THE CLASSIFICATION OF

THE RUSSIAN VERBS

AN EXAMINATION OF THE TRADITIONAL

AND STRUCTURAL LINGUISTIC APPROACHES.

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ABSTRACT

The purpose of the thesis is to compare the traditional and the modern structuralist approaches to the problem of classifying the Russian verbs.

In the Introduction a brief historical outline of the treatment of the problem is given. Within the traditional school two main tendencies developed: classification by the present- and by the infinitive-stem. Within the framework of modern structural linguistics new approaches to the problem of classifying the Russian verb were attempted. These attempts culminated in the descriptive system of Roman Jakobson. Besides its main purpose: a comparison of the results of Jakobson with those of two of the newer representatives of the traditional school - Berneker and Unbegaun -, the thesis has as secondary purpose to explain and to a certain extent to criticize the work of Jakobson.

In Chapter I the classification of Berneker which starts from the infinitive is presented and discussed; in spite of its doubtless pedagogical merit, the classification is found to contain flaws in its methodology: it is based on mixed criteria, it is not strictly synchronic, it is not exhaustive and it separates groups of verbs which linguistically belong together (as a result of preoccupancy with script).

In Chapter II the classification of Unbegaun, which is based on the present tense form, is discussed. Unbegaun's classificatory technique is found to be stricter than Berneker's, but this very strictness accentuates the shortcomings of the system. Like Berneker's, Unbegaun's system is largely based on script, and in his case the consequences are more serious.

Chapter III is devoted to a discussion of Jakobson's approach.

Jakobson has solved the problem on which all traditional classifications stranded - the matching of present- and infinitive-stems. His solution consists of the setting up of a (sometimes artificial) underlying stem-form, from which the alternations of the stem can be predicted on the basis of the simplest possible set of rules. The alternations of the stem are, in the main, described in terms of truncation (loss of a final stem phoneme). In view of this feature the basic stem-forms are subdivided into stem in vowel, stem in j, v, m, n, and stem in other consonants. The subdivision proves useful in the statement of the rules for softening and stress, for which Jakobson has been the first to state general rules.

In the <u>Conclusion</u> it is demonstrated that, as opposed to the confusion of varied criteria of classification characteristic of the traditional school, the basis of Jakobson's system is simply the phonemic structure of the basic stem-form. Furthermore, Jakobson's systematizing technique differs basically from that of his predecessors. Whereas the latter carry out consecutive subdivisions of the material thus obtaining separate classes of verbs - set up on the basis of separate criteria, Jakobson's descriptive system forms one closely-knit whole, where a minimum of distinctions is employed to the describe the behavior of a maximum of the total number of Russian verbs.

C O N T E N T S

C O N T E N T S (C T D.)

INTRODUCTION

The purpose of this thesis is to compare the traditional and the modern structuralist approaches to a specific linguistic problem: that of classifying the Russian verbs. This problem is one of long standing, and in attempting a solution the traditional school has developed two main tendencies. The 17th and 18th century Russian grammarians based their systems on the present stem; 19th century authors began to use the infinitive stem as a starting point for their descriptions of Russian verb conjugation. At the same time, combinations of the two approaches were attempted.[1]

Of the newer representatives of the traditional school, Berneker[2] and Unbegaun[3] are the most lucid and consistent. At the same time their systems exhibit the two main tendencies mentioned above; Berneker classifies by the infinitive -, Unbegaun by the present stem. Our treatment of the traditional approach consists of an analysis of the classifications of these two authors. The best grammatical descriptions of Russian which have appeared in various languages (English - Forbes[4]; French - Mazon[5]; Swedish - Lundqvist[6]; Russian - Ščerba[7] and more recently Vinogradov[8]),

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1) For an account of the earlier classifications cf. W. Guihomard , Des systèmes traditionnels de classement des verbes russes. Mélanges publiés en l'honneur de M. Paul Boyer. Paris, 1925.

2) Berneker, E. - Vasmer, M. (rev.), Russische Grammatik. Walter de Gruyter and Co., Berlin, 1947.

3) Unbegaun, B., Grammaire Russe. Collection "Les langues du monde", Lyon - Paris, Éditions I.A.C. 1951.

4) Forbes, N., Russian Grammar. Oxford, Clarendon Press, 1916.

in so far as the classification of the verbs is concerned, offer no original ideas not contained in the systems of Berneker and Unbegaun.

The development of the structuralist school in linguistics which followed the publication of F. de Saussure's "Cours de linguistic générale" [1] made possible a new approach to the problem. This approach, characterized by a strict separation of synchrony and diachrony, by the introduction of the functional point of view and later by the development of new descriptive and classificatory techniques, was first applied by Karcevski [2] who paved the way for the later attempts of Bloomfield [3] and Cornyn [4].

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5) Mazon, André - Grammaire de la langue russe. Collection de Grammaires de l'Institute d'Études Slaves V. Paris, 1949.

6) Lundqvist, J. - Rysk Språklära. Helsingfors. 1914.

7) Ščerba, L. V., - Grammatika russkogo jazyka. Gosudarstvennoe učebnopedagogičeskoe izdateljstvo ministerstva proveščenija R.S.F.S.R. 1950.

8) Vinogradov, V.V. (red.). Grammatika russkogo jazyka. Tom I , Fonetika i Morfologija. Akademii Nauk S.S.S.R. Institut Jazykoznanija, Moskva. 1953.

1) Saussure, F. de. Cours de linguistique générale. Payot, Paris. 1916.

2) Karcevski, S. Études sur le système verbal du russe contemporain. Slavia. Prague. 1922.

Karcevski, S. Système du verbe russe. Essai · de linguistic synchronique. Prague. 1927.

3) Bloomfield, L. Dictionary of Spoken Russian. War Dept. TM 30-944, 194 5.

4) Cornyn, W. On the Classification of Russian verbs. Language, Vol.24 No.1, p.64 ff., Baltimore. 1948.

However, it remained for Roman Jakobson to take full advantage of these new techniques. Our examination of the structuralist approach is based on his article on "Russian Conjugation"[1]. This article contains a mass of information in an exceedingly compact form, and is therefore hard to absorb. For this reason, our treatment of Jakobson's work is not confined to mere analysis but attempts also to restate his ideas in a more digestable form (if less systematic). In order to achieve this, the basic elements of Jakobson's system are dealt with first, whereas the treatment of secondary issues is left for the later sections. Also, the rules stated by Jakobson are reworded in order to avoid at least part of his special terminology based on a number of definitions given in the first section of his article.

Since the aim of this thesis is a comparison of the systems of Berneker and Unbegaun with that of Jakobson, it is subject to the limitations imposed by the latter: (1) only simple verbs (with unprefixed one-root stems) are treated and (2) the analysis is confined to the purely verbal categories (the finite forms and the infinitive).

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1) Jakobson, R. Russian Conjugation. Word, Vol.4:3, p.155 ff., New York, 1948.

NOTE ON TRANSCRIPTION

The Cyrillic alphabet is transcribed into Latin letters as follows:

а - a	е - e	й - j	о - o	у - u	ш - š	э - è
б - b	ё - ě	к - k	п - p	ф - f	щ - šč	ю - ju
в - v	ж - ž	л - l	р - r	х - x	ъ - "	я - ja
г - g	з - z	м - m	с - s	ц - c	ы - y	
д - d	и - i	н - n	т - t	ч - č	ь - j	

Transcribed Cyrillic script is underlined, e. g. <u>delatj</u>.

Phonemic transcription is given between slants, e. g. /d'élat'/.

Morphophonemic notation is spaced, e. g. d'é l a j-.

´ over a vowel indicates stress.

' after a consonant indicates palatalization.

- indicates separation of morphemes.

C H A P T E R I : B E R N E K E R .

1. E x p o s é o f c l a s s i f i c a t i o n. Berneker's classification of the Russian verb is based on the dictionary form, i. e. the infinitive.

As his first principle of subdivision he uses the distinction of consonant versus vowel as last element of the infinitive stem. This yields two major classes:

A. Infinitive ending preceded by a consonant (e. g. nes-ti).

B. Infinitive ending preceded by a vowel (e. g. dela-tj).

A third class, C, contains some anomalous verbs.

