The usefulness of the notion 'semelfactive' may be questioned. Although the formatives in -nu are certainly understood as denoting a single action, it may be argued with equal validity that many other perfective forms also denote a single action, e.g. brosil (threw) in On brosil mira čerez zabor (He threw the ball across the fence). It may also be pointed out that the 'semelfactive' forms and other perfective forms co-occur with time adverbs such as tri raza (three times) : Muzčina tri raza kol'nul mili-
cionera (The man stabbed the policeman three times). These facts seem to indicate that the 'semelfactive' forms are first and foremost perfective forms. This statement could be refuted by the existence of a verb which has two perfective forms, one 'semelfactive', the other simply perfective. Most of the verbs in -nu cited by Isačenko are in fact the only perfective forms of the verb concerned, but some verbs do have two perfective forms. Stučat' (knock) has postučat' and stuknut', but postučat' is to be inter-
interpreted as 'knock for some time'. Zevat' (yawn) has zavnut' and prozvavat' but the latter is used only in the sense of letting slip an opportunity. Konat' (dig) has konnut' and vykonat' but the latter occurs only in the sense of digging out a hole in the ground or digging up potatoes. Plevat' (spit) has plinnut' and naplevat' but the latter occurs only in such phrases as Emu naplevat' na eto (lit. To him to spit on that, i.e. He could not care less). Mazat' (smear) has vvmazat', zamazat', izmazat', nomazat', namazat' and maznut'. Of these, the forms with vy-, za- and iz- may be interpreted as 'smearing thoroughly' (cf. the discussion of resultative verbs). Maznut' is classed as 'colloquial' by Ožegov, and nomazat' and namazat' are the literary perfective forms. (This opposition of literary and colloquial perfective forms seems to indicate that -nut' for many people is simply a suffix to be used in forming perfective verbs). Metat' (throw) has metnut' and vymetat', but the latter is used only in the sense of fish spawning their eggs. Rugat' (scold) has rugnut', vvrugat' and abrugat'. Ožegov classes rugnut' as colloquial and the forms with vy- and oh- express the notion of cursing someone soundly. Xvastat' (boast) has xvastnut' and no-xvastat', but the latter is to be interpreted as 'do a little boasting'. Ščinat' (pinch) has ščinnut', obščinat' and oščinat', but the latter two are used only in the sense of plucking feathers or plucking a chicken.

Ožegov lists kol'nut' and zakolot' as perfective forms of kolot' (stab), but zakolot' is also listed as the perfective form of zakalvyvat'. In the light of the
discussion of 'thoroughness' in connection with resultative verbs, it is clear that zakolot' should be paired only with zakalyvat', and that za- indicates, in Mazon's words, 'développement de ce mouvement à l'extrême'.

I do not wish to deny that the perfective form prygnut' (jump) may be more appropriately described as denoting a single action than, for instance, kunit' (buy), and it is obvious that -nu at one time marked some kind of semantic factor. With respect to a generative grammar of Russian it must be asked whether special features need to be added to PRED in order to account for -nu. It seems to the writer that the forms in -nu are to be derived from the same underlying structures as ordinary perfective forms, that the entries for each item specify whether that item can be realised with the suffix -nu or not, and that the semelfactiveness of these verbs is more usefully regarded as part of the interpretation of the meanings of these verbs, i.e. the kind of actions they denote plus perfective aspect. These suppositions are supported by the fact that any feature which could be attached to PRED would have to refer to some property or characteristic of the actions, and such features would fail to distinguish between, e.g. brosit', the perfective form of brosat' (throw) and metnut' (the perfective, so-called semelfactive form of metat' (throw).
The other Aktionsarten listed by Isačenko are as follows:

1. The 'evolutive' Aktionsart, which is found in such verbs as *raskričat'sia* (raise a hullabaloo). This verb is understood as expressing the initial development or evolution of the action. Other examples are *razgovorit'sia* (which Ožegov glosses as 'having begun to speak, to get caught up in a conversation'), *razbegat'sia* (start running), *razšemet'sia* (kick up a row). These forms seem to be derived from structures containing the features [*Inchoative*] and [*Intense*], though it may well be that the latter feature is part of the lexical entry. Since forms like *raskričat'sia* are not very numerous, each lexical item must be marked in the lexicon as to whether it is subject or not to the realisation rules which add the prefix *raz*-(whose basic meaning appears to be approximately 'apart') and the reflexive ending -sia.

2. The 'attenuative' Aktionsart is found in verbs like *poobsoxnut'* (dry slowly), which expresses not limitation in time as does *pogovorit'* (have a chat) but limitation in intensity. Isačenko's list of attenuative verbs can be subdivided into groups according to meaning:

(a) verbs meaning 'do something slowly' - *nopriyyvknut'* (become slowly accustomed), *prilečšia* (die down slowly, of the wind), *nodzabyt'* (forget slowly); (b) verbs meaning 'do something for a short time' - *prileč'* (lie down for a...
(c) verbs meaning 'do something in a little degree' - privstat' (raise oneself slightly), podvypit' (have a little drink), prinažat' (press lightly on something), porazmat'sia (stretch one's legs a bit). It is possible that all these verbs derive from a structure with the feature [+Quantitative] which can be applied to amounts of speed or time or to extent in general. Since these attenuative forms are 'nicht allzu produktiv', and since three different prefixes are involved, no-, pri- and pod-, a general rule is out of the question. A special set of realisation rules must be formulated which adds the appropriate prefix to the perfective form of the verb, and the various lexical entries will specify whether these rules apply or not.

(3) Isačenko begins his discussion of the 'iterative' Aktionsart, with the observation that iterative forms can no longer be derived freely, that the remaining iterative forms occur only in the past tense, and that they are used only for stylistic effect or in dialect. The iterative forms were derived by suffixation, -vy/-iv being added to the stem. Suffixation was sometimes accompanied by changes in stress or vowel and consonant changes, e.g. vidat' (see) - vidyvat' (see often), zovorit' (speak) - zovaryvat' (say often), nisat' (write) - nisvat' (write often), xodit' (walk) - xajivat' (walk often). The interesting thing about iteratives is the number of sub-types. Isačenko lists the 'diminutive iterative' (pokašlivat' - have a little cough now and again, pokurivat' - have a quiet smoke, nošityvat' - have a little read); the 'mutual iteratives' pererugivat'sia - have a slanging match, perešentvyvat'sia -
whisper to each other); the 'intensive iterative' (vypisvat' bukvi v tetradi - write out letters in an exercise book with great care, vyrisolovvat' - draw with great care). Ozegov lists vypisat' and vyrisolovat' as the perfective forms of these verbs, although Isačenko maintains that the imperfective forms are Imperfectiva tantum and have nothing to do with the perfective forms. It seems best to the writer to regard vv- in these forms as expressing 'thoroughness' and to treat the perfective and imperfective forms as paired. In this treatment vyrisolovvat' and vypisvat' are not iteratives; the perfective iteratives occur in sentences such as On pozapiral vse dveri (He closed all the doors; sapirat' - sanerat' means close), Vse gosti povskakali (All the guests jumped up), Vse synov'ja pereženilis' (All his sons have got married).

The important elements in the meanings of these sentences have to do with 'reciprocity' (perešeptyvat'sja), 'totality' (pozapirat' vse dveri), with doing a little of something every now and again (nokašlivat', pokurivat') and with everybody doing something one after the other (pereženit'sja). One might even argue that, with the possible exception of nokašlivat', etc., the label 'iterative' does not refer to the meaning of the verbs but to their superficial form. The iterative verbs must be handled in the same way as the other Aktionsarten, by postulating appropriate features in the underlying structure and setting up rules which realise these features as the various prefixes and suffixes. (4)
To sum up this chapter on Aktionsarten, one of the Aktionsarten, the inchoative, can be handled syntactically by embedding a sentence containing PRED [Inchoative] into the basic underlying structure. (Causatives can also be handled this way, but grammars of Russian do not recognize a causative Aktionsart, although the case for recognising one is very strong.) The other Aktionsarten are handled by attaching various features to the lowest PRED in the underlying structure. These features may be regarded as syntactic for the moment since they occur in the syntactic component of the grammar, but it must be made clear that these features represent the first gropings towards a more abstract semantic level of deep structure. This is noticeable especially from examples like those quoted in the discussion of resultative verbs or verbs like nerešentvyvat'sja, which can be paraphrased as šentat' drug s drugom (whisper the one with the other). It is assumed that semantic features such as [+Reciprocal] will be capable of being translated into various types of constituent structure. The PRED šent- [+Reciprocal] may be translated into šent-drug s drugom, that is, into šent- plus whatever structure underlies drug s drugom. The lexical entry for šent- specifies that, if this translation has not taken place, a special set of rules add the prefix pere- and the suffix -sia. This treatment takes some problems of word derivation out of the lexicon and handles it by means of 'realisation rules' which add prefixes and suffixes and assign
the correct verb or adjective endings. The preceding account assumes that these rules are grouped into different sets and sub-sets but it may be possible to organise the rules so as to avoid overlapping. It is unnecessary, for example, to have several different sets of rules all assigning the same verb and adjective endings.

The whole discussion calls in question the value of the notion 'Aktionsart'. The only explicit definition, in spite of Isačenko's listing of criteria, is Agrell's, and the only verbs which fitted his definition were the 'resultative' verbs in which the notion of 'thoroughness' came out very strongly. Moreover, many of these 'resultative' perfective forms were found to be paired with 'resultative' imperfective forms. In a generative grammar all the traditional Aktionsarten are handled by means of features and/or extra structure. Indeed, the notion of Aktionsart seems to have been arrived at via considerations of form, since grammarians have used it with respect to prefixed verb forms which either have perfective or imperfective aspect but not both. By limiting the notion in this way linguists may miss many interesting phenomena, witness the skimpy account of inchoatives in Isačenko's book. It may be concluded from these facts that the notion of Aktionsarten is not needed in a generative approach.

Since the above form of grammar suggested itself partly because of the general form of transformational grammars but mostly because of the data being studied, it is interesting to note the following remarks by Chomsky: 'There is no doubt that items must be specified lexically
in terms of the operations that apply to them; this is particularly clear from a consideration of phonological rules, but is no less true of syntactic processes. Much of lexical structure is, in fact, simply a classification induced by the system of phonological rules. Postal has suggested, furthermore, that there should be a general analysis of lexical items with respect to each rule $R$, into those which must, those which may, and those which cannot be subject to $R$... That such a treatment is necessary is fully borne out by the Russian data discussed in 5.3.2 - 5.3.4.
Mazon's account of infinitives.

6.1 Mazon's study of aspect in Russian is distinguished by the amount of space and attention devoted to the use of aspect in the infinitive. Mazon took the use of aspect in the infinitive as the starting point of his investigation because infinitives do not display the intertwining of tense and aspect which bedevils the study of aspect in finite verb forms. Because it contains many useful examples and observations, Mazon's account will be taken as the basis of this discussion.

The use of imperfective aspect in infinitive forms is described according to the general criteria listed at the beginning of Chapter Two, namely:

(1). Action unique qui se développe; (2) Action réitérée;
(3) Action généralisée.

Criteria (1) and (2) each subsume various uses of the imperfective aspect:

(1)a Action commencée ou interrompue

Mazon notes that infinitives dependent on načat', stat' (begin), privyknut' (get used to), prodolžat' (continue) or končit' (finish) always occur in imperfective aspect. Mazon maintains that it is impossible to conceive of infinitives dependent on these verbs expressing "un tout intégralement achevé", an impossibility which has been explained in this study of aspect by postulating that
superficial sentences containing these verbs derive from underlying structures which may be glossed as "go into a state", "get used to being in a state", "continue being in a state", or "come out of a state".