For his secondary subdivision Berneker uses the obvious method of classifying according to the exact phonetic nature of the sound preceding (actually or historically) the infinitive ending. Within class A this yields the following subgroups:

Stems in 1) s, z	3) b	5) r, l
2) t, d	4) k, g	6) n, m

In subdividing class B, the phonetic principle is supplemented by a morphological one. The first four subgroups are based on purely phonetic considerations; the last two, on the other hand, are of a morphological character:

Stems in I. a	II. e	III. i	IV. y
V. nu		VI. ova/eva	

Thirdly, where necessary, the groups thus obtained are further

subdivided to yield uniform classes: e. g. class B III (i before
infinitive ending) is further broken down into the types:

    1) bitj - bjju, bjěšj, etc.   2) xvalitj - xvalju, xvališj, etc.

These final subdivisions are not based on any unified principle
but rather on whatever characteristic is convenient in each particular
instance.

For each group of verbs it is stated which of the following three
sets of personal endings is used:

    a) -u   -ut

              -ešj -et -em -ete

    b) -ju   -jut

    c) -ju -išj -it -im -ite -jat[1]

Of course, this presupposes the well known spelling rule that
after š, ž, č, šč, instead of ja, ju, the letters a, u are employed;
e. g. the verbs pisatj and spešatj take the endings b) and c) respect-
ively, in spite of the spellings pišu, pišut, spešu, spešat, etc.
Sometimes the sets of endings used yield major subdivisions within
Berneker's classification, as in class BI type 2) drematj - dremlju
(with endings b.) versus type 3) stonatj - stonu (with endings a.).

Rules for the stress are given in each separate group. The stress
patterns yield important subdivisions in the Russian verb and are oc-
casionally reflected in Berneker's classification, e. g. in class
B III 2) type xvalítj - xvaljú, xválišj versus type valítj - valjú,
valíšj.

Rules for "substitutive softening" (alternation k : č, etc.)

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1) Incidentally, Berneker does not mention the pronunciation
"-ut" of the unstressed 3d person plural ending in verbs of the second
conjugation.

are given where necessary (classes A 4; B I 2; B I 3; B II 2; B III 2).

A complete outline of Berneker's classification of the Russian verb is given below. It is presented in some detail to make possible later reference to any class of verbs and any exceptional type (exceptional, that is, from Berneker's point of view). Of each of Berneker's regular classes one example is given - regardless of whether the class is large or small. If within a given class more than one stress pattern occurs, each pattern is represented whether or not Berneker makes an appropriate subdivision. The exceptions occurring within each class are all summed up under their respective headings. These exceptions are distinguished from the regular types by indentation.

A. Consonant before infinitive ending.

    1) Stem in s̲, z̲   nestí - nesú, nesёšj

                      veztí - vezú, vezёšj

                      gryztj - gryzú, gryzёšj

                         leztj - lézu, lézešj

    2) Stem in t̲, d̲   mestí - metú, metёšj

                         pročéstj - -čtú, -čtёšj

                      vestí - vedú, vedёšj

                      klastj - kladú, kladёšj

                           sestj - sjádu, sjádešj

                           rastí - rastú, rastёšj

                           idtí - idú, idёšj

    3) Stem in b̲   grestí - grebú, grebёšj

    4) Stem in k̲, g̲   pečj - pekú, pečёšj   (from *pek-ti)

                      berečj - beregú, berežёšj

$$
\underline{mo\check{c}j} - \underline{mog\acute{u}}, \underline{m\acute{o}\check{z}e\check{s}j}
$$

$$
\underline{\check{z}e\check{c}j} - \underline{\check{z}gu}, \underline{\check{z}\check{z}\hat{e}\check{s}j}
$$

$$
\underline{le\check{c}j} - \underline{lj\acute{a}gu}, \underline{lj\acute{a}\check{z}e\check{s}j}
$$

5) Stem in <u>r</u>, <u>l</u>　　　$\underline{mer\acute{e}tj} - \underline{mru}, \underline{mr\hat{e}\check{s}j}$　　(from *mer-ti)

$$
\underline{por\acute{o}tj} - \underline{porj\acute{u}}, \underline{p\acute{o}re\check{s}j}
$$

$$
\underline{kol\grave{o}tj} - \underline{kolj\acute{u}}, \underline{k\acute{o}le\check{s}j}
$$

$$
\underline{mol\acute{o}tj} - \underline{melj\acute{u}}, \underline{m\acute{e}le\check{s}j}
$$

6) Stem in <u>n</u>, <u>m</u>　　　$\underline{mjatj} - \underline{mmu}, \underline{mn\ddot{e}\check{s}j}$

$$
\underline{\check{z}atj} - \underline{\check{z}mu}, \underline{\check{z}m\ddot{e}\check{s}j}
$$

$$
\underline{klj\acute{a}stjsja} - \underline{kljan\acute{u}sj}, \underline{kljan\ddot{e}\check{s}jsja}
$$

B. Vowel before infinitive ending.

I. Stem in <u>a</u>　　　1)　$\underline{d\acute{e}latj} - \underline{d\acute{e}laju}, \underline{d\acute{e}lae\check{s}j}$

　　　　　　　　　　　　$\underline{\check{c}it\acute{a}tj} - \underline{\check{c}it\acute{a}ju}, \underline{\check{c}it\acute{a}e\check{s}j}$

　　　　　　　　　2)　$\underline{pis\acute{a}tj} - \underline{pi\check{s}\acute{u}}, \underline{p\acute{\imath}\check{s}e\check{s}j}$

　　　　　　　　　　　　$\underline{m\acute{a}zatj} - \underline{m\acute{a}\check{z}u}, \underline{m\acute{a}\check{z}e\check{s}j}$

　　　　　　　　　　　　　　$\underline{stlatj} - \underline{stelj\acute{u}}, \underline{st\acute{e}le\check{s}j}$

　　　　　　　　　　　　　　$\underline{slatj} - \underline{\check{s}lju}, \underline{\check{s}l\ddot{e}\check{s}j}$

　　　　　　　　　　　　　　$\underline{koleb\acute{a}tj} - \underline{kol\acute{e}blju}, \underline{kol\acute{e}ble\check{s}j}$

　　　　　　　　　3)　$\underline{ston\acute{a}tj} - \underline{ston\acute{u}}, \underline{st\acute{o}ne\check{s}j}$

　　　　　　　　　　　　$\underline{sos\acute{a}tj} - \underline{sos\acute{u}}, \underline{sos\ddot{e}\check{s}j}$

　　　　　　　　　　　　　　$\underline{zvatj} - \underline{zov\acute{u}}, \underline{zov\ddot{e}\check{s}j}$

　　　　　　　　　　　　　　$\underline{bratj} - \underline{ber\acute{u}}, \underline{ber\ddot{e}\check{s}j}$

　　　　　　　　　　　　　　$\underline{dratj} - \underline{der\acute{u}}, \underline{der\ddot{e}\check{s}j}$

　　　　　　　　　4)　　　$\underline{spatj} - \underline{splju}, \underline{spi\check{s}j}$

　　　　　　　　　　　　$\underline{gnatj}, - \underline{gonj\acute{u}}, \underline{g\acute{o}ni\check{s}j}$

　　　　　　　　　5)　$\underline{s\acute{e}jatj} - \underline{s\acute{e}ju}, \underline{s\acute{e}e\check{s}j}$

　　　　　　　　　6)　$\underline{dav\acute{a}tj} - \underline{daj\acute{u}}, \underline{da\ddot{e}\check{s}j}$

　　　　　　　　　7)　$\underline{statj} - \underline{st\acute{a}nu}, \underline{st\acute{a}ne\check{s}j}$

II. Stem in <u>e</u>   1) <u>umétj</u> - <u>uméju</u>, <u>uméešj</u>

2) <u>smotrétj</u> - <u>smotrjú</u>, <u>smótrišj</u>

<u>velétj</u> - <u>veljú</u>, <u>velíšj</u>

<u>vídetj</u> - <u>vížu</u>, <u>vídišj</u>

<u>deržátj</u> - <u>deržú</u>, <u>déržišj</u>   (from *drg-ěti)

<u>bežátj</u> - <u>begú</u>, <u>bežíšj</u>

3) <u>revétj</u> - <u>revú</u>, <u>revěšj</u>

<u>xotétj</u> - <u>xoču</u>, <u>xóčešj</u>, <u>xotím</u>

4) <u>petj</u> - <u>pojú</u>, <u>poěšj</u>

5) <u>detj</u> - <u>dénu</u>, <u>dénešj</u>

III. Stem in <u>i</u>   1) <u>bitj</u> - <u>bjju</u>, <u>bjěšj</u>

<u>gnitj</u> - <u>gnijú</u>, <u>gnišsj</u>

<u>britj</u> - <u>bréju</u>, <u>bréěšj</u>

2) <u>xvalítj</u> - <u>xvaljú</u>, <u>xválišj</u>

<u>valítj</u> - <u>valjú</u>, <u>valíšj</u>

<u>lázitj</u> - <u>lážu</u>, <u>lázišj</u>

<u>posetítj</u> - <u>poseščú</u>, <u>posetíšj</u>

IV. Stem in <u>y</u>   1) <u>mytj</u> - <u>móju</u>, <u>móešj</u>

2) <u>slytj</u> - <u>slyvú</u>, <u>slyvěšj</u>

V. Stem in <u>nu</u>   1) momentary:

<u>kríknutj</u> - <u>kríknu</u>, <u>kríknešj</u>

<u>šepnútj</u> - <u>šepnú</u>, <u>šepněšj</u>

2) non-momentary:

<u>gásnutj</u> - <u>gásnu</u>, <u>gásnešj</u>

<u>tonútj</u> - <u>tonú</u>, <u>tónešj</u>

VI. Stem in <u>ova/
<u>eva</u>   1) <u>kovátj</u> - <u>kujú</u>, <u>kuěšj</u>

<u>plevátj</u> - <u>pljujú</u>, <u>pljuěšj</u>

<u>slédovatj</u> - <u>sléduju</u>, <u>sléduešj</u>

<u>torgovátj</u> - <u>torgúju</u>, <u>torgúešj</u>

C. Remains of other conjugations (bytj, datj, estj, éxatj).

2. D i s c u s s i o n o f c l a s s i f i c a t i o n.

a. CLASSIFICATORY TECHNIQUE. The first criticism that may be levelled at Berneker's overall classification concerns the principle on which it is based. Strictly speaking, the criterion employed on a given level should be maintained until the possibilities of that level are exhausted. For example, in subdividing the verbs with a vowel before the infinitive ending (Berneker's class B) one could either employ purely phonetic criteria and subdivide into verbs in -atj, -etj, -itj, etc., or, on the other hand, one could employ some morphological criterion such as the type of infinitive suffix: -a-, -nu-, -ova-, etc. Berneker, however, summing up the vowels that can precede the infinitive ending, includes -nu- (class V) and -ova- (class VI) which are, of course, not vowels but morphemes, and in this way he confuses the phonetic and the morphological approaches.

b. EXHAUSTIVENESS. Partly as a consequence of the approach criticized under a., Berneker's classification is not exhaustive: the verb dutj finds no place in it since of the verbs with u before the infinitive ending only those with the suffix -nu- are treated (class V). Had a purely phonetic approach been employed, this verb would have found its natural place in the class with u before the infinitive ending. Had a purely morphological criterion been chosen, then dutj would have found its place in the class without suffix in the infinitive (together with bitj - bjju; mytj - moju; etc., as opposed to del-a-tj, xval-i-tj, gas-nu-tj, etc.).

c. SYNCHRONY AND DIACHRONY. The classification is not strictly synchronic: in several cases verbs are assigned to a class not on the basis of their actual form, but from the point of view of their his-

torical (or rather their prehistorical) origin. Such is the case in classes A 4 (pečj from *pek-ti), A 5 (meretj from *mer-ti) and A 6 (mjatj from *men-ti), all classed by Berneker as verbs with a consonant before the infinitive ending.

d. PREDICTABILITY. As is the case with any other classification of the Russian verb which is based on the infinitive alone, in Berneker's system no prediction with regard to the rest of the paradigm is possible on the basis of the form chosen as starting point. That the paradigm of delatj differs from that of pisatj, the paradigm of zevatj from that of nočevatj and the paradigm of uvažatj from that of deržatj (delaju versus pišu; zevaju versus nočuju; uvažaju versus deržu) is not apparent from the infinitive. It will be noticed that the procedures on the basis of which the members of the latter two pairs of verbs are assigned to different classes are exactly those criticized under a. and c. respectively.

e. PREOCCUPANCY WITH SCRIPT. The classification is based on script rather than on pronunciation which, for instance, forces Berneker to distinguish between two sets of unstressed desinences: -ešj, -et, etc., versus -išj, -it, etc., whereas phonemically there is only /-iš/, /-it/, etc. Though in this case Berneker's procedure may be justified by obvious practical considerations, his preoccupancy with script leads him to such unnecessary distinctions as that between class B I 2 and class B I 5 (mazatj - mažu and sejatj - seju).

f. CONCLUSION. The foregoing critical remarks are made from a strictly scientific point of view. It must of course be kept in mind that Berneker's aim was as much pedagogical as scientific - a combination which presents quite special difficulties in the case of the Russian language - and one cannot but admire the balance achieved between the two.

CHAPTER II : UNBEGAUN.

2. E x p o s é o f c l a s s i f i c a t i o n. Contrary to
Berneker, Unbegaun chooses as his starting point for the classifi-
cation of the Russian verb not the infinitive, but the forms of the
present tense.

As first principle of subdivision he uses the "connective vowel"
("voyelle de liaison") which appears between the present base and the
personal endings (except 1st sing. and 3d plur.). This yields the two
major classes traditionally referred to as first and second conjuga-
tion.

For his secondary subdivision Unbegaun uses the form of the
present base. This yields a further subdivision only within the first
conjugation (-e- class) as follows:

I. Present base ending in a consonant (e. g. nes-u)

II. Present base ending in the suffix -n- (e. g. dvi-n-u)

III. Present base ending in a vowel (e. g. dela-ju).

These three classes are referred to by Roman numerals as indi-
cated; the verbs of the second conjugation (-i- class), though the
result of a division on a higher level, are added to these as class
IV. Two further subdivisions not indicated by Roman numerals contain
respectively verbs straddling two of the above-mentioned classes and
anomalous verbs.

Classes I to IV are then further subdivided into groups A, B,
etc. This subdivision is carried out on the basis not of one single

criterion but of several. These criteria are the following:

    a) absence or presence of a suffix in the infinitive base

                  (in classes I and III);

    b) possibility of losing the suffix ne/nu (in class II);

    c) character of the suffix in the infinitive base (in class IV).

On this level of subdivision the complete picture is as follows:

I A	nes-u - nes-ti	versus	I B	sos-u - sos-a-tj
II A	dvi-nu-tj - dvi-nu-l	versus	II B	gas-nu-tj - gas
III A	duma-ju - duma-tj	versus	III B	ta-ju - ta-ja-tj
IV A	ljub-i-tj	versus	IV B	let-e-tj	versus	IV C	zvuč-a-tj.

Unbegaun completes his classification by making a final subdivision into subgroups 1, 2, etc. As was the case on the preceding level of subdivision, different criteria are employed for the various classes of verbs, namely:

    a) whether or not the bases of present and infinitive are of

        identical structure (in I A, I B and III A);

    b) according to the character of the suffix in the infinitive

        base (in III B);

    c) according to whether the present base ends in a vowel or a

        consonant (in IV A and IV C).

Unbegaun's final classification is summed up below:

I A 1	nes-u	nes-ti	I A 2	sjad-u	ses-tj
I B 1	sos-u	sos-a-tj	I B 2	zov-u	zv-a-tj
			I B 3	piš-u	pis-a-tj
II A	dvi-nu-tj dvi-nu-l		II B	gas-nu-tj gas	
III A 1	duma-ju duma-tj		III A 2	mo-ju	my-tj
III B 1	ta-ju ta-ja-tj		III B 2	da-ju	da-va-tj
			III B 3	ku-ju	kov-a-tj

IV A 1   <u>kraš-u</u> <u>kras-i-tj</u>   IV A 2 <u>stro-ju</u> <u>stro-i-tj</u>

            IV B   <u>leč-u</u> <u>let-e-tj</u>

IV C 1 <u>zvuč-u</u> <u>zvuč-a-tj</u>   IV C 2 <u>sto-ju</u> <u>sto-ja-tj.</u>

As is the case in Berneker, rules for substitutive softening and for the stress are given with each separate group, except that Unbegaun devotes special paragraphs to the stress patterns of the present and preterit tenses. These paragraphs merely sum up the different existing patterns. Which of these patterns applies to each particular verb cannot be predicted on the basis of Unbegaun's classification, and only in one case, is he able to give a general rule for the stress: in the present tense forms, the stress is always fixed in the verbs which - in Unbegaun's system - have a vocalic present tense base, that is, in all of class III (A 1 <u>dúmatj</u> - <u>dúmaju</u>, <u>dúmaešj</u>; A 2 <u>mytj</u> - <u>móju</u>, <u>móešj</u>; B 1 <u>tájatj</u> - <u>táju</u>, <u>táešj</u>; B 2 <u>davátj</u> - <u>dajú</u>, <u>daéšj</u>; B 3 <u>kovátj</u> - <u>kujú</u>, <u>kuéšj</u>), in class IV A 2 (<u>stróitj</u> - <u>stróju</u>, <u>stróišj</u>) and in class IV C 2 (<u>stojátj</u> - <u>stojú</u>, <u>stoíšj</u>).