The notion of the "mise en train de l'action verbale" comes out clearly in sentences in which the infinitive is used "independently", e.g. \textit{Tabe vybirat'} (lit. To you to choose, i.e. It's you to choose - get on with it), \textit{Davaj emu odevat'sia} (lit. Give to him to dress himself, i.e. Let him get on with dressing himself), \textit{Pora mne uxdit'} (lit. It's time to me to go away, i.e. It's time I was getting on my way).

After \textit{nora} (It is time to ...) a perfective infinitive is used when the action "est envisagée dans son résultat", e.g. \textit{Pora mne uiti} (It's high time I was off). Of such sentences Mazon says : "la phrase prend des lors un caractère de netteté et d'énergie".

The notion of continuing the action is evident in sentences like \textit{Rabotat', takrabotat'} (lit. To work, so to work, i.e. If we're working, let's keep on working), and the notion of interruption is evident in \textit{Dovol'no vam smejat'sia} (lit. Enough to you to laugh, i.e. That's enough laughing from you).

b \textit{Irresoudoion du sujet concernant l'accomplissement de l'action.\
Ja ne znal, čto otvečat' na ee vopros ( I did not know what to reply to her question) ; Priačodit' li mne k nemu zavtra (lit. To come + Question Marker + to me to him tomorrow?, i.e. Should I call on him tomorrow?}

Mazon adds that if the action about which the
speaker is uncertain is thought of "dans son unité abstraite" a perfective infinitive is used, e.g. *Ja ne znal, čto sdalat*! (I did not know what to do).

c  **Tendance du sujet vers l'action**

A sentence may express the notion that the speaker is striving towards a goal which may not be reached, e.g. *Ved' už vše ravno i privvkat' nado* (It doesn't matter now: one just get used to it) or express the speaker's intention of doing something without referring to the end of the action, e.g. *...otpravilas' lisa dobyvat' priпасов*...(lit. ...set off the fox to get some provisions...). If a perfective infinitive is used in such sentences it expresses, not intention, but "une décision qui va droite à l'achèvement de l'acte et n'en considere pas le développement, e.g. *Ona xorala napisat*! (She wanted to write).

d  **Action prolongée ou complexe**

In sentences which refer to a prolonged or complex action the notion of the "mise en train de l'action verbale" is not as important as the notion of duration, e.g. *Vy u nas ostanetes' obedat*! (lit. You at us will stay to dine, i.e. You'll stay and have dinner with us.) *Emu nuţno bylo ob'iasnjat'sje* (lit. To him necessary was to explain himself, i.e. He had to explain himself).

e  **Action permanente**

The notion of duration is particularly striking when reference is made to actions which are, so to speak, permanent facts of life, e.g. *...rečku v brod pereezhát' nadot* (lit. ...the river at the ford to cross is necessary).

f  **Action prise sur le fait au cours de son développement**

*Za čto ... čestnogo čehoveka običat' izvolite?*
For what ... an honest man to insult you permit yourself?, i.e. Why are you permitting yourself to insult an honest man?)

Sorrow to me was to part from the old man.

...Tiaželo vse eto prinominat' (Lit. Unpleasant all that to recall).

Mite ne xotalos' ob' iasniat'sia (Lit. To Mitja not wanted to explain himself).

Mne umeret' ne strašno, a strašno umirat' (Lit. To me to die not frightening, but frightening to be a-dying).

These sentences, comments Mazon, are concerned with how the subject is affected by the on-going action or process.

(2)a Action réitérés proprement dite

Infinitives often denote a habitual action:

...ugoščat' byl master (lit. ... to entertain (he) was master, i.e. he was excellent at entertaining guests).

On pošital za grez prodavat' xleb (Lit. He considered for a sin to sell bread).

Some sentences express general propositions, e.g.

Čelovek nikogda ne dolžen zabivat' svoe dostoinstvo (Lit. Man never not should forget his worth).

Imperfective infinitives often occur after nouns denoting the skill or habit of doing something or the ability or right to do something, e.g. ... Sobaki ne imejut sposobnost' ulybat'sia (lit. ... Dogs not have the ability
to smile), ...etc...suščestvoimeest...pravo prezirat' menja (...this...creature has...the right to despise me).

b  Action réitérée ramenée à l'unité.

On možet nesti svobodno četvrti pуда (lit. He can carry freely four poods).

On vsegda gotov iditi v teatr (He is always ready to go to the theatre)\(^1\) (p. 320)

(3)  Action généralisée

Mazon uses this label for imperfective infinitives referring to actions which are closely bound up with questions of principle. Such an action appears "comme élargie et comme jusqu'à un certain point généralisée".

- A dlja čego mne otkupat'sia? (lit. - But for what to me to buy myself out, i.e. But why should I buy my freedom (spoken by a serf).

- Začem deševye nokupat'? (lit. For what cheaply to buy? i.e. Why buy cheaply?).

Negative sentences

A negated imperfective infinitive may refer (A) to an action in its on-going, (B) to an action which is forbidden "de maniere prolongee et en sa reiteration possible".

A  Prošu ne rassuždat' (lit. I ask you not to argue).

B  Citatel' pozvolit mne ne peredavat' eva zaikan'ja

(The reader will permit me not to convey his stammering)

Ne kurit' (lit. Not to smoke, i.e. no smoking).

C Negated imperfective infinitives may refer to an "action généralisée" in the sense of 3 above.

On ... staralsja ne obraščat' na niz nikakogo vnimanija (lit.
He ... tried not to pay to them any attention.
On rešilna uzžat′ segodnja ... (He has decided not to leave today...).
...Nikomu nedavat′ lošadı, ... (lit. ... to nobody to give horses, i.e. ... don't give horses to anybody...).

Sentences containing such negated imperfective infinitives accompanied by a noun in the dative case are interpreted as meaning that the action is impossible for the subject to carry out, e.g.

...Ne ostevat′sja xe emu xolostym (lit. Not to remain (Particle) to him unmarried, i.e. He won't remain a bachelor).

Ne rasti trave pozdno osen′ju (lit. Not to grow to grass late in autumn, i.e. Grass doesn't grow in the late autumn.)

Finally, Mazon states that certain words and expressions are capable of strengthening the negation and of "generalizing" the action. Such are: nel′zja (one must not), ne vellju (I do not order...), ne smej(t)e (do not dare...) which express "une interdiction de principe de durée indéterminée plutôt que l'interdiction d'un fait particulier".

...Ne smej soglašat′sja (Don't dare to agree).

Other phrases which "s'appliquent moins à un cas momentane et précis qu'à une situation de durée indéterminée" are: ne nada (not necessary), ne sleduet, ne podobat, ne prixdolisja (one ought not...), ne stoit (it's not worthwhile):
Na nado bylo napominat' (It wasn't necessary to remind me).

There is a third group of expressions, negda, nekogda, nekuda, nečešo, nedijela čego, ne s čego, ne za što, ne k čemu, ne začem, all of which can be translated as "there is no point in (doing such-and-such)", which are always followed by imperfective infinitives as the impossibility to which they refer has "un caractère de permanence on tout au moins de durée indéfinie".

...teper' nedija čego skryvat'sja....now there is no point in hiding...

...i ne za što se blagodørit'....and there is no point her to thank...

The criteria by which Mazon explains the use of infinitives in perfective aspect are whether the infinitive denoted (1) "une action unique considérée dans son achèvement intégral"; or (2) "une action réitérée ramenée à l'unité".

(1) A. A perfective infinitive may denote an action the accomplishment of which is seen as necessarily preceding the accomplishment of second action.

...užasno nevežliivo uṣavit'sia i rassmatrivat' : (It is) terribly impolite to fix your gaze on someone and look them up and down.

B. The speaker may have in mind the result of an action rather than its development. Discussing the example; umirat' - to ne xoćetsja; Pozit xoćetsja (You don't want to die. You want to see a little of life) Mazon says that the imperfective infinitive umirat' expresses "(un)
fait conçu dans son indétermination et comme généralisé" whereas the perfective infinitive expresses "(un) résultat précis et un". Mazon translates Požit' xočetsia as "Tu veux avoir eu ton bon temps". Sentences containing such perfective infinitives may be classified as follows:

a. Sentences expressing volition (a desire, wish, demand, decision, etc.)
Ja vam skazhu, počemu mne ne xočetsia umerat' : I will tell you why I do not want to die.

b. Sentences expressing potentiality.
- tv etogo poniat' ne možesh' : ... You cannot understand this.
-Gde mne uгадат' : lit. Where to me to guess?. i.e. How am I to guess?

c. Sentences referring to actions which are necessary or unavoidable.
Knizi to eti nado sprimat': a to doneat: You must hide these books or they will report you.
A mne ... zagubit' svoju molodost' ... : lit. But to me... to ruin my youth, i.e. I am fated/doomed to ruin the best years of my life...

d. Sentences expressing finality or "tendance vers une action verbale considérée en son résultat".
Ja prišel posmotret', kak vy sebiu čuvstvujete : I have come to see (perf. asp.) how you are feeling.
Vy ... starastes' ... zanijat' menja : You ... are trying to get me occupied with something.
(Ona) položila na okošečko prostudit' : (She) placed it at the window to cool (perf. asp.).
e. Sentences expressing the attitude of the subject towards an action ("expriment la valeur affective de l' action") thought of as an integral whole.

rad by evo sdelat' ... : And I would be glad to do it.
Tjažko budet rasstat'sja s .... tetuškoj : (It) will be hard to part from your aunt.

f. Sentences containing impersonal constructions which refer to the opportuneness or convenience of an action.

... a vse posmotret' stojit : ... but (it) is worthwhile having a look.
...taper' sleduet bol'nuvju v pokoe ostavit' : ...now you must leave the patient in peace.
...Nam pora rasstat'sja : ...(it) is time for us to part.

(2) A repeated action may be thought of as a whole by the speaker, who (a) has in mind the result of the series of actions; or (b) uses one instance of the action as typical of the whole series.

a. Sasa ... vse ce zatei rad ispolnit' : (He) Sasa... is glad to carry out all her schemes.

...Vsjakoe neščast'emožno perenести : ...Any unhappiness can be borne.

Pravdu govorit Štol'c, čto nado zavesti skolu v derevnja : Štol'c is correct in saying that schools must be set up in the countryside.

b. Arkadij Pavlyč liubil ... pri slučae pohalovat' sebja : Arkadij Pavlyči loved ... when the occasion offered, to indulge himself

Ne vesalo voiti nožju v mužickuju izbu : (lit.) (It) is not pleasant to go at night into peasant's hut.
...cha liubili porovorit': ...both liked to
have a chat.

Examples of negated perfective infinitives are:

**Action unique**: Ja mogu emu skazat': I may tell him,
no jamogu i ne skazat' but I may well
not tell him.

**Action ramenée à l'unité**: 
- Ot'ego - že ne skazat'? Why not tell you?
- Ne razobrat', smeetsiali on ili blast: lit. ...
  not to tell whether he is laughing or bleat-
ing, i.e. (It) is impossible to tell.

**Some comments on Mazon's account**

6.1.1

The first comment I would like to make concerning
Mazon's account is that the treatment of perfective infin-
itives under the heading "Action réitérée ramenée à l'
unité" ((1), B a-f) is misleading. The treatment is dec-
ptive in that all sorts of modal factors are introduced
which turn out to have no bearing on whether perfective or
imperfective aspect is chosen, the crucial factor being
whether or not the speaker is thinking of the action "dans
son achèvement intégral". As an example of a sentence ex-
pressing finality or "tendance vers une action verbale"
Mazon gives Gde ongia dobyt'...?(...lit.Where to get fire?),
dobyt' referring to an action "conquè en son résultat et
momentanée". With this he contrasts an example ...stali oni
gorevat', kak im edu dobyvat' (lit... began they to
grieve, how to them food to get, i.e. how they were to get
food), добывать referring to an action 'conquérir en son 
développement'.