This rule, however, is only of limited scope and, though correct as far as it goes, has no further implications whatsoever: even in a small class such as III A 2 the stress can be fixed on different syllables (<u>móju</u> versus <u>pojú</u>).

4. D i s c u s s i o n   o f   c l a s s i f i c a t i o n.

a. COMPARISON WITH BERNEKER. From the point of view of classificatory technique Unbegaun's system is definitely more sophisticated than Berneker's. Whereas the latter in several instances assigns verbs to classes in which they do not actually belong (cf. section 2 c.), Unbegaun consistently keeps to the criteria on which he bases his consecutive subdivisions.

Furthermore, whereas Berneker contents himself with giving a broad classification in the different categories of which sundry exceptions and anomalies are admitted, Unbegaun, whose classification is more complex, manages to bring such exceptions under a common denominator. For instance, the verbs of the type mytj - moju form one half of his class IV, britj - breju is an exception in class III and petj - poju is an exception in class II (all in group B). For For Unbegaun, all three fit naturally in his class III A 2 (III: connective vowel -e-; A: present base in vowel; 2: present and infinitive bases of different structure).

Nevertheless, Unbegaun's classification retains some of the negative points of Berneker's and has a few of its own.

b. PREOCCUPANCY WITH SCRIPT. As is the case with Berneker, Unbegaun classifies on the basis of script rather than pronunciation. In his system, however, the consequences are more serious.

The very first principle of subdivision - the connective vowel used in the present tense forms - is, in Unbegaun's system, a matter of script rather than of pronunciation. The verbs delatj and veritj have in standard Moscow pronunciation identical present tense endings[1],

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1) The pronunciation /-ut/ for the unstressed 3d person plural present ending in the verbs of the 2nd conjugation is given as standard by Ušakov l.c., p. XXXIV (1935). Ožegov, l.c., p. 7f. (1952) says that it is gradually disappearing. However, Vinogradov, l.c., p. 475 (1953) states that it is extensively used. As is well known, the ending became /-ut/ in the Moscow dialect; the fact that the pronunciation /-at/ is gaining ground is due entirely to the influence of the script.

and even if one bases one's classification on the pronunciation /-at/
rather than /-ut/, the difference between first and second conjugation
is not, as with Unbegaun, a matter of connective vowel -e- versus -i-.

The fact that Unbegaun himself is aware of this (cf. p. 178 ff.)
does not prevent him from employing this very criterion as the basis
of his classification.

Unbegaun's preoccupancy with script results furthermore in awk-
wardness with regard to the separation of stem and following morphemes,
e. g. in tajatj - taju Unbegaun regards ta- as the stem, -ja- as the
infinitive suffix; and the 1 sing. ending, in the first conjugation, is
according to him -u. Between a vocalic stem and this ending "un yod fi-
gure naturellement". Quite apart from the objections that can be raised
to this latter statement, it is awkward to regard the stem of this verb
as having the form ta- since this root appears elsewhere in the form
taj- (cf. tajna, tajnyj, etc.). The morphology of the verb is only a
part of the system of the Russian language as a whole, and in analyzing
this morphology the other parts of the system should be kept in mind.

But even within the limits of the verbal system, Unbegaun's pro-
cedure separates elements which obviously belong together. He classes
taju - tajatj as III B 1 (III: first conjugation with present stem in
vowel; B: suffix in infinitive base; 1: the form of the suffix is ja).
On the other hand, the verb mažu - mazatj is classed as I B 3 (I: first
conjugation with present stem in consonant; B: suffix in infinitive
base; 3: base with alternating consonants). It is clear, however,
that the two verbs are exactly parallel from the point of view of
pronunciation, as follows:

$$táj\text{-}u \quad - \quad táj\text{-}a\text{-}tj$$
$$mắž\text{-}u \quad - \quad mắž\text{-}a\text{-}tj.$$

Both verbs have stems ending in a consonant in the present (j and ž/z respectively), both have 1st pers. sing. ending in -u, and both have the infinitive suffix -a-. Apart from the fact that Unbegaun does not manage to bring the two verbs under the same heading, his method of dealing with tajatj is particularly inelegant: in the present tense the "yod" is regarded as a separate element which "figure naturellement" between stem and ending; in the infinitive it is regarded as part of the infinitive suffix. In both forms, of course, the "yod" is part of the stem, and it is only his preoccupancy with script that prevents Unbegaun from recognizing this fact.

c. CLASSIFICATORY TECHNIQUE. As is the case with Berneker, Unbegaun employs mixed criteria for subdivisions on the same level. His subdivision of the verbs of the first conjugation employs not only the opposition consonant/vowel (phonetic criterion) but also the presence of an "-n- suffixal" (morphological criterion). As is clear from the exposition of his classification given before, the criteria for all his further subdivisions are also of a mixed character (cf. p. 9).

A peculiar flaw in Unbegaun's classification from a methodological point of view is his use of the same criterion on different levels of subdivision. The criterion consisting of the character of the suffix in the infinitive base is used not only for the subdivision of his class IV (connective vowel -i-: infinitives A ljub-i-tj, B let-e-tj, C zvuč-a-tj), but also on a lower level, namely in subdividing his class III B (III: connective vowel -e-, present stem in vowel; B: suffix in infinitive base; 1. ta-ja-tj, 2. da-va-tj, 3. kov-a-tj). Furthermore, the criterion of whether the present base ends in a vowel or in a consonant is used not only on the first level, namely

to separate classes I and III (first conjugation, I: present stem ending in consonant, III present stem ending in vowel), but again on the last level, namely to distinguish consonant from vowel stems within class IV (A 1 kraš-u versus A 2 stro-ju; C 1 zvuč-u versus C 2 sto-jṳ)[1].

d. CONCLUSION. To sum up, Unbegaun's classification of the Russian verb exhibits a greater strictness of method than Berneker's does, but is certainly not above reproach in this respect. It is true that his system does not involve the diachronic aspect and that it is exhaustive; but on the other hand, there are such negative features as preoccupancy with script and a confused classificatory technique. From a pedagogical point of view, Berneker's system is preferable to Unbegaun's.

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1) Incidentally, this last distinction is non-existant from a linguistic point of view and even graphically quite useless.

C H A P T E R   III :   J A K O B S O N.

5. I n t r o d u c t o r y. Contrary to Berneker and Unbegaun, Jakobson takes as the basis for his discussion of the Russian verb the phonemic rather than the graphic facts. This approach, which is linguistically the only correct one, involves certain complications which are absent if one starts from script. On the other hand, there are also instances where phonemic reality is simpler than its graphic representation.

The alternations to which the vowels in the verbal roots of Russian are subjected are not reflected in script in so far as they are purely phonetic (the script being based on the so-called morphological principle), so that to this extent Berneker and Unbegaun can ignore them. These phonetic alternations - which Jakobson must take into account - are the following:

(1) /ó/-/a/   močj   /moč/   -   mogu   /magú/

(2) /é/-/i/   sek   /s'ek/   -   seku   /s'ikú/

(3) /ó/-/i/   pёk   /p'ok/   -   peku   /p'ikú/

(4) /á/-/i/   prjastj   /pr'ast'/   -   prjadu   /pr'idú/

(5) /ó/-/é/   pёk   /p'ok/   -   pečj   /p'eč/

These alternations are predictable on the basis of the following phonetic rules:

(a) Stressed /ó/ appears in unstressed syllables as /a/.

(b) Stressed /é/ appears in unstressed syllables as /i/.

(c) Stressed /ó/, /á/ after soft cons. appear in unstressed

syllables as /i/.

(d) Stressed /ó/ after soft and before hard cons. appears be-

fore soft cons. as /é/.

These rules being given, the stems of the above-mentioned verbs can in morphophonemic notation be written as follows[1]:

m o g-   s'e k-   p'o k-   p r'a d-

If one starts from these stems, then rule (a) accounts for the al-ternation exemplified under (1) above, rule (b) for that under (2), rule (c) for those under (3) and (4) and rule (d) for that under (5).

The well-known unvoicing of voiced consonants before voiceless ones and at the end of a word is dealt with in the same way, e. g. in <u>vezti</u> /v'ist'í/ - <u>véz</u> /v'os/ - <u>vezu</u> /v'izú/ - <u>vezla</u> /v'izlá/, the morphophonemic shape of the root is v'o z-, with a voiced fricative, since the unvoicing of this sound can be predicted on the basis of a general phonetic rule.

If in these instances Jakobson's description of Russian conju-gation exhibits a greater complexity than that of his predecessors, due to the greater complexity of the phonetic facts in comparison to the script, in other cases the linguistic facts are simpler than their rendering in script. As was stated before, Berneker distinguishes three sets of personal endings in the present tense. These endings are given below together with their phonemic counterparts:

_____

1) The consonant alternations which accompany the vowel alter-nations under discussion are left out of account here.

B e r n e k e r			P h o n e m i c a l l y		
a) <u>-u</u>		<u>-ut</u>	/-u/		/-ut/
	<u>-ešj</u>/<u>-ešj</u>			/'-iš//ṷ-óš/	
b) <u>-ju</u>		<u>-jut</u>	/'-u/		/'-ut/
c) <u>-ju</u>	<u>-išj</u> ..... <u>-jat</u>		/'-u/	/ṷ-iš/	/'-ut/ /'-át/

Since the palatalization of stem-final consonants is a question
of stem alternations and not of endings, the desinences of the present
tense can be summed up as follows:

$$/-u/ \quad \frac{/-iš//-oš/ \quad ..... \quad /-ut/}{/-iš/ \quad ..... \quad /-ut//-át/} \, .$$

It is clear that the present tense endings form a simpler system in
the Russian spoken language than they do in Russian script.

6. M a t c h i n g   p r e s e n t   a n d   i n f i n i t i v e
s t e m.

a. STATEMENT OF THE PROBLEM. As is stated correctly by Cornyn,
"the problem of classifying the Russian verb lies in matching the
present and infinitive stems" (l.c., p. 66). As is well known, the
present tense stems of the Russian verbs cannot be predicted on the
basis of those of the infinitive nor vice versa. For example, the
similar infinitives <u>delatj</u> and <u>zvučatj</u> are matched with different
present tense forms: <u>delaju</u> versus <u>zvuču</u>; on the other hand, the
similar present tense forms <u>valju</u> and <u>velju</u> are matched with differ-
ent infinitives: <u>valitj</u> versus <u>veletj</u>. In spite of his awareness of
this fact, Cornyn has not achieved any solution. He is content to set
up four regular types of verbs; corresponding to Berneker's classes
B I 1, B VI, B V and B III 2,and considers everything else "irregular",
including such common types as Berneker's classes B I 2 and B II 2.
However, a good classification should be as inclusive as possible

and in this respect Cornyn is far behind both Berneker and Unbegaun.

b. TRUNCATION. It is the great achievement of Jakobson to have found a solution for the problem of matching the present and infinitive stems. For this solution he draws his inspiration from the following passage in Bloomfield:

"...when forms are partially similar, there may be a question as to which one we had better take as the underlying form, and ..... the structure of the language may decide this question for us, since, taking it one way, we get an unduly complicated description, and, taking it the other way, a relatively simple one. This same consideration often leads us to set up an artificial underlying form."[1]

Whereas Berneker's classification is based on the infinitive- and Unbegaun's on the present stem, Jakobson selects neither but uses that form from which the other can be deduced by the simplest set of rules. He sets up two major classes of Russian verb stems. (1) Stems ending in a vowel (in his terminology "open stems") and (2) Stems ending in a consonant (in his terminology "closed stems"); the latter class is subdivided into "narrowly closed stems" i.e. stems in j, v, m, n, and "broadly closed stems" i.e. those ending in another consonant. Four simple rules cover the general relationship[2] between the form of the stem in the infinitive and the present tense:

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1) L. Bloomfield, Language. London, 1935, p. 218.

2) The "general relationship", that is to say, excluding simple or substitutive softening of consonants (/n'isú/, /n'is'óš/; /p'isát'/ /p'íšiš/) and special cases as /m'at'/, /mnu/, etc., for which special rules are given.

R u l e.[1]	E x a m p l e.
J 1. Stem-final vowel	Stem t a j a-
intact before desinence beginning in cons.	Inf. /tája-t'/
dropped before des. beginning in vowel.	1SPr. /táj-u/
J 2. Stem-final j, v, m, n	Stem d'e l a j-
dropped before des. beginning in consonant	Inf. /d'éla-t'/
intact before des. beginning in vowel	1SPr. /d'élaj-u/
J 3. Stem-final velar	Stem s t r'i g-
dropped before infinitive ending /-č/	Inf. /str'i-č/
J 4. Stem-final labial or dental	Stems g r'o b-, m'o t-

changes to /s/ before infinitive ending Inf. /gr'is-t'í/, /m'is-t'í/.

It will be noted that rule J 1. covers the "open stems", rule J 2. the "narrowly closed stems" and rules J 3. and J 4. the "broadly closed stems".

As can be seen from the above examples, Jakobson's basic stem-form is sometimes the form found in the infinitive (t a j a-), sometimes that found in the present tense (d'e l a j-) and sometimes neither (g r'o b-, m'o t-). The alternations to which the stems are subject are mainly a matter of dropping the final phoneme (rules J 1-4). Jakobson calls this phenomenon "truncation". The solution to the problem exemplified on p. 17 (section 6 a) may be seen from the following:

Stem d'e l a j-	Inf. /d'éla-t'/	1SPr. /d'élaj-u/
Stem z v u č a-	Inf. /zvučá-t'/	1SPr. /zvuč-ú/
Stem v a l'i-	Inf. /val'í-t'/	1SPr. /val'-ú/
Stem v'e l'e-	Inf. /v'il'é-t'/	1SPr. /v'il'-ú/

---

1) The rules of Jakobson in their restated form are referred to as J 1, J 2, etc., and are numbered in the order in which they appear in the text.

The simplification achieved by Jakobson in comparison to Berneker and Unbegaun may be seen from the following table:

Jakobson's class		Jakobson's stem-form	Infinitive	1 S. Present	Berneker's Class	Unbegaun's class
OPEN STEMS J 1.		p'i s a-	/p'isá-t'/	/p'iš-ú/	B I 2	I B 3
		p o r o-	/paró-t'/	/par'-ú/	A 5	I A 2
		ž d a-	/žda-t'/	/žd-u/	B I 3	I B 1
		s'e j a-	/s'éja-t'/	/s'éj-u/	B I 5	III B 1
		s m o t r'e-	/smatr'é-t'/	/smatr'-ú/	B II 2	IV B
		d'o r ž a-	/d'iržá-t'/	/d'irž-ú/	B II 2	IV C
		x v a l'i-	/xval'í-t'/	/xval'-ú/	B III 3	IV A
		d v'i n u-	/dv'ínu-t'/	/dv'ín-u/	B V 1, 2	II A, B
NARROWLY CLOSED STEMS J 2.		d'e l a j-	/d'éla-t'/	/d'élaj-u/	B I 1	III A 1
		s t a n-	/sta-t'/	/stán-u/	B I 7	2-cl. vb.
		d'e n-	/d'e-t'/	/d'én-u/	B II 5	2-cl. vb.
		g n'i j-	/gn'i-t'/	/gn'ij-ú/	B III 1 (exc.)	III A 1
		ž i v-	/ži-t'/	/živ-ù/	B IV	I A 2
		d u j-	/du-t'/	/dúj-u/	uncl.	III A 1
BROADLY CLOSED STEMS	J 3	p'o k-	/p'e-č/	/p'ik-ú/	A 4	I A 1
		b'i r'o g-	/b'ir'é-č/	/b'ir'ig-ú/	A 4	I A 1
	J 4	m'o t-	/m'is-t'í/	/m'it-ú/	A 2	I A 1
		v'o d-	/v'is-t'í/	/v'id-ú/	A 2	I A 1
		n'o s-	/n'is-t'í/	/n'is-ú/	A 1	I A 1
		v'o z-	/v'is-t'í/	/v'iz-ú/	A 1	I A 1
		g r'o b-	/gr'is-t'í/	/gr'ib-ù/	A 3	I A 1

c. SOFTENING. Softening of the last consonant of the verbal stem plays an important part in Russian conjugation. This softening can be of two types: (1) "bare" softening, consisting of the simple palatalization of a consonant, as in /n'is'-óš/ versus /n'is-ú/, and "substitutive" softening, involving the well-known consonant alternations of the type t/č, g/ž, etc. Neither Berneker nor Unbegaun states any general rules for softening. Both give separate rules for each of their classes of verbs. Since their treatment of the Russian verb is based on script they avoid any mention of the palatalization other than before a and u. Jakobson is the first to have given general rules covering all instances of palatalization and based not on a classification of the Russian verb in terms of other features but on the phenomenon of palatalization by itself.