In the chapter on imperfective infinitives a number 
of examples are grouped under the heading "Tendance du 
sujet vers l'action". In other words, the same heading 
is used with reference both to perfective and imperfective 
infinities, and the same type of constructions appears 
in both chapters, e.g. imperfective infinitive - ... все 
нели спить чай (everyone went to drink tea); perfective 
infinite - я пришел позавтракать (I have come to see...).
The former example is particularly uninformative, since 
only the form спить (drink) can occur with the form чай 
(tea). (cf. the discussion in 5.2.1).

The one really serious mistake which Mazon made 
was to regard the various modal shades of meaning as 
subordinate to the general semantic criteria which he 
applied to aspect throughout the entire verb system. This 
mistake can be seen especially clearly in his exploration 
of sentences containing нельзя, нечего etc. (cf. the 
section above on negated imperfective infinitives).

An interesting question is why Mazon was able to 
analyse both finite forms in "past" or "present" tense 
and infinitive forms by means of the same general semantic 
criteria. In current transformational grammars of English 
infinities are treated as nominalised verbs. For example 
the sentence He likes to watch football is derived from 
an underlying structure 'He likes it: He watch football'.
It is clear from the diagram that in the superficial sentence the infinitive phrase *to watch football* belongs to the category 'Noun' In many sentences the choice of aspect will be governed by the same criteria which determine the choice of aspect in finite verb forms, that is by whether the structure underlying the infinitive phrase is "being in a state of doing something" or "having gone into, been in and come out of a state of doing something". What I propose to do is examine various constructions containing infinitives in order to see if it is ever the case that the aspect of the infinitive is governed by other factors.

Infinitives dependent on *may*

6.2

The first type of construction I wish to consider is
that in which the various finite forms of \textit{mož'}(can) are followed by an infinitive. Two features of these constructions are particularly important:

(a) Whereas in English one finds such sentences as \textit{John can always tell you what is going on}, in which it is not clear from the word order whether \textit{always} modifies \textit{tell} or \textit{can}, in Russian the order of the constituents must be \textbf{Adverb + mož' + Infinitive} if the adverb modifies \textit{mož'}, e.g. the translation of the above English example, \textit{Džan vsed'ja možet rasskazat', što proiskodit} (lit. John always can tell ...). When \textit{mož'} is modified by an adverb which co-occurs only with verbs in imperfective aspect, the dependent infinitive nonetheless takes perfective aspect. If in the surface structure the dependent infinitive is modified by an adverb like \textit{vsed'ja} (always), \textit{ves'den'} (all day), then the infinitive is in imperfective aspect, e.g. \textit{On možet ves'den' rasskazyvat' ovojne} (lit. He can all day tell about (the) war). In this case the order of constituents is \textbf{Mož' + Adverb + Infinitive}. (The above \textit{if-then} sentence is not to be taken as meaning that the infinitive is to be assigned its aspect by a context-sensitive rule which operates only in the presence of adverbs like \textit{vsed'ja} and \textit{ves'den'}, but simply as a comment on a superficial sentence-pattern in Russian).

(b) Both \textit{can} in English and \textit{mož'} in Russian are ambiguous. The sentence \textit{On možet priiti zavtra} (He can come tomorrow) may be paraphrased as \textit{Vozmožno, što on pridet zavtra} (lit. (It is) possible, that he will come tomorrow), or \textit{Emu dali razrešenie priiti zavtra} (lit. To him they have given permission to come tomorrow - dali,
which is here translated as 'they have given', is non-
definite form, cf. English *they say that...*), or as
On sposoben prijti zavtra (lit. He capable to come to-
morrow - *sposobnyi* means 'capable' in both a concrete and
an abstract sense, e.g. physically capable of lifting a
heavy boulder or capable of making the most outrageous
remarks. This ambiguity may be resolved by using *On v
sostojaniii* (lit. He in state), which means 'he is phys-
ically capable (of lifting a heavy boulder)' but not 'He
has it in him (to make outrageous remarks)').

The facts for English are well documented (cf.
Anderson, 1967, studies referred to therein) but have not,
to my knowledge, been discussed in detail in studies of
Russian. The fact that sentences containing *moż* may be
paraphrased in various ways is of more than passing inter-
est. Consider the following sets of sentences:

1. a. *On ne možet oţvetit' na etot vonros* : He is not
   able to answer this question.
   b. *On možet ne oťvetit' na etot vonros* : He may not
   answer this question.
   c. *On možet ne oťvaţat' na etot vonros* : He may not
   reply to this question.

2. a. *On ne možet priiti* : He is not able to come.
   b. *On možet ne priiti* : He may not come.
   c. *On možet ne prixodit'* : He may not come.

The (a) sentences mean that a person is not able to
carry out a certain action. The negative *ne* immediately
precedes *moż*, the "future tense" form of which is used.
The (b) sentences mean that it is possible that the person
will not do such-and-such while the (c) sentences mean that the person has been given permission not to do such-and-such. In all four (b) and (c) examples the "present tense" third person singular form of moč', možat, is used and the negative comes between možat and the dependent infinitive. The crucial difference is that in the (b) examples the dependent infinitives, onjetit' and priiti, are in the perfective aspect whereas in the (c) examples the dependent infinitives, otextat' and proxodit' are in the imperfective aspect.

The essential features of examples (2) +(3) are as follows:

(1) When moč' has the meaning "be able to" the negative particle ne immediately precedes it. (2) When moč' means 'it is possible that' or 'be allowed to' ne comes between moč' and the dependent infinitive. When moč' means 'it is possible that...' the infinitive following the negative may take either aspect. In the (b) examples above only perfective infinitives occur but one comes across sentences such as On možat ne vsagda popodat' v mšen' (lit. He may not always fall into the target, i.e. It is possible that he will not always hit the target).

When moč' means 'be allowed to', the infinitive following the negative is always in the imperfective aspect. Informants rejected the sentences:

3. *On možat ne proiti kurs po algebri (lit. He may not go through a course on algebra.

4. *Emu razrežili ne priiti na lekciju : Lit. To him they allowed not to come to the lecture and insisted that the perfective infinitives proiti and priiti be replaced by their imperfective forms, proxodit'.
and prixdit' respectively. Unfortunately far less clear cut is the use of aspect in infinitives dependent on možno ('is possible' or 'is permitted') which, like nado, is a superficial adjective occurring only with infinitives and sometimes also with an animate noun in the dative case (cf. footnotes 2, 3).

5 a. Možno li otkryvat' okno?
   b. Možno li otkryt' okno?

Both sentences in (5) mean 'Is it possible to open the window?'. (li is an interrogative particle). They differ only in that the infinitive in (5a), otkryvat', is imperfective whereas the infinitive in (5b), otkryt', is perfective. Some Russians interpret (5a) as "Is it allowed...?" (5b) as "Is it physically possible...?". One informant, however, rejected (5a) no matter what the interpretation of možno.

Obligation and volition

6.2.1

The second type of sentences which come up for discussion are those concerned with obligation and volition. The most common constructions expressing volition are ja xožnu (I want, wish), ja želaju (I desire), mne xočetsja (lit. to me wants), u menja želanie (lit. at me a desire...). In affirmative sentences infinitives dependent on these expressions may take either aspect depending on what the speaker wants to say, whether the speaker presents the action as on-going or as completed, but when these expressions of volition are negated the dependent infinitive is
in imperfective aspect.

6 a. *On ne xočet uexat' domoi: Lit. He not want to
go off home.

b. *Mn ne xoteli ubit' sobaku: Lit. We not wanted
to kill the dog.

c. *U nevo net želanija ostat': Lit. At him not do-
sie v etom gorode. desire to stay in this
town.

Most informants rejected 6a,b,c out of hand, maintaining that the perfective infinitives uexat', ubit' and
ostat'sia should be replaced by the imperfective infinitives nezžat', ubivat' and ostavat'sia respectively.

One informant, however, was ready to accept sentences
in which ne xočat, ne xočo etc. (but not net želanija) were
followed by perfective infinitives. For instance she
accepted the sentences in (7) without any reservations.

7 a. Ja ne xoču zakurit' tak kak ploxo sebia
čuvstvuju: lit. I not want to smoke since
bad myself I feel.

b. Ja ne xoču obidet'vas: I not want to offend
you.

Zakurit' and obidet' are the perfective infinitive
forms of the verbs 'to light up' and 'offend'. The imper-
fective forms are zakurivat' and obizat'.

The informant was not quite so willing to accept the
sentences in (8).

8. a. Oni ne xotiat' narexat' v druguiu kvartiru:
Lit. They not want to move into
another flat.
b. ?Sekretar' ne xočet vziat' na sebia takie obiazannosti : lit. The secretary not wants to take on himself such duties.

Although not condemning outright the perfective infinitives pereezat' and vziat', the informant did say that the imperfective infinitives pereezžat' and brat' were "better". Curiously enough, this was the same informant who rejected možno li otkryvat' okno? (Is it possible to open the window?) even if možno means 'Is it permitted?'.

The most plausible solution is that there are as far as the modals možno, xotet' are concerned, two varieties of Russian and that in one of them, namely that spoken by this particular informant, the aspect of infinitives dependent on ne xotet' seems to depend on the actual lexical item.

The most common expressions of obligation are nado and dolžen. Nado, as was argued in footnote 2, is an adjective which modifies only infinitive phrases and occurs with animate nouns in the dative case. Dolžen is the masculine singular form of an adjective derived from the noun dolg (duty). The feminine and neuter singular forms and the plural form are, respectively, dolžna, dolžno and dolžny. (N.B. Dolžen, dolžna etc. are not short forms of dolžnyi, meaning 'necessary', 'due'). Dolžen, etc. occur only predicatively and the nouns modified by this adjective are always in the nominative case. Dolžen has the meaning of moral obligation or duty, which a person may ignore, whereas nado means external obligation which leaves a person no choice. Ja dolžen is translated as 'I ought to,
I am to', \textit{Mnenado} as 'I must (= It is necessary for me to...').

The following examples illustrate the use of \textit{nado}

9. a \textit{Saša, avtobus otojdi čez}: Sasa, the bus leaves in five minutes. You must choose a jacket (spoken by someone in a shop)

b \textit{Knigi \textit{nado sdavat'}}: lit. Books (you) must return always in time to the library.

c \textit{Nado čašče zagljajivat'}: lit. (You) must more often look into the dictionary.

In 9a the infinitive, \textit{vybrat'}, is perfective; in (9b) the infinitive, \textit{sdavat'}, is imperfective. The difference in aspect would probably be accounted for in traditional grammars by indicating that (9a) refers to one particular act, whereas (9b) refers to a general procedure.

This observation is correct, but is not an exhaustive description of the meaning of (9a) and (9b). Even more important is the fact that Russians interpret (9a) as an imperative and (9b) as a general statement that something is necessary. These interpretations come out more clearly in the reaction of informants to the following sentences.

\textit{Zavtra vsem nam \textit{nado rano}: lit. Tomorrow to all necessary early to set off. Necessary right now to go to bed.}
The informants said that the perfective infinitive *uexat'* should be replaced by the imperfective infinitive *uэзат'*.

11 U vas slahoe zdorov'e. *Nado* : lit. At you weak health. Necessary to buy a warm coat.

The informants said that the imperfective infinitive, *nokupat'*, was incorrect and should be replaced by the perfective infinitive, *kupit'*.

These comments on (10) and (11) accord with my own feelings about these sentences, and also with the intuitions of my informants, namely that (10) is an imperative, (11) a general statement about a particular necessity. Another informant, commenting on (12):

12 U tebia ne polučilos'. : lit. At you not succeeded. *Sovetovat'sia nado* To ask advice is necessary.

said that it expressed the assertion of a principle rather than a command to carry out a specific act.

The interpretations of sentences with *nado* have been described, but there still remains the problem of providing these interpretations with sources in the deep structure. That the problem is not straightforward is shown by (9c), which could be taken either as an imperative or as a statement, although *nado* is followed by an imperfective infinitive. This problem will be taken up in the theoretical discussion which follows the presentation of the data.

*Dolžen* may be followed by an infinitive in either aspect. *Dolžen*, of course, differs from *nado* in that it
does not occur in imperative sentences.

The really interesting data involve the use of aspect in infinitives dependent on negated *nado* and *dolžen*, that is on expressions like *mne ne nado*... (to me not necessary...) and *ja ne dolžen*... (I not ought...). After *ne nado* (and its synonyms *ne mužno* and *nel'zja*) infinitives are always in imperfective aspect. The starred sentences in (13) contain perfective infinitives and were rejected by informants.

13. a. *Ne nado vypit' srazu že* : lit. Not necessary to drink up immediately all the bottles of beer.

       vse butylki piva

b. *Ne nado poexat'.* : lit. Not necessary to set off. There's a storm brewing up.

       Sobiraetsia burja.

c. *Emu ne nužno vypit' ves' limonad* : lit. To him not necessary to drink up all the lemonade.

d. *Ostat'sia nel'zia.* : lit. To stay not necessary. There's going to be an explosion.

       Budet vzryv.

Although the phrases *ne nado*, *ne mužno* and *nel'zja* are translated above as 'not necessary', they have a strong modal meaning and are more idiomatically translated as 'He must not', 'You must not', etc. *Nel'zia* is a special case, since it may mean either 'must not' or 'is impossible'. In (13d) it has the former, modal, meaning
and the infinitive following it is imperfective. When
nel'zja means 'is impossible' the infinitive dependent on
it may take either aspect but is usually perfective unless
it derives from an underlying structure containing the
features [+Durative] and/or [+Habitual], or from a struct-
ure dominated by a stative or static S.

Tuda nel'zja vxodit', with an imperfective infinitive
vxodit', means 'In there (you) must not go'. Tuda nel'zja
voiti, with a perfective infinitive voiti, means 'In there
is impossible to go'. An informant rejected the following
sentence containing an imperfective infinitive: On tak
raduetsia, čto nel'zja vyražát' slovami evo čuvatva (lit.
He so is glad, that impossible to express in words his
feelings.)

Ne dolžen also has two meanings, a 'strong' modal one
'ought not to...' and a 'weak' modal one, 'is not supposed
to'. If ne dolžen has the modal meaning the infinitive
dependent on it is always in the imperfective aspect. If
ne dolžen had the non-modal meaning the infinitive depend-
ent on it may take either aspect.

14  a. Vy ne dolžny vmešivat'sja : lit. You not ought
to interfere in
v čužie dela
other people's
affairs.

b. On ne dolžen prixodit' : lit. He not ought
to come.

    sevodnja

c. On ne dolžen priti : lit. He not supposed
to be coming today.
    sevodnja

The infinitives in (14a,b), vmešivat'sja and prixodit',

289
are imperfective; the infinitive in (14c), prijti, is perfective.

Possibility

6.3 Before introducing further data I wish to discuss briefly the problems involved in handling the above examples in a generative grammar of Russian. The first problem concerns the various meanings of moč' (cf. pp. 280-283). Two solutions immediately suggest themselves. Either (a) moč' appears in three lexical entries, there being a separate entry for each of the meanings 'is capable', 'is possible', 'is allowed'; or (b) moč' is treated as a purely superficial element which is substituted by various lexicalisation rules (cf. Anderson, 1968a) for the predicators ...sposoben...(is capable), ...vozmožno...(is possible), ...razrešaetsia...(is allowed). Solution (b) is preferable to solution (a) in that the grammar will have to generate these various strings anyway; and the same restrictions apply to these strings as to moč'. When moč' means 'is allowed to', the infinitive in the string moč'-ne-Infinitive is always in imperfective aspect. If the verb razrešit' is used instead of moč' in this sequence, the infinitive is also always imperfective, e.g. On možet ne mežžat' (He may not go away) and Emu razrešili ne mežžat' (To him they have allowed not to go away). When moč' means 'is possible
that', the infinitive in the string moč'-ne-Infinitive may be either perfective or imperfective. If vozmožno, što (is possible that) + Clause is used, the verb in the clause may be perfective or imperfective, e.g. On možet ne priiiti (He may not come), Vozmožno, što on ne pridet (It is possible that he will not come) - priiiti and pridet both being perfective; On možet ne vsedna nonadat' v mišen' (He may not always hit the target), Vozmožno, što on ne vsedna budet nonadat' v mišen' (It is possible that he will not always hit the target) - nonadat' and budet nonadat' both being imperfective.

Solutions (a) and (b) are both weakly adequate in that they permit the formulation of rules which will generate the required sentences. They fail, however, in that they do not explain why it is that moč' can have these three meanings. The first step towards a strongly adequate solution is to take several other factors into consideration.

1. Like the 'subjects' of stative verbs such as know, believe, etc., the 'subject' of moč' is not an agent, and moč does not refer to an action but rather to a state:

2. Common to all the meanings of moč' is the component 'possible' - an action may be possible because the person performing it has certain abilities or because the circumstances are appropriate or because someone has given permission for the action to be performed:

3. There is a superficial predicator možno which is used both in sentences like možno pročest' etu knigu v dva časa (It is possible to read this book in two hours)
and in sentences like 

Možno otkryt' okno (It is permitted to open the window).

Ideally, the best hypothesis would be that which accounted for all the factors mentioned in the previous paragraph and also for the paraphrase relationship holding between such sentences as On možet ne priiti and Vožmožno, čto on ne priдет. I intend to go for the most general hypothesis possible, that is, I will attempt to postulate a single underlying structure from which all the superficial sentences derive.

The clue seems to me to lie in the component 'possibility' which is present in all the meanings of mož'. I wish to suggest that the category Predicator in the deep structure be marked as [+Modal] or [-Modal]; that if Predicator is marked [+Modal], it may then be assigned another feature, [+Possibility], and that [+Possibility] be linked with other features which indicate whether the possibility derives from physical or mental capabilities, from favourable circumstances, or from someone else's permission. The most appropriate Russian word for glossing this Predicator is možno (possible). The obvious objection is that možno never appears in the surface structure of Russian when the possibility derives from a person's physical or mental capabilities but that in this case the appropriate finite form of mož' is used.

The full underlying structure would be DAT-PRED-NOM, which can be glossed as emu možno. This structure, from which sentences containing forms of mož' are to be derived, captures the fact that mož' refers to states rather than
actions. The objection mentioned at the end of the previous paragraph I wish to answer by postulating an obligatory process of topicalisation which takes place when the Predicator, already marked \([+\text{Modal}]\) and \([+\text{Possibility}]\), is assigned the feature which indicates that the possibility derives from someone's physical or mental capacity. It is not implausible to argue that possibility deriving from appropriate circumstances or permission granted comes to a person, whereas possibility deriving from someone's abilities comes from within that person. To express this idea in other terms: with the latter type of possibility the person concerned plays a more 'active' role compared with the 'inactive' roles connected with the former types of possibility. This process of topicalisation is reflected in the grammar of Russian by rules which assign the Predicator the feature \([+\text{Verb}]\) and realise DAT as a nominative case form. The process can be interpreted as an attempt to indicate the more 'active' role of the subject "by analogy", all \([+\text{Active}]\) Predicators being realised as verbs in Russian. This seems to be the same process of topicalisation which was invoked in Chapter One to explain the paraphrase relationship between \textit{mne izvestno} (to me is known) and \textit{ja znaju} (I know). The realisation of the DAT-PRED-NOM structure ('to him is possible' (because someone has given permission or because the circumstances are appropriate)) can also be accounted for by appealing to topicalisation.

Of course, these suggestions are extremely speculative, there being no experimental evidence either for or against
the postulated distinction between 'active' and 'inactive' types of possibility. On the other hand, to me as a native speaker of English the suggestions seem very plausible, especially since they capture the intuition that various types of possibility are involved. The suggestions seem even more plausible for Russian, which has only the one root, moţ (ignoring morphophonemic variations), compared with the English can and may. I propose, then, to proceed on the assumption that these suggestions, though speculative, are accurate. The assumption I take to be justified, for the time being, by the plausibility of the proposed underlying structure and by the fact that they enable me to use the most general hypothesis possible.

The structure underlying On moţet priiti na lekciin (He may come to the lecture, i.e. it is possible that he will come to the lecture) is approximately that shown in Fig. 28:

![Fig. 28](image)

It should be noted that the feature [+Modal] leads to the generation of more structure which can be glossed either as 'He be in state: He come to lecture' or as
'He go into, be in and come out of state: He come to lecture'. The underlying structure shown in Fig. 28 may be realised in various ways:

1. The DAT-PRED dominated by $S_1$ are realised as emu možno, the PRED dominated by $S_3$ is nominalised, giving the infinitive priiti (perfective because of LOC [+Ingressive], [+Egressive] dominated by $S_2$) and LOC is realised as na lekciju;

2. Depending on which suggestion is adopted, one can say either that recategorisation or topicalisation takes place. If recategorisation, PRED dominated by $S_1$ is marked +Verb and DAT is changed to AC, which is realised with a nominative case form, thus on možet. As in (1), PRED dominated by $S_3$ is nominalised;

3. The structure dominated by $S_3$ is realised as on priidet na lekciju. The PRED dominated by $S_1$ is realised as -mož-, to which are added the prefix voz-, the suffix -n, giving vozmožn-, to which is then added the third person singular neuter ending -o, producing vozmožno. N in the string K + N dominated by NOM in $S_1$ may be realised as to (it) or may not be realised at all. In either case, čto (that) is inserted before on priidet na lekciju in order to indicate that this string has the status of a noun, of which vozmožno is predicated. The possible surface structures are To, čto on priidet na lekciju, vozmožno, čto on priidet na lekciju vozmožno and Vozmožno, čto on priidet na lekciju, the last variant being the most frequent.

(Vozmožno differs from možno as follows. Whereas možno is a unique form, vozmožno is the third person sing-
ular neuter form of an adjective *v*o*z*moż*o*nij*, which in predicate position agrees in number and gender with the noun it modifies, and in attributive position agrees in number, gender and case with the noun it modifies, e.g.

*V*o*z*mož*o*nij* is*xo*đ dele* : The possible outcome of the affair,

So *v*sej *v*o*z*mož*o*nj *sa*ri* : With all possible seriousness,

Tak*o*j is*xo*đ *v*o*z*możen* : Such an outcome is possible.)

One final word needs to be added concerning the fact that *On mož*et *p*riti na lek*ca*j j*u* may be paraphrased as *Emu razreša*ć*a*j... (To him is allowed...) I wish to suggest that *razrešat'* (to allow) be regarded as a purely superficial item which realises a structure 'cause *X* to be in a state such that to *X* is possible to do something'.

Thus, the structure underlying *Emu razreša*ć*a*j is:

![Diagram](image)

This structure may be glossed as, for example:'*X* is in a state: *X* causes it: *Y* be in a state: To *Y* possible' [+Causative], like [+Modal], brings about the generation of strings identical with the possible topmost strings,
i.e. NOM-LOC [+Ingressive] or NOM-LOC [+Ingressive][+Egressive].

Obligation once more

6.4

It was mentioned above that sentences containing nado followed by a perfective infinitive are understood as imperatives, whereas sentences containing nado followed by an imperfective infinitive are understood as statements. The question which has to be decided is whether or not the notion of 'illocutionary force' (cf. Chapter Four) must be used to explain the different interpretations. That is, is the former set of sentences, the imperatives, to be derived from underlying structures containing an element 'I command you' and the latter set, the statements, from underlying structures containing the element 'I state'? This solution involves one serious difficulty; although it makes sense to talk of a sentence like Wash the car as deriving from a structure I command you: You wash the car, it does not make sense to talk of a sentence like Yam nado kupit' pal'to (To you necessary to buy a coat) as deriving from a structure I command you: To you necessary to buy a coat.