To understand these rules the following facts must be kept in mind:

(1) The Russian consonants can be divided into three groups: hard (t, s, etc.), palatalized (t', s', etc.) and a group of "unpaired" consonants (š, ž, č, j). Jakobson calls the latter group "palatal". The "palatal" consonants are not subject to softening and may be disregarded in a discussion of this phenomenon.

(2) In stems ending in -e or -i (e. g. s m o t r'e-, x v a l'i-) the last consonant of the stem, if not palatal, is necessarily palatalized.

(3) In stems in -a the last consonant can only be hard (p'i s a-) or palatal (z v u č a-, t a j a-), but never palatalized. In terms of the traditional classifications this means that the classes of verbs like pisatj include none ending in *-tjatj, *-sjatj, etc.

(4) If a rule prescribes substitutive softening, it must be understood to imply bare softening in the case of consonants which are not subject to substitutive softening (r, l).

Jakobson is able to give the following comparatively simple rules covering <u>all</u> cases of palatalization:

J 5. Stems with palatalized last consonant

retain the softening everywhere,

except that in the 1st pers. sing. it is substitutive.

J 6. Polysyllabic stems in -a, -o

have substitutive softening before desinences beginning

in a vowel[1]

J 7. All other cases

have bare softening before des. beginning in a vowel

other than u,

but velars have substitutive softening except in the

imperative.

Examples: (stem, 1st and 2nd sing. and imperative are given)

(J 5) Last consonant palatalized:

    s'i d'e- /s'ižú/, /s'id'íš/   /s'id'í/

    t r a t'i- /tráču/, /trát'iš/   /trat'/

(J 2) Polysyllabic stem in -a or -o:

    p'i s a- /p'išú/, /p'íšiš/   /p'iší/

    p o r o- /por'ú/, /pór'iš/   /par'í/

(J 7) Monosyllabic stem in -a:

    ž d a-   /ždu/, /žd'oš/   /žd'i/

Stem in hard cons. other than velar:

    n'o s-   /n'isú/, /n'is'óš/   /n'is'í/

Stem in velar:

    p'o k-   /p'ikú/, /p'ičóš/   /p'ik'í/

---

1) This class includes one element consisting of zero in alternation with a vowel, namely the imperative ending (cf. section 8 c.).

Such comparatively simple rules for palatalization can be given only
on the basis of (1) the "basic stem-forms" as set up by Jakobson and (2)
the present tense endings as they actually are in the Russian language
(rather than in script and in the pronunciation based on script). Jakob-
son's advantage over his predecessors is clear, for instance, from the
fact that in Berneker's class A 5 (teretj - tru; porotj - porju) it has
to be especially stated that the verbs of the type porotj "have the end-
ings b." (-ju, -ješj, etc.). For Unbegaun, the verbs of this type form
a special sub-group of his class I A 2. One of the characteristics of this
sub-group is the very palatalization of the final consonant in the present
stem. In Jakobson's system the verbs of the type porotj (stem p o r o-)
are classed together with the verbs of the type pisatj(stem p'i s a-).
Both types are polysyllabic; both end in an open, non-palatal vowel; both
have a hard last consonant. When, before a desinence beginning in a vowel,
they lose the final stem-vowel, the behavior of their last consonant with
regard to softening is likewise identical:

p'i s a-	p o r o-
/p'iš-ú/	/par'-ú/
/p'íš-iš/	/pór'-iš/
/p'íš-ut/	/pór'-ut/,

and is covered by the same rule for softening (J 2). With regard to
p o r o-, the fact mentioned under (4) on p. 21 must be kept in mind.

It should also be noted that it is the fact mentioned under (3) on
the same page that makes Jakobson's first rule possible: if there were
verbs with infinitive in /-t'at'/, /-s'at'/, etc., and present tense in
in /-ču/, /-čiš/ and /-šu/, /-šiš/, etc., the rule would not hold, since
it allows substitutive softening in the 1st pers. sing. only. The class
of pisatj, however, includes no such verbs, as can be checked in Cornyn's
list (l.c., p.73).

It must finally be pointed out that in Jakobson's system the verbs
stonatj, sosatj, oratj (in the meaning "to bawl") and žaždatj - which,
in spite of the fact that they are polysyllabic, have the softening pat-
tern of ždatj - are irregular, whereas both Berneker and Unbegaun can
include them in their respective classifications (Berneker B I 3; Unbe-
gaun I B 1). But then, neither Berneker nor Unbegaun are able to state
general rules for softening; for having achieved this the price paid by
Jakobson is small indeed.

7. S t r e s s. In descriptions of the Russian verb-system the
stress-patterns are usually dealt with as a secondary matter. Until
the appearance of Jakobson's article no complete and lucid systemati-
zation had been achieved. Regarding the way the stress is treated by Ber-
neker and Unbegaun, the same remarks could be repeated here as were made
in connection with softening: individual rules are given for classes
or parts of classes which are set up on the basis of non-accentual
criteria.

As is the case with palatalization, Jakobson deals with the stress-
patterns of the Russian verb in an entirely new way. The original ele-
ment in Jakobson's approach is his subdivision of the Russian verb-
stems into two major categories: stressed and unstressed stems. In
other words, not only the place, but the very presence or absence of
a stress on the basic stem-form is considered an inherent characteris-
tic of this form.

On the basis of this distinction Jakobson is able - as he was
in the case of palatalization - to cover the accentual behavior of the
Russian verb in a few comparatively simple rules.

To understand these rules it is necessary to know that Jakobson regards the traditional person-endings of the present tense (with the exception of the first person singular) as consisting of two morphemes (2nd sing. -i-š/-ó-š; 3d sing. -i-t/-ó-t, etc.; 3d plur. -u-t/ -á-t) – the vowel in each case indicating the present tense, the consonant indicating person and number.

Jakobson's rules are restated below, first those for accented and then those for unaccented stems:

J 8. Accented stem:

stress remains on same syllable throughout

except that in open and broadly closed stems

the stress moves from the final syllable

to the first syllable of a desinence begin-

ning in a vowel.

J 9. Unaccented stem:

A. if open polysyllabic

the simple desinence is stressed

otherwise the preceding vowel is stressed.

B. in all other cases

the final syllable is stressed

but in all except the broadly[1] closed stems

the stress is drawn back from the neuter

and plural preterit desinences.

The following examples completely cover the full range of accentual possibilities presented by the Russian verb:

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1) Jakobson, l.c. 2.62 prints "narrowly closed" in his rule, which, obviously, is an error.

Examples (stem, 1st and 2nd pers. sing. and fem. and plur. preterit are given; only in the 1st sing. is the desinence simple, otherwise it is complex):

(J 8) <u>Accented stem:</u>

Open stem with stress not on the final syllable:

m á z a- /máž-u/ /máž-i-š/ /máza-1-a/ /máza-1'-i/

d v'í n u- /dv'ín-u/ /dv'ín'-i-š//dv'ínu-1-a/ /dv'ínu-1'-i/

Open stem with stress on the final syllable:

v'e 1'é- /v'il'-ú/ /v'il'-í-š/ /v'il'é-1-a/ /v'il'é-1'-i/

v a 1'í- /val'-ú/ /val'-í-š/ /val'íl-a/ /val'í-1'-i/

Broadly closed stem with stress on the final syllable:

k r á d- /krad-ú/ /krad'-ó-š/ /krá-1-a/ /krá-1'-i/

(but cf. the stress-pattern in narrowly closed stems:

s t á n- /stán-u/ /stán'-i-š/ /stá-1-a/ /stá-1'-i/

č i t á j- /čitáj-u/ /čitáj-i-š/ /čitá-1-a/ /čitá-1'-i/

(J 9) <u>Unaccented stem:</u>

Open polysyllabic stem:

p'i s a- /p'iš-ú/ /p'íš-i-š/ /p'isá-1-a/ /p'isá-1'-i/

(same pattern in x v a 1'i- and t o n u-)

Open monosyllabic stem:

ž d a- /žd-ú/ /žd'-ó-š/ /žda-1-á/ /ždá-1'-i/

Narrowly closed stem:

p l i v- /pliv-ú/ /pliv'-ó-š/ /pli-1-á/ /plí-1'-i/

Broadly closed stem:

n'o s- /n'is-ú/ /n'is'-ó-š/ /n'is-1-á/ /n'is-1'-í/

As can be seen in the rules quoted above, the distinctions used by Jakobson as the basis of his description of the stress-

patterns are the following:

    (a) Unaccented and accented stems (the latter subdivided into

        stems with final and non-final stress).

    (b) Open, narrowly closed and broadly closed stems.

    (c) Polysyllabic and non-polysyllabic stems.

The diagram below presents Jakobson's systematization of the stress-patterns of the Russian verb, superposed upon the classification of Berneker[1]:

		UNACCENTED	ACCENTED	
			final stress	non-final stress
OPEN	poly-syll.	A 5. p o o r o— B I 2. p'i s a— B I 3. s t o n a— B II 2. s m o t r'e— B III 2. x v a l'i— B V t o n u—	B I 5. s m'e j á— B I 3. s o s á— B II 2. v'e l'é— B III 2. v a l'í— B V š e p n ú—	B I 2. m á z a— B II 2. v'í d'e— B III 2. l á z'i— B V d v'í n u—
	mono-syll.	B I 3. ž d a—		
NARROWLY CLOSED		B IV ž i v— A 6. k l'a n—	B I 1. r u g á j— B II 1. u m'é j— B I 7. s t á n— B II 5. d'e n—	
BROADLY CLOSED		A 1. n'o s— A 2. v'o d— A 3. g r'o b— A 4. b'i r'o g—	A 2. k r á d— A 4. s t r'í g—	

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1) Some of Berneker's classes which — in so far as they are not anomalies — will receive special treatment later on (see sections 8 and 9) are not included here.

It is again Jakobson's primary distinction between open, narrowly closed and broadly closed stems that is largely responsible for the simplicity of his categorization of the stress-patterns. As can be seen from the diagram, this categorization brings to a common denominator the various accentual possibilities which are scattered throughout the different classes of Berneker's system.

The efficacy of Jakobson's system is strikingly demonstrated by the small number of exceptions to it. Jakobson mentions only four (l.c.,p. 163); to these, the verbs k o l'e b a- (1 sing. /kal'ébl'u/ instead of expected */kal'ibl'ú/ and m o g- (2 sing. /móžiš/ instead of expected *9/mažóš/, etc.) must be added.

a. INTRODUCTORY.

8. R e m a i n d e r of paradigm. So far, the discussion of Jakobson's analysis of Russian verb-morphology has centered around the two major issues: (1) the matching of the present- and infinitive stems (truncation and softening) and (2) the stress-patterns. The soundness of Jakobson's approach to these issues is apparent not only from the simplicity of the rules he is able to give regarding the two points themselves, but also from the ease with which the rest of the paradigm can be integrated into his system. This integration works out in two ways: on the one hand, new categories to be set up fit easily into the system already established, and on the other hand, the major categories facilitate the formulation of rules for further material to be covered.

b. TRUNCATION IN PRETERIT. In the section devoted to the discussion of Jakobson's solution of the problem of matching present and infinitive stem it was pointed out that the pivotal principle of this solution is Jakobson's distinction of open, narrowly closed and broadly closed stems.

The complete description of the stem-alternations in present and in-
finitive required a further subdivision of the broadly closed stems
into stems ending in a velar and stems ending in another consonant
(see p. 19). To describe the additional alternations to which stems
are subject in the preterit, only one further subdivision has to be
made, which affects precisely this last category.(broadly closed stems
ending in a consonant other than a velar. This subdivision separates
the dental stops from the other consonants within this category. To
the four rules stated on p. 19 a fifth one must now be added:

J 10. Stem-final dental stop

dropped before preterit-desinence.

E.g. stems m'o t-, v'o d-   preterit /m'o-l/, /v'o-l/.

In this way, Jakobson's system of subdivisions of the basic stem-
forms, aimed at describing the behavior of these stems with regard to
truncation, is the following:

OPEN STEMS (J 1)			
CLOSED STEMS	NARROWLY CLOSED STEMS (J 2)		
	BROADLY CLOSED STEMS	STEMS IN VELAR (J 3)	
		OTHERS (J 4)	STEMS IN DENT. STOP (J 10)
			OTHERS

As can be seen in the above diagram, the system consists of a
simple series of dichotomies.

c. IMPERATIVE DESINENCES. With regard to the choice between the two alternants of the imperative ending (-i or zero): to the well-known rule of "-i after two consonants" (J 11; e. g. /kr'íkn'i/ versus /tron'/, /m'édl'i/ versus /v'er'/), Jakobson has only to add that the alternant -i occurs "after a stem not having an irremovable accent" (J 12). In other words, all unaccented stems have -i in the imperative, since they have no accent at all, and of the accented stems all those from which the stress sometimes moves to the desinence likewise have -i. The rest have the alternant zero; that is, in the terms of the diagram given on p. 27: the accented open stems with non-final stress and the accented narrowly closed stems[1].

d. INFINITIVE DESINENCES. The alternants of the infinitive (-t'/ -t'í/-č) can likewise be treated quite simply in terms of Jakobson's system. The alternant -č occurs after stems ending in a velar (which is lost: p'o k- inf. /pe-č/; the alternant -t'i in verbs with unaccented stems ending in a consonant in the infinitive (n'o s- inf. /n'ist'í/, g r'o b- inf. /g r'ist'í/, but cf. k r á d- (accented!) /krast'/; J 14).

e. PRETERIT DESINENCES. Even more simple is the rule dealing with the alternation zero/-1 in the preterit suffix: after a consonant the suffix -1 drops if not followed by a vowel (cf. /p'ok/, /p'ik-1-á/; /n'os/, /n'is-1-á/; J 15).

f. PRESENT PERSONAL DESINENCES. Finally the distribution of present tense desinences must be considered. The endings for person are always the same (1S. -u; 2S. -š; 3S. -t; 1P. -m; 2P. -t'i; 3P. -t), but there are three sets of vocalic suffixes indicating the present tense. These

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1) The rules for the imperative are completed by the statement "the group j-i is admitted only if the full stem itself ends in ji-" (l.c. 2.122; J 13).

are the following:

(1) i/u   e.g. /znáj-i-š/, /znáj-u-t/; /l'úb'-i-š/, /l'úb'-u-t/

(2) i/a   e.g. /v'il'-í-š/, /v'il'-á-t/

(3) o/u   e.g. /n'is'-ó-š/, /n'is-ú-t/

It will be noticed that the vowels in (1) are both high, those in (2) both unrounded and those in (3) both rounded.

The high-vowel suffixes (1) are the unstressed ones (J 16); (2) and (3) are found only under the stress. The distribution of the suffixes (2) and (3) is covered by the following rule: the unrounded suffixes (2) occur in open stems the last consonant of which is soft, the rounded suffixes (3) in all remaining cases (J 17).

The distribution of the present tense suffixes is shown by the following diagram:

UNSTRESSED SUFFIXES		i/u
STRESSED SUFFIXES	OPEN STEMS WITH SOFT LAST CONS.	i/a
	OTHERS	o/u

Jakobson has eliminated the traditional system of "first" and "second conjugation" and has replaced it by a system which reflects the actual facts of the Russian language.

In terms of the diagram given on p. 27 the rounded suffixes (3) are characteristic of the open monosyllabic and the narrowly closed unaccented stems, and also of all broadly closed stems. The unrounded suffixes (2) are characteristic of that part of the open stems with final stress, the last consonant of which is soft. All other verbs either do not stress the endings at all or draw it back from the 2nd sing. on and therefore have the suffixes (1).

Only four verbs are exceptions to the rules given above: spatj,
revetj, smejatjsja and ržatj. The first two are exceptional in any
classification; the others have the rounded tense-suffixes o/u in spite
of the fact that they are open stems with a soft last consonant
(s m'e j á-, r ž á-).