One can state that something is necessary but one cannot command that something is necessary.

On the other hand, the illocutionary element 'I command you' and the phrase 'to you is necessary' are semantically similar in that both refer to obligation. They dif-

297
er in that the illocutionary element makes specific the source of the obligation, whereas the phrase 'to you is necessary' does not. It seems to be that the same semantic interpretation can be arrived at by different paths - in this case sentences are interpreted as having an imperative meaning both when they have an illocutionary element 'I command you' and when they contain a modal word denoting obligation. The superficial forms of the two types of sentence are different, of course, the former containing an 'imperative' form of the verb and (usually) no overt subject, the latter consisting, in Russian at least, of an animate noun in the dative case and an adjective (in the case of nado and nūţno) or an animate noun in the nominative case and an adjective (in the case of dolžen).

One objection which might be made to the preceding explanation is that only sentences in which nado was followed by a perfective infinitive were said by the informants to be imperatives, while sentences in which nado was followed by an imperfective infinitive were said to be statements or assertions of a (general) principle. I would suggest that the different reactions are caused by a difference in intensity. There is a particular urgency in sentences whose deep structure contains "I command You" and there is a similar urgency about sentences in which nado is followed by a perfective infinitive, the urgency being connected with the completed action structure underlying perfective forms. This urgency is lacking in sentences containing nado followed by an imperfective infinitive.
(The different 'feel' of nada + perfective infinitive as opposed to nada + imperfective infinitive is conveyed by the English I must get this room tidied as opposed to I'll have to be getting this room tidied.)

A third problem which requires some theoretical discussion is the use of aspect in infinitives dependent upon nel'zia and ne dolžen. Each of these forms has two meanings, one strongly modal, the other weakly modal. From now on the "modal" and "non-modal" meanings will be referred to as the (a) and (b) meanings. Nel'zia with its (a) meaning, is usually considered to have the force of ne nada (not necessary); with its (b) meaning to have the force of neвозмоžno (impossible). Both these meanings are concerned with impossibility: the former meaning has to do with the impossibility of an action because it is forbidden by someone or by some ethical law; the latter meaning has to do with the physical impossibility of doing something.

The (a) meaning of ne dolžen has to do with a moral obligation not to do something. The (b) meaning of ne dolžen does not lend itself to analysis as easily as the (b) meaning of nel'zia. It is clear, however, that ne dolžen in its (b) meaning has to do not with obligation not to do something but rather with being not obliged to do something. To put it more accurately, it has to do with being not obliged by the circumstances to do something. When someone utters the sentence Poed ne dolžen opazdat' (The train not ought to be late - opazdat' is a perfective infinitive) what the listener understands is that nothing
has happened which might delay the train. I propose, for the purpose of discussion, to use the feature [+Subjective] to distinguish between the (a) and (b) meanings of nel'zja and ne dolžen, the (a) meaning being designated as [+Subjective], the (b) meaning as [-Subjective]. With regard to [+Possibility], [+Subjective] might be taken as referring to permission granted by someone, [-Subjective] might be rewritten as [+Internal], referring to a person's abilities, or as [+External], referring to appropriate circumstances. The rules might look approximately thus:

\[
\begin{align*}
+\text{Modal} & \rightarrow \left\{ \begin{array}{l}
+\text{Necessity} \\
+\text{Possibility} \\
+\text{Obligation} 
\end{array} \right. \\
\left\{ \begin{array}{l}
+\text{Possibility} \\
+\text{Obligation} 
\end{array} \right. & \rightarrow -\text{Subjective} \\
+\text{Possibility} & \rightarrow -\text{Subjective} \rightarrow \left\{ \begin{array}{l}
+\text{External} \\
+\text{Internal} 
\end{array} \right.
\end{align*}
\]

It is clear that in certain cases the aspect of the "infinitive" is governed by certain combinations of features. To be precise, the infinitive is in the imperfective aspect if the Predicator on which it depends is:

(1) +Modal, +Neg, +Necessity (ne nadu, ne nužno);
(2) +Modal, +Neg, +Possibility, +Subjective (nel'zja);
(3) +Modal, +Neg, +Obligation, +Subjective (ne dolžen).

A technical problem

6.4.1

This conclusion raises one important problem. In
Chapter Three of 'Aspect' Chomsky proposes that transformations apply cyclically to generalised Phrase Markers, beginning with the most deeply embedded Phrase Marker. That is, given the English sentence I met the boy who was examined by the doctor, which derives from the underlying structure shown in (30)

```
NP  \\  
  | \  |
  N  \  
   |  
  PAST

S1
```

```
S2
NP
  | 
  det
   | 
  n
    | 
  the

```

Fig. 30

the grammar would start by running through the set of transformation rules to find out which ones can apply to $S_2$. Having applied to $S_2$ whatever T-rules it can, the grammar would then run through the set of transformation rules to find out which ones can apply to $S_1$.

Generalised Phrase Markers are formed by allowing the same set of base (phrase-structure) rules to apply again and again. This recursive property is imparted to the base rules by allowing $S$ to appear on the right-hand side of certain rewrite rules. The relative clause in (30) is introduced by rule NP $\rightarrow$ Det - N - S.

Whether one is using the type of deep structure suggested in Chapter Two of this dissertation or whether one is using the type of deep structure proposed by Chomsky, the same problem arises in the derivation of the
sentence Ne nado pisat' pis'mo (Not necessary to write a letter). This sentence derives from two underlying sentences; the sentence underlying pisat' pis'mo (to write a letter) which is embedded in the sentence underlying Ne nado (Not necessary). The sentence Ne nado pisat' pis'mo can be understood in two ways. If X asks Y, Čto vy delaete? (What are you doing?), and Y replies, Ja nǐnu pis'mo (I am writing a letter), then X might say Ne nado pisat' pis'mo (It's not necessary to write a letter), meaning 'It is not necessary for you to be writing a letter). On the other hand, if X asks Y, Čto vy delaete? (What will you do?) and Y replies, Ja nanišu pis'mo (I will write a letter), then X might say, Ne nado pisat' pis'mo, meaning 'It is not necessary for you to carry out and complete the writing of a letter'. In terms of the deep structure proposed in Chapter Two, Ne nado pisat' pis'mo can mean either 'It is not necessary to be in a state of writing a letter' or "It is not necessary to go into, be in and come out of a state of writing".

The problem is whether or not the structure underlying pisat' pis'mo should be generated in full. In Chomsky's model this would mean marking the verb as

Perfective or Imperfective, in the model presented in Chapter Two this would mean generating the appropriate string, NOM - LOC [+Ingressive], or NOM - LOC [+Inressive] [+Egressive]. In Chomsky's model, the transformational rule which ensures that the infinitive dependent on certain negated modal predications is in imperfective aspect would have either to leave [+Imperfective] unchanged or substit-
ute [\textit{Imperfective}] for [\textit{Perf ective}]. In the model suggested in Chapter Two this transformational rule would have to delete whatever locative structure had been generated and assign [\textit{Imperfective}] to the Predicator. That is, it would apply, e.g., to the structure

\begin{center}
\begin{tikzpicture}
  \node (s) at (0,0) {	extit{Pred}};
  \node (s1) at (-2,1) {\textit{Nom}};
  \node (s2) at (-2,2) {\textit{Loc}};
  \node (s3) at (1,2) {\textit{Pred}};
  \draw (s1) -- (s) node [midway, left] {\textit{Nom}};
  \draw (s2) -- (s) node [midway, left] {\textit{Loc}};
  \draw (s3) -- (s) node [midway, right] {\textit{Pred}};
\end{tikzpicture}
\end{center}

Fig. 31

and transform it into (32)

\begin{center}
\begin{tikzpicture}
  \node (s) at (0,0) {	extit{Pred. \textit{Imperfective}}};
  \node (s1) at (-1,1) {\textit{S}};
  \node (s2) at (-2,2) {\textit{S}};
  \node (s3) at (1,2) {\textit{Pred. \textit{Imperfective}}};
  \draw (s1) -- (s) node [midway, left] {\textit{S}};
  \draw (s2) -- (s) node [midway, left] {\textit{S}};
  \draw (s3) -- (s) node [midway, right] {\textit{Pred. \textit{Imperfective}}};
\end{tikzpicture}
\end{center}

Fig. 32

The mechanism required to transform (31) into (32) may seem cumbersome but it does have certain advantages:

1. In general, the locative deep structure provides more insights than the use of features such as [\textit{Perf ective}] and [\textit{Imperfective}]:

2. As was pointed out above, sentences like Na \textsc{nado} pisat' pis'mo have two interpretations. By first generating the locative structure and then deleting it an explanation is provided for these possible interpretations.

3. By introducing a separate feature [\textit{Imperfective}], the transformational rule captures the fact that
in the sentences *On obeszal pisat' kazdy den* (He promised to write each day) and *Ne nado pisat' pis'mo* the imperfective infinitives have different sources, the former deriving from an underlying locative, the latter marking the presence of a negated modal.

Some phrases modal and non-modal

6.5

There are a number of words and phrases which are not usually classed as modals but whose meaning, when they are negated, is closely linked with the modal terms of obligation, necessity and volition. Moreover, any infinitives dependent on these negated words are in the imperfective aspect.

There are, first of all several expressions which are paraphrases of *ne nado : ne k ceemu* (lit. Not to what), *nezaqem* (lit. not for what), *necego* (nothing).

(22)a *Ne k ceemu kupit' staruiu* : lit. not to what *masimu* to buy an old car.

b *Ne k ceemu prodavat' dom* : lit. Not to what to sell the house.

c *Ne ceego sprsot' ego* : Lit. Nothing to ask him.

d *Ne ceego pisat' emu pis'mo* : lit. Nothing to write to him a letter.

The starred sentences are unacceptable because they
contain perfective infinitives, *kunit'* and *spravit*', instead of the imperfective infinitives, *pokupat'* and *spravit*. These phrases may be used in a non-modal meaning, in which case the infinitive is in the perfective aspect:

(23)a *Ne k to prislomit'sia* : lit. No to which to lean against, i.e. There is nothing to lean against.

b *Mne nočego skazat' emu* : lit. To me nothing to say to him, i.e. I have nothing to say to him.

Mazon asserts that the imperfective infinitive is used after these expressions when they refer to a permanent or indefinitely long impossibility or interdiction, and that the perfective infinitive is used when the speaker has in mind a unique and precise act. In fact, imperfective infinitives are used if the expression has a modal meaning, perfective infinitives if the expression has a non-modal meaning.

Secondly, these are expressions which are not paraphrases of *ne nado* but which are always followed by imperfective infinitives. Among such expressions are:

*Ne stoit* (is not worthwhile), *ne naneran* (do not intend), *žal* (is a pity), *vrede* (dangerous), *skučno* (boring), *nenrijatno* (unpleasant), *xvatit, budet* (enough), *ja čitaju ližnìm...* (I think it superfluous to...)

(24)a *(Ne stoit prosñitat' etu knize* : It's not worthwhile reading through this book.

(Must be : *Ne stoit prosñityvat'*...)
b *Ja ne nameren zai'ti k vam*: I do not intend
   calling on you.
   (Must be: *Ja ne nameren zao'dit' k vam*)

c *Mne žal' uexat' otsiuda*: lit. To me regret to
   leave here, i.e. I am sorry/loth to leave here.
   (Must be: *Mne žal' uezžat' otsiuda*)

d *Vredno provesti takoi opyt*: lit. Dangerous to
   carry out such an experiment.
   (Must be: *Vredno provodit takoi opyt*)

e *Mne skučno napisat' emu pis'no*: lit. To me
   boring to write him a letter.
   (Must be: *Mne skučno pisat'...*)

f *Mne neprijatno rasskazat' emu etu novost*: lit.
   To me unpleasant to tell him this news.
   (Must be: *Mne neprijatno rasskazyvat'...*)

g *Xvatit vam kunit' knizi*: lit. Enough to you to
   buy books, i.e. Enough of buying books.
   (Must be: *Xvatit vam pokupat' knizi*)

h *Ja sčitaju lišnim prodat' dom*: lit. I consider
   superfluous to sell the house.
   (Must be: *Ja sčitaju lišnim prodavat' dom*)

From 2^4a,d,g and h the listener can infer that the
speaker considers the action unnecessary: from 2^4b,c,e
and f the listener can infer that the speaker does not
want to carry out the actions. In terms of semantic
components one can say that the meaning of these expres-
sions "includes" (:+Modal) Neg, and Necessity/Volition and
that it is these components which cause the dependent infin-
itive to be in the imperfective aspect. Until the role of semantics in a grammar has been thoroughly investigated, one can provide only an intuitive explanation and indicate that it is not yet known how these insights are to be captured by a generative grammar of Russian.

Thirdly, there are interrogative sentences in Russian which contain perfective infinitives, e.g. *komu dat' den'gi?* (lit. To whom to give the money? i.e. To whom am I to give the money?), *Nalit' tebe ešče čaju?* (lit. To pour you more tea?, i.e. Will I pour you more tea?) Such sentences can be accounted for by postulating the underlying structures *Mne nado komu dat' den'gi?* (To me necessary to whom to give the money?) and *Dolžen lija nalit'...?* (Am I to pour...?). Suitable underlying structures cannot be so easily postulated for the following interrogative sentences:

(25)a  *Začem davat' emu den'gi?* : lit. Why to give to him money?

b  *Čego rasskazyvat' emu vse podrobnosti?* : Why tell him all the details?

(26)  *Rasve on imeet pravo prodavat' dom?* : Does he really have the right to sell the house?

Sentences (25) - (26) would be unacceptable if the imperfective infinitives *davat', rasskazyvat' and prodavat'* were replaced by their perfective counterparts, *dat', rasskazat' and prodat'. The crucial feature of these examples is that in each case the speaker presupposes that the answer will be in the negative and, more importantly, that the answer will be, or will imply, *Ne nado davat' emu...*
den'gi (Not necessary to give him money), Ne nado rasakzyvat' emu vse podrobnosti (Not necessary to tell him all the details), Emu ne nado prodavat' dom (To him not necessary to sell the house). 5

R. Lakoff has noticed a similar phenomenon in English in connection with the use of some - any. If someone asks 'Do those men want any work?', that person presupposes that the men do not want work. If, however, someone asks 'Do those men want some work?', then that person presupposes that the men are looking for work. In my speech, these two sentences would have different patterns of intonation and stress. The latter, with some, would have normal interrogative intonation but the former, with any, would have a heavy stress on want and a rise in intonation. In Russian, too, the sentences Zayem davat' emu den'gi? and Vy davali emu den'gi? (Did you give him money?) have different intonation patterns. As R. Lakoff says, generative grammars cannot at present handle such phenomena as presuppositions and it does not seem likely that they will ever be able to deal with them elegantly.

The problem of presuppositions is complicated by such sentences as:

(27) Ne nado li vam pal'to kunit'? : Don't you need to buy a coat?

Normally one would expect an imperfective infinitive after ne nado, but in (27), after ne nado and the interrogative particle li there is a perfective infinitive. The point is that (27), which is negative and interrogative in form, is really a polite way of asserting that it is
necessary to buy a coat. In other words, although the speaker is asking a question he presupposes that the answer will be in the affirmative, and this presupposition is marked by the perfective infinitive kupit'.

Negated infinitives

6.6 The problem of unspoken thoughts crops up in a slightly different guise in connection with the use of aspect in infinitives directly negated by ne. After verbs such as prosit' (ask), sovetovat' (advise), rešit' (decide), dat' slovo (give one's word), obiazat'sia (pledge oneself to), pokliast'sia (give one's oath that...) an infinitive directly negated by ne is in the imperfective aspect. If the ne directly negates the finite verb, the infinitive may take either aspect.

(28)a  Ja sovetoval emu ostat'sia doma: I advised him to stay at home.

b  Ja ne sovetoval emu ostat'sia doma: I did not advise him to stay at home.

c  Ja sovetoval emu ne ostavat'sia doma: I advised him not to stay at home.

(29)a  Strana rešila kupit' rakety: The country decided to buy rockets.

b  Strana ne rešila kupit' rakety: The country did not decide to buy rockets.
c Strana rešila ne pokunat': The country decided not to buy rockets.

In the (a) and (b) sentences in which either there is no negative or the negative applies to the finite verbs, sovatoval and rešila, the infinitive is perfective. In the (c) sentences, however, the infinitives, ostavat'sia and pokunat' are imperfective because the negative applies directly to them. Infinitives in such sentences are imperfective no matter whether they refer to a single event or to a series of events, cf. Ja rešil ne posylat' pis'mo včera a sevdenja (I decided not to send the letter yesterday but today — yesterday and today are adjuncts to send, not decide). The problem of ensuring that infinitives in such sentences are imperfective is easily solved. Suppose a sentence like (29c) has an underlying structure (I gloss it in English for convenience):

![Diagram](image)

Fig. 33

When NEG is in S₂, the infinitive which is the superficial realisation of buy is in the imperfective aspect. If NEG is in S₁, that infinitive may be in either aspect. When NEG is in S₂ in the verb-dependency model outlined in
Chapter Two it 'triggers off' a transformational rule which deletes the locative structure and assigns the feature [Imperfective] to the Predicator (cf. Figs. 31, 32).

After some verbs an infinitive directly negated by ne is imperfective only if it refers to being in a state of doing something. Otherwise it is perfective. Such verbs are stremit'sia (strive), starat'sia, probovat' (try), xotet' (want)

(31)a Ja staralsia ne uronit': I tried not to drop stakan the glass.

b Ja postarajus' ne skazat': (lit) I will try not emu rezkosti to say cutting things to him.

c On stremitsia ne obidet': He is striving not ee to offend her.

All these examples contain perfective infinitives, uronit', skazat' and obidet'. When asked to evaluate the following sentences, in which a choice of aspect is given, informants said that either aspect was possible depending on whether the infinitive referred to a long continuous action or to a completed action. (The imperfective aspect is given first)

(32)a Oni postarajutsia ne : They will try not to poddavat'sia/poddat'sia yield to his persuasions.
evo vogovoram

b Staraites' ne ususkat'/: Try not to let the unusit' prestupnika criminal out of your iz vidu sight.

311
When asked to evaluate the sentences (33) informants either rejected outright the sentences with perfective infinitives or said that the imperfective infinitives were "better".

(33)a My obiazalis' ne pronuskat': We have pledged pronustit' etu lekciju ourselves not to miss this lecture.

b Oni dali slovo ne prodavat': They gave their prodat' etot starvijdom word not to sell this old house.

Now, it is not difficult in principle to write rules which will generate all and only the correct sentences in (28) - (33). One need only ensure that the transformational rule which deletes the locative structure and assigns the feature \( [\text{Imperfective}] \) operates only when certain lexical items, such as rešit', prosit', dat'slovo, are present.

There is some evidence, however, that the facts are far too subtle to be captured by such a crude rule. Some informants commented that the perfective aspect is used when the speaker is uncertain that he will succeed in carrying out an act or if the speaker is afraid that an act will take place which he feels is undesirable. The expressions obiazat'sja, dat'slovo, rešit' are certainly much more positive than probovat' stremit'sja but one might be inclined to dismiss the informants' comments as too subjective, not based on testable evidence. Such a dismissal would be premature, because there is other evidence available.

a) The English sentence I fear I may not find him at home
is translated into Russian as *Boiuts' ne zastat' evo doma* (lit. I fear not to find him at home). He is always afraid he may not get into the library because there are so many people there is translated as *On vsegda boitsia ne popast' v biblioteku, tak kak tamocen' mnogo narodu* (lit. He always fears not to get into the library...). In the Russian there is no discrete superficial morph corresponding to the English *may*, but the dependent infinitives, *zastat'* and *nopast'* are in the perfective aspect, although they are directly negated by *ne*.

The above sentences refer to actions which the speaker fears he himself may not be able to perform but which he would like to perform. The feeling that an act is undesirable can be expressed in an even more obvious fashion when the speaker is talking about an act which he thinks undesirable but which he fears may be performed by someone else or about an undesirable state of affairs which he fears may arise. In English one can say *They fear that he will find out* or *They fear that he may find out*. From the latter sentence one can infer with certainty that 'they' hope that the finding out will not take place. The former sentence is translated into Russian as *Boiatsja, cto on uznaet* (They fear that he will find out), but the latter sentence is translated as *Boiatsja, kak by on ne uznal*. (*By* is a "subjunctive" particle, *uznal* is the past tense, third person singular masculine form of the verb *uznat'*; *to find out*. Combinations of *By* + past tense forms are used in the protasis of conditional sentences - *esli by on kupil masinu* (if he bought the car, *esli* = 'if') -
and is the apodosis - *ja by dal emu sto rublej* (I would give him a hundred roubles). An interesting feature of this sentence is that *uznal* is perfective.

b) Even more interesting is the fact that the clause following b)bojats1a, *kak by on ne uznal*, is identical in form with optative sentences in which the speaker expresses a wish concerning someone else, e.g. *Kak by načal' stvo ne uznał obo etom* (Would that the boss didn't find out about this). In such sentences only perfective aspect is possible cf. *Kak by on ne prodaval knigu* (Would that he did not sell the book), in which the imperfective *prodaval* must be replaced by the perfective *prodal*. If the optative clause expresses a wish concerning the speaker, a perfective infinitive is used, e.g. *Vot by ne sdat' zavtra eksamen* (lit. Would that I did not have to sit tomorrow the exam.) One informant glossed the sentence *Kak by ne noezat' zavtra* (Would that I did not leave tomorrow) as *Kak by xotel ne noezat'* (How I would like not to leave).

Optative sentences or clauses may begin with *kak, vot or tol'ko*. An example of the latter is: *Mašinu prodam, no tol'ko by ne prodat' dom*. (The car I'll sell, only don't let me have to sell the house).

It is clear that the semantic structure of *Bojats1a, kak by on ne uznal* (They fear that he may find out) is approximately: 'They do not want him to find out but they fear that there is the possibility that he will find out'. Similarly, the semantic structure of *Kak by ne noezat' zavtra* is approximately "I do not want to leave tomorrow but I fear I will be obliged to". Intuitively, the facts
are clear. When a speaker hopes that an act will not be performed or that a certain state of affairs will not arise, but at the same time fears that the act will be performed or the state of affairs will arise, and when he knows he can do little to prevent it, then the speaker uses a construction with *by* and a perfective form. What is not clear is how all these modal meanings and shades of meanings are to be drawn together into one coherent abstract deep structure. The task is so complex and the chances of success so slight that these questions outstrip the scope of this dissertation.

**Imperatives**

6.7 This chapter is concluded with some brief remarks on the use of aspect in the imperative verb forms. It is not surprising that Mazon was able to apply the same criteria in his account of imperatives as in his account of infinitives, past tense forms, etc. The structure underlying imperative sentences is identical with the structure underlying statements and predictions in all respects but one - the illocutionary potential is different. It has been suggested (See Boyd + Thorne, Thorne) that the structure underlying English sentences like *Open the window* is

\[
\text{I imp } \left[ \begin{array}{c} \text{some} \\ \text{voc} \end{array} \right] \text{ proform } \left[ \begin{array}{c} \text{some} \\ \text{voc} \end{array} \right] \text{ proform open the window}
\]

more informally, I imp you : you open the window, though

\[
\left[ \begin{array}{c} \text{some} \\ \text{voc} \end{array} \right] \text{ proform is not always realised as 'you'. For the}
\]

315
purposes of discussion, I will assume that the glosses given by Boyd + Thorne are valid.

The structure underlying the sentence Pišite medlenno (Write slowly), in which nišite is an imperfective form, may be glossed as: 'I imp you : you be in a state : You write slowly'. On the other hand, the structure underlying Napišite emu srazu-že (Write to him immediately), in which napišite is a perfective form, may be glossed as: 'I imp you : You go into, be in, and come out of a state : You write to him immediately'. This explains why Mazon could say of nišite medlenno that the speaker was thinking of the act in its development but that napišite emu srazu - že would be spoken by someone who was thinking of the act as an "integral whole".

Imperfective imperative forms can often be paraphrased as 'Begin doing something', e.g. Pišite (write) may, in certain contexts, be paraphrased as Stan'ite pisat'. I wish to suggest that the possibility of such a paraphrase is allowed for in the deep structure outlined in Chapter Two. The structure underlying nišito is:

Fig.34

This structure contains, as it were, both the idea of beginning to do something and the idea of being in the
process of doing something. I suggest that when the former idea is emphasised the feature [\text{Ingressive}] may be realised as the appropriate imperative form of \text{stat}'. By what formal process this would be carried out is unclear, but the fact that imperfetive imperatives can be paraphrased as 'begin to do something' seems valuable independent support for the analysis offered to Chapter Two$^6$ \text{(p.332)}

It has been pointed out (e.g. by Baras and Christian, pp.127-131) that a non-negative perfective imperative, being used to command the completion of an act, is often felt to be more categorical than an imperfective imperative, which is used to command only the beginning and progress of an action. This does not mean, however, that imperfective imperatives are always more polite than perfective imperatives. Spoken with one intonation pattern, the sentence $\text{Otkryvaj dver'}$ (open the door) is interpreted as an exhortation to do something and might be used, for example, by a mother urging her child to open the door. Spoken more quickly and with a different intonation pattern, $\text{Otkryvaite dver'}$ is interpreted as a brusque command to get on with opening the door without any delay.

A negative imperfective imperative is understood, quite simply, as a command not to do something. Negative perfective imperatives, however, are understood not as commands but as warnings. The sentence $\text{Na otkroite dver'}$ (Don't open the door) is usually interpreted as 'If you open the door, something nasty will happen'. In this case the speaker is not uttering a categorical command but simply giving a warning that something undesirable may take place. The speaker, as it were, does not see himself
as master of the situation. This use of the perfective aspect is reminiscent of the use of perfective infinitives after bojat'sia, stremit'sja, etc. and in negative optative sentences. This similarity of use does not appear to be coincidental, for it is negative perfective imperative forms which are used in situations where the notion of command is inappropriate. For example, when someone says 'Don't catch a cold', this injunction can hardly be taken as a command since, although one can take precautions, it is impossible to guarantee that one will not catch a cold. The force of 'Don't catch a cold' is more 'Would that you don't catch a cold'. The optative sentence in Russian would be Kak by vy ne prostudilis', prostudilis' being a past tense perfective form of the verb 'catch a cold'. The imperfective form, prostužalits', is completely unacceptable in this sentence. It is consequently all the more interesting that if one is enjoining someone not to catch a cold one cannot say Ne prostudižites', using the imperfective imperative, but must say Ne prostudižites', using the perfect imperative.

Negative commands may be expressed by NE + imperfective infinitive, e.g. Ne kurit' (lit. Not to smoke, i.e. no smoking) (These can be derived from an underlying structure containing vam ne nado) However, one cannot change a negative command into a negative warning simply by changing the aspect of the infinitive from imperfective to perfective to produce, e.g., ne prostudit'sja (lit. Not to catch a cold). Instead, one has to use a construction with by and say ne prostudit'sja by vam, the by marking the speakers uncertainty.

The by distinguishes this sentence
from the more categorical assertion *Vam menja ne provesti* (lit. To you me not to get the better of, i.e. You'll never get the better of me). This sentence can be regarded, for present purposes, as deriving from a deep structure which contains *nel'zja* or *nevázmožno*, or more abstractly, from a deep structure containing *Neg* and [*Possibility*], the latter of which is not in this case realised as a separate superficial morph.
1. Active predicates in Russian must be marked \([\text{+Motion}], [\text{+Directional}]\). The features \([\text{+Motion}], [\text{+Directed}]\) can be interpreted in two ways. In Russian there is a small set of verbs which have two imperfective forms: bezat' - bežat' (run), krodit' - bresti (wander), vodit' - vesti (lead), vozit' - vesti (convey), goniat' - znat' (drive), ezdit' - ezat' (go - in a vehicle), katat' - katit' (roll), lazit' - lezi' (climb), letat' - letat' (fly), nosit' - nesti (carry), plavat' - plyt' (swim, sail), polzat' - polzsi (crawl), taskat' - tasdit' (drag), xodit' - idti (go).

The second member of each pair denotes movement in one direction. What is common to the first member of each pair is the absence of the idea of motion in one direction. It is obvious that the above list does not include all verbs denoting motion. What is not clear to me at the moment is how the feature \([\text{+Motion}]\) should be used. Two alternatives suggest themselves: (a) use \([\text{+Motion}]\) to "isolate" the members of the above set, which could then be further distinguished as \([\text{+Directional}]\), e.g. bežat' \([+\text{Directional}]\), bezat' \([-\text{Directional}]\). (b) use \([\text{+Motion}]\) to "isolate" all verbs denoting motion, and use \([\text{+Directional}]\) to distinguish between those verbs for which direction is important and those for which it is not, and bring in a third feature, say \([\text{+Directed}]\) to distinguish between verb forms denoting movement in one direction and verb forms not denoting movement in any particular direction. Under this alternative, dvigat' (move) would be \([+\text{Motion}]\).
[-Directional], bezat' would be [+Motion], [+Directional], [+Directed], and hegat' would be [+Motion], [+Directional], [-Directed].

Other candidates for the above list of verbs are snimat' - sniat' (take down, e.g. a picture from a wall), brat' - vziat' (take), otkryvat' - otkryt' (open). On snimal kartinu is often interpreted as "He took down the picture (looked at it) and put it back". On bral u menja knigi (lit. He took at me the books, i.e. He got the books from me) is taken to mean "He took the books and brought them back". On otkryval okno (He opened the window) is understood as "He opened the window and then closed it". These three verbs cause no difficulty since they all involve movement.

A more unexpected candidate for inclusion in the verbs of motion in general, though not in the above list of directed verbs, is look. The case for treating look as a verb of motion has been argued in detail by Gruber. The starting point of Gruber's argument, which need not be reproduced here, is the formal parallel between sentences such as The bird flew into the nest and The bird looked into the nest. In Russian, too, one finds that smotret' (look) is followed by locative constructions of the type denoting 'movement into' or 'movement towards', e.g. On posmotrel v gnezdo (He looked into the nest), Ptica vletela v gnezdo (The bird flew into the nest). In both sentences the locative adjunct consists of v (into) followed by a noun in the accusative case. The notion of
looking at something is involved in the interpretation of
other constructions which are identical in form with loc-
atives, e.g. napravit' vzgliad na čeloveka (lit. to direct
(one's) gaze towards a person), peresvesti vzgliad na čelove-
ka (to transfer (one's) gaze to a person), prikoyat'vzgliad
k čeloveku (lit. to rivet (one's) gaze to a person). The
'basci' meaning of prikoyat' is "to rivet, chain" (something
to something). Of course, it might be objected that these
expressions are metaphorical, but one answer to that ob-
jection is that these particular metaphors involving verbs
of movement are made possible by the fact that part of the
meaning of smotrat' is 'movement towards'.

Gruber also wishes to treat see as a verb of motion,
basing his case on sentences like He saw right into the
nest. Given the arguments presented in Chapter One, this
hypothesis cannot be accepted for Russian. It is difficult,
however, to say exactly what underlying structure might be
ascribed to On videl prijamo v gnezd (He saw right into
the nest).

2. Emmons (1969) has recently argued (a) that
infinitives are not noun phrases; (b) that most gerunds
are noun phrases, except those gerunds which occur after
verbs like begin, continue, notice, find, e.g. begin doing
something, notice someone doing something. Emmons takes
up Ross' point that infinitives and sentences which func-
tion as verb complements appear to undergo passivisation,
just like ordinary noun phrases. For example, one finds
That the house was old was denied by John and To remain
silent was preferred by John (although the latter, to me,
is bordering on the unacceptable.

Emmons observes that passivisation does not take place if an infinitive construction or that-clause occupy the deep subject position, e.g. (1)*A lot of trouble would be caused (by) for John to arrive now; (2)*The necessity of discipline is shown (by) that the children are always late; (3)*John was being disturbed by that the neighbours were so noisy.

Emmons' arguments cannot be taken as a refutation of the hypothesis that infinitives derive from sentences embedded in noun phrases and that infinitives can be handled as noun phrases in the surface structure. Infinitives are not basic nouns, in the sense in which table, chair are nouns, but nominalisations, and cannot be expected to behave in exactly the same way as ordinary nouns. For instance, I will argue below that infinitives in Russian are best treated as nouns, although infinitives do not take case endings (this in part meets Emmons' objection that in English prepositions like from, at, by, with do not occur before infinitives, although they do occur before gerunds, e.g. By doing this, he showed that he did not understand the situation). What Emmons' arguments seem to amount to is that sentences embedded in noun phrases in the deep structure of English are not always realised as infinitive phrases. What the realisation is may be affected by various examples. (1) for instance, contains for-to. Kiparsky has shown that Rosenbaum's analysis of I forced John to say 'cheese' as deriving from I forced John for John to say cheese is incorrect and that for-to occurs.
superficially only with "emotive" expressions, e.g. It is
important/fascinating/herdersome for him to go there:
(1) contains just such an emotive expression, 'A lot of
trouble'. (1) may well be unacceptable because of this
emotive expression. The acceptable version of (2) is
The necessity of discipline is shown by the fact that the
children are always late. In its active form the super-
official sentence may or may not contain the words the fact:
(2a) (The fact) that the children are always late shows
the necessity of discipline. The fact that the structure
underlying the fact may not be deleted if the sentence is
made passive is no strong evidence that that-clauses
are not (parts of) noun phrases. The peculiarity of (3)
can be explained in the same way as the peculiarity of (2).

In short, much work has yet to be done on the realis-
ation of abstract deep structures as infinitives, gerunds
or that-clauses. In the phrase-marker on p. 310 the NP
which is to contain the embedded sentence is expanded as
N + S, and N is rewritten as IT. Since linguists are
working towards a universal deep structure, it seems more
appropriate to exclude such elements as it, to and for - to
from the deep structure and introduce them fairly late on
in the derivation of sentences. To and for - to may be
regarded as marking certain processes of nominalisation.
It, in many cases, seems to be simply a dummy word which
fills an "empty" NP position in the surface structure.

Emmons' arguments are even less applicable for Russian.
Firstly, gerunds such as чтеніе (reading), пеnіe (singing)
are formed only from verbs which take an Agent and occur
much less frequently than infinitives. Secondly, where in English one can use either an infinitive or a gerund, e.g. To make out his writing is difficult, Making out his handwriting is difficult, in Russian one can use only an infinitive, razbirat' ego počerk trudno.

In Russian, as in English, there are strong similarities between sentences containing ordinary nouns as subject or object of the verb and sentences containing infinitive phrases as the subject or object of the verb.

(a) Noun/infinitive in subject position.
1.a Novaja kniga mne nравится : lit. The new book to me pleases.
   b Čitat' Tol'stogo mne nравится : lit. To read Tolstoy to me pleases.
(b) In obj. position
2.a Ja poobesčal' emu novoe nal'to : lit. I promised to him a new coat.
   b Ja poobesčal' emu priti v sem' časov : lit. I promised to him to come at 7 o'clock.
3.a On liubit' hlinčiki : He likes pancakes
   b On liubit' igrat' v šaxmaty : He likes to play chess.

The noun-like character of infinitives is made still clearer by the fact that 1b, 2b, 3b, can be used to answer the questions, respectively: čto vam nравится? (lit. What to you pleases?), čto vy poobesčali emu? (lit. What you promised to him?), čto on liubit? (lit. What he likes?). This test can be extended to sentences containing a nominal
predicate. The question Cto nas dolg? (lit. What our duty?)
may be answered by the sentence Borot'sia za mir - nas
dolg. (lit. To fight for peace - our duty).

Both nouns and infinitive phrases co-occur with
adjectival predicates.

4.a Ego teoriia - bespoleonoe: His theory is useless.

4.b Pomogat' emu - bespoleonoe: (lit. To help to him is
useless.

Treatng infinitives as nouns removes one problem
which plagues linguists who are concerned only with class-
ifying the superficial morphs of Russian. The word
nužnyj (necessary) occurs in both predicate and attributive
position. In predicate position it agrees with the noun
in number and gender; in attributive position it agrees
with the noun in number, gender and case. In predicate
position, after the past or "future" tense forms of byt' (to be), nužnyj may occur in the appropriate instrumental
case form. The following sentences illustrate the use of
nužnyj:

5.a Etot rubl' mne nužen : lit. This rouble (masc.)
to me (is) necessary.

5.b Vaša kniga mne nužna : lit. Your book (fem.)
to me (is) necessary.

5.c Eto pal'to mne nužno : lit. This coat (neut.)
to me (is) necessary.

Nužno also occurs with infinitives.

5.d Mne nužno kunit' mašinu : lit. To me (is) necess-
ary to buy a car.

5.d can also be expressed as:

5.e Mne nado kunit' mašinu.

326
Nuzno being replaced by nad. The problem alluded to at the beginning of this paragraph concerns the classification of nad. The difficulty arises from the fact that there are no masculine and feminine short forms, nad and nada, which might occur in predicate position following a masculine or feminine noun, and there are no forms of nad which might occur in attributive position, agreeing with the noun in gender, number and case. Furthermore, the sole existing form nada, which seems to have a neuter singular ending, never occurs with neuter singular nouns such as pal’to (coat) or veščestvo (substance). For these reasons linguists have been reluctant to classify nada as an adjective. Many adverbs in Russian end in -o, but nada can hardly be classified as an adverb since it never occurs with finite verb forms but only with infinitives.

The apparently unsolvable problem of finding a satisfactory classification for nada is not made any easier by uncertain notions as to the categorial status of infinitives. (cf. footnote (3) to Chapter Two). If, however, one assumes that infinitives are a special type of noun, then the problem is solved, because the only possible deep structure of a sentence like Nado kunit’ knigu is, and for convenience sake the terminal symbols are represented by actual superficial elements.

```
S
  NP
    TO
    S
      Pred.
      NP
        ... + Adj info...
        + Adj info...
        npu...n
        nigu
        ... nadi
```

i.e. (It - (I buy a book) is necessary)
The assumption that infinitives are nouns further leads one to observe other data. (1) The question čto nada? (lit. What necessary?) is identical in form with the questions čto nužno? (What necessary?) and čto bespolezno? (What useless?). It is not important that answers to the first question, with nada, may contain only an infinitive (Kunit'knigu nada - To buy a book is necessary), whereas answers to the second and third questions may contain either nouns or infinitives (Pal'to nužno - A coat is necessary; Kunit' knigu nužno - To buy a book is necessary; Ego teorija bespolezna - His theory is useless; Pomogat' emu bespolezno - To help him is useless).

(2) Granted the assumption that infinitives are nouns, the sentences Emu slyšen zvuk (lit. To him audible the sound) and Mne nada kunit' knigu (lit. To me necessary to buy a book) are identical in superficial form, both consisting of an animate noun in the dative case followed by an adjective followed by a noun. There are differences, in that the adjective slyšen agrees in number and gender with the masculine singular noun zvuk, whereas the infinitive phrase kunit' knigu does not have any obvious number or gender. There seems to be a rule in Russian which assigns the neuter singular ending to an adjective under the following conditions: A) if there is no subject noun, as in Mne dušno (to me stuffy) : B) if the subject noun has no obvious grammatical gender and does not refer to an animate creature. These differences are not crucial, since there is already a fair amount of evidence in favour of the hypothesis that infinitives are nouns and these differences
are not important enough to shake the hypothesis.

The sentences *Emu slyšen zvuk* and *Mne nado kníru* can also be assigned highly similar deep structures, both deriving from a structure consisting of a predicator [+Adjective] accompanied by an animate noun in the dative case and an inanimate noun in the nominative case. In the underlying structure of the second sentence the case NOM is expanded as an N + S, in the first sentence only as N.

*Nado* and *nužno* may be treated as alternative realisations of the same lexeme (in the sense of Lyons 1968). This lexeme may be realised by *nužno* in all contexts but by *nado* usually only when the noun phrase modified by the lexeme is an infinitive.

The word 'usually' is necessary because of sentences like *Čto vam nado?* (What to you necessary), *Eto nado* (This is necessary) and *Kníru nado* (A book is necessary). In the first two examples *nado* is predicated of undefined Ns, by which I mean that what is necessary has still to be specified by the speaker. If it is assumed that the sentences *Kníru nado* and *nado pit’lekarstvo* (necessary to take medicine) have highly similar underlying structures, then one might argue that these two sentences differ only in that *Kníru nado* has an underlying structure N - Pred, whereas *nado pit’lekarstvo* has an underlying structure N S Pred.

This solution is weak for several reasons. Firstly, it fails to explain why *kníru* is in the accusative case and it does not account for the difference between *kníru nado* and *kníra nužna*. Secondly, if one asks Russians for some
possible answers to the question *Čto van nado?* they supply sentences such as *Nado nisat sočinenja/noslati' emu den'gi/kupit' maslo* (It is necessary to write my essay/to send him money/to buy butter) but never sentences such as *Mne nado mašinu* (To me necessary a car). Thirdly, if one presents Russians with the sentence *Čto van nado* (This to you is necessary) and asks what *eto* might refer to, they provide infinitive phrases but not single nouns in the accusative case.

The most satisfactory solution possible within the framework of a generative grammar is to say, as above, that the lexeme NECESSARY is realised as *nado* if it is predicated of an infinitive, otherwise as the appropriate form of *nužen*. One has to say that *Mne nado knigu* derives from an underlying structure which is approximately *To me necessary to acquire a book* and that *acquire* is deleted. This accounts for the accusative case of *knigu*. It certainly seems rather ad hoc to postulate a verb which is then deleted, but on the other hand this, so far, is the hypothesis which accounts for the most facts in the most satisfactory way.

3. *Ožegov* paraphrases *možt* as *byt' v sostojanii* (be in a position to) and *imet' vozmožnost'* (lit. to have the possibility). The latter phrase is ambiguous between 'Having the chance to do something because the physical circumstances are favourable' and 'having the chance to do something because someone has given their permission).

Neither of the paraphrases given by *Ožegov* allows for the interpretation of *On možet priiti zavtra* (He can come to-
morrow) as *Vozmožno, čto... (It is possible that...).
Borsas and Christian say only that *vozmožno means only 'it is possible' whereas *možno may mean 'it is possible' or 'It is permitted', while neither Isacenko nor Mazon (a) have anything to say on the matter.
4. This proposal completely begs the question as to the source of the noun 'predication'. For a discussion of the problems involved see Chomsky (1968).
5. It is possible that the aspect in which the various forms of *mož* (be able) appear in interrogatives is influenced by presuppositions on the part of the speaker. Suppose X and Y are carrying on a conversation and X says: Vaš plan mne ne pravitaju (lit. Your plan to me not please). According to one informant, Y can reply *Vy možete predložit' čto-nibud' * or *Vy možete predlagat' čto-nibud' *? Both sentences mean 'Can you suggest something?', but differ in that the former contains a perfective infinitive, predložit', whereas the latter contains an imperfective infinitive, predlagat'. This informant maintained that if Y used the latter sentence with the imperfective infinitive then Y would be presupposing that X did not in fact have any suggestions to make.
Notice also the sentence *Kuda už mne proxodit' kurs po logike* (lit. To where to me to do a course in logic?) which means 'What's the use of me doing a course in logic'. This question presupposes that it would be no use for the speaker to do the course, i.e. a listener can infer that Ne nado proxodit' kurs (Not necessary to do the course). The interrogative sentence would be unacceptable if the
imperfective infinitive, proxodit', were replaced by the perfective infinitive proiiti.

The preceding example with kuda followed by a negated infinitive has to do with something being unnecessary. Such sentences may also be concerned with the impossibility of something, e.g. the following sentence spoken about a woman who had very poor health: Kuda e i rozdat' rebenka (lit. To where to her to give birth to a child), the implication being that the rigours of childbirth would kill her.

6. More support for this analysis is provided by Mazon, who emphasises that in sentences in which infinitives are used independently the notion of the 'mise en train de l'action verbale' comes out very clearly, e.g. Tebe vybira! (lit. To you to choose, i.e. to get on with the choosing).

7. Cf. the following unacceptable sentences:
   a. *Ne zabolevat' by vam: Would that you do not fall ill.
   b. *Ne proval'vat'sja by vam: Would that you do not fall (the exam).

The imperfective infinitives zabolevat' and proval'vat'sja must be replaced by their perfective counterparts zabolet' and provalit'sja in order that the sentences be acceptable. These sentences can be accounted for provisionally by postulating a semantic structure which may be glossed as: I hope that it will not fall to your lot to fall ill/to fail'. The sentence Vam suždeno provalit'sja (lit. To you fated to fail) means
'You are doomed to failure'. Suždeno is the third person singular neuter form of the past participle passive of the verb *sužiti* (to judge) and is used mainly with infinitive phrases. Ozegov explains suždeno as meaning 'predetermined, of something unforeseen, as though not dependent on a person's will'.

I am not suggesting that the underlying structure of (b) contains the abstract sentences: 'I hope: It - you fail - to you fated' but rather that on a more abstract level than this the various components of meaning are generated, only some of them being realised in the surface structure. It is impossible at present to describe in detail the process of generation, since a sufficiently abstract level of grammar has yet to be developed.
SUMMARY OF CONCLUSIONS.

The main conclusions of this thesis are as follows:

(1) Sentences containing adjectives or verbs in imperfective aspect derive from a locative structure which can be glossed as 'be in a state', e.g. 'be in a state of writing a letter', 'be in a state of being ill', etc.

Sentences containing verbs in perfective aspect derive from a structure which can be glossed as 'go into, be in and come out of a state'.

(2) Tense is best handled by postulating a basic distinction between Past and non-Past and a further distinction between Statements and Predictions.

(3) Aspect in the infinitive is determined basically by two sets of factors. If the infinitive is dependent on a modal predicator, and if the predicator is negated, the infinitive is in the imperfective aspect. If the predicator is not modal, the aspect of the dependent infinitive is determined by whether the infinitive is a nominalisation of a structure 'be in a state' or of a structure 'go into, be in and come out of a state'. If the latter, the infinitive is perfective, if the former the infinitive is imperfective.

(4) Various types of predicators can be distinguished - stative, static and active. Since each type of predicator is accompanied by a different set of cases in the deep structure, and since the opposition of perfective and imperfective aspect concerns only active predicators, one can make out a case for making stative, static...
and active features of the sentence rather than features of the predicator, and for making the predicator govern how many and what type of nouns can co-occur with it.
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337
<table>
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