9. C o m p l e t i o n   o f   t h e   s y s t e m. Not all clas-
ses of the Russian verb are covered by the rules for stem-alternation
discussed in section 6. The omission was made on purpose, so as not
to cloud the basic issues in a mass of detail. Jakobson's treatment
of the remaining cases must now be dealt with. These cases, in terms
of Berneker's classification, are the following:

    (1) B V 2   Non-semelfactive bases in -nu- (e. g. gasnutj,

                                        preterit gas.

    (2) B I 6   The group davatj - daju, etc.

    (3) B VI   Stems in -ova- (e. g. kovatj - kuju)

    (4) B IV   The group mytj - moju, etc.

    (5) B III 1   The group pitj - pjju, etc.

    (6) A VI   Stems ending in a nasal (e. g. žatj - žmu)

    (7) A 4, 2   The verbs žečj - žgu and čestj - čtu.

    (8) A 5   The group teretj - tru, etc.

Jakobson's way of including these verbs in his general theory
of Russian verb-morphology is discussed in the following pages. The
classes of verbs are treated in the order in which they are given
above.

(1) The inclusion of the non-semelfactive verbs with the suffix
-nu- poses no problems. As is known, these verbs lose their suffix
in the forms of the preterit, and Jakobson states a rule to that effect.

effect (J 18). This group of verbs simply forms a special case which comes under the general heading of "truncation" (see section 6 b.).

(2) The verbs of the type <u>davatj</u> - <u>daju</u> are likewise dealt with by Jakobson as a special case of truncation. He gives the following rule: "Before j-, the group vá, if preceded by a, is omitted in the present" (J 19)[1]. Here a tendency becomes apparent in Jakobson's article which might be labeled as the "horror exceptionis". In the first place, there are only three verb-stems of this type: d a v á j-, -z n a v á j- and -s t a v á j- (pres. /daj-ú/, /-znaj-ú/, /-staj-ú/). In the second place, the attempt to include these verbs under the heading of truncation has rendered the statement of their morphological behavior unnecessarily complicated. In the third place - and this is the most serious objection - to regard these verbs as regular means excluding the possibility of the existence of verbs in -a v á j- with present tense in /-aváju/. It is obvious, however, that any new-formation in Russian which happened to end in -a v á j- would be precisely of this type, i. e. would follow the pattern of d'é l a j- rather than that of d a v á j-. The stem of the verb upovátj - upováju is morphophonemically, as far as the Russian language is concerned, u p a v á j- (the second syllable never being stressed throughout the paradigm), and contrary to Jakobson's rule it has present /upaváju/ rather than */upajú/. Our objection to Jakobson's rule concerning these verbs is all the more serious since according to his section 2.7 they constitute a productive type.[2]

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1) The behavior of the stress is covered by the addition "...and the stress falls on the following syllable".

2)"Productive are all existing verbal types with a polysyllabic accented full stem...when the preconsonantal alternant of the stem ends in a 'mobile' j."

(3) The stems in -ova- must be fitted into any classification
of the Russian verb, as they are both numerous and productive. For
Jakobson, they are open stems (in -o v a-) which exhibit a "concom-
itant change" (concomitant, that is, with truncation). The behavior
of this group of verbs is covered by the following rule: "Before
dropped a- the group ov is regularly replaced by uj-" (J 20).[1] Here
a new element is introduced in Jakobson's system, in the form of
"concomitant changes". It is typical of Jakobson's approach to the
Russian verb-system that such an element, newly introduced to cover
a certain class of verbs, immediately proves fruitful in the descrip-
tion of other classes: the behavior of the three following groups
(4-6) can likewise be dealt with under the heading of "concomitant
changes".

(4), (5), (6) As basic stem-forms of the types (4) <u>mytj</u> - <u>moju</u>,
(5) <u>pitj</u> - <u>pjju</u> and (6) <u>žatj</u> - <u>žmu</u>, Jakobson selects the forms these
verb-stems have in the present tense, so that they are respectively
m o j-, p'j- and ž m-. The last two forms contain no vowel and are
referred to as "nonsyllabic stems". All these verb-stems end in -j
or in a nasal (narrowly closed stems) and therefore must drop their
final consonant before an ending beginning in a consonant (J 2, p. 19).
The following rules regarding "concomitant changes" cover the re-
maining features of the behavior of these verbs: "Before the dropped
j- the vowel o in monosyllabic stems and zero in nonsyllabic stems
are replaced by i". (J 21). "Before the dropped nasal, zero in non-
syllabic stems is replaced by a."(J 22). According to the first rule,
the infinitive and preterit of m o j-, p'j- are/mi-t'/, /mi-l/ and
/p'i-t'/, /p'i-l/; according to the second, those of ž m- (and also
of ž n-); /ža-t'/, /ža-l/.

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1) The behavior of the stress is covered by the addition "...in a
non-initial syllable the stress is transferred from á- to új-, other-
wise to the following vowel."

(7), (8) As basic stem-form of the verbs of the types žečj - žgu; -čestj - -čtu and of the type teretj - tru Jakobson again selects the present form of the stem.(morphophonemically ž g-, -č t- and t'r-). The first two verbs are unique in their respective traditional classes, and so they are in Jakobson's classes "broadly closed stems ending in velar (ž g-) or dental stop (-č t-). Also, from the point of view of syllabic structure all these verbs form a minority in the group of "nonsyllabic stems" (which also includes the types p'j-, ž m-, ž n-, cf. (5) and (6) above). Nevertheless, Jakobson includes, with an eye to these verbs, a rule on vowel insertion in nonsyllabic stems which runs as follows:"A vowel is inserted within a nonsyllabic full stem before a nonsyllabic desinence and, if this stem ends in r, before any consonantal desinence. The inserted vowel is é in the infinitive, ó elsewhere". (J 23). Examples: ž g-, pret. /žok/, /žg-l-á/, inf. /že-č/; t'r-. /t'ór/,/t'ór-l-a/.

Here again, the tendency criticized above under (2) becomes apparent. The rule is complicated, it introduces a new notion "vowel insertion"; still, it covers only six verbs and of these not even the whole paradigm, since the infinitives /t'ir'é-t'/, etc., remain irregular. Furthermore, the rule is incorrect as it stands since it would require an o in the imperative of pitj, which, however, is /p'ej/, with an e.[1] The artificial nature of the rule appears clearly from the fact that it separates the relation between /žok/ and /žeč/ from that between /p'ok/ and /p'eč/ (cf.p. 15), whereas the two cases are obviously parallel.

The rule on "vowel insertion" is the weakest point in Jakobson's article and should not have been included.

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1) This defect could be mended by the inclusion of the words "and the imperative" in the last sentence of the rule.

C O N C L U S I O N

In comparison to the traditional treatment of the Russian verb as
exemplified by Berneker and Unbegaun, Jakobson's approach is different
mainly in two respects: as regards his principles of classification and
as regards his techniques in applying these principles.

Jakobson's principles of classification are basically different from
those used in the traditional systems. Berneker's system is based on the
nature of the infinitive-stem in its phonetic and morphological aspects,
and the further breakdown of the classes thus obtained results from employ-
ing various criteria such as the present-stem, the preterit-stem, the endings
used, etc. Unbegaun's classification is based on the connective vowel of the
present tense (in script!) and on the phonetic nature of the present-stem;
his further subdivisions again result from a host of mixed criteria: presence
and behavior of suffixes in the infinitive-base,,similarity or dissimilarity
of the present- and infinitive-stems, and the character of the suffix
in the infinitive-base. In comparison to this confusion of varied criteria
in the traditional classifications, the basis of Jakobson's system is of
an amazing simplicity. The basis of Jakobson's systematization of the Russian
verb is the phonemic structure of the basic stem-form. This phonemic structure
is exploited to the utmost and only where phonemic criteria are insufficient,
do morphological elements enter into the picture.

The following phonemic features of the basic stem-form figure in
Jakobson's rules:

(1) <u>The make-up of the stem in terms of phonemes</u>. The nature of the final phoneme of the stem yields the classes of open and closed stems, with further subdivisions (see the diagram on p.29). This feature enters into the picture in almost every one of Jakobson's rules. The hardness or softness of the last consonant of the stem plays a role in the rules on softening and on the present-endings.

(2) <u>The syllabic structure of the stem</u>.(non-syllabic,monosyllabic and poly-syllabic stems). This feature plays a role in the rules on softening, on the stress, and also on concomitant change and vowel-insertion.

(3) <u>The accentuation of the stem</u>.(unaccented and accented stems, the latter subdivided into stems with final and non-final stress). This feature plays a role in the rules on the stress, on the imperative, on the infinitive and on the endings.

As far as the basic stem-form is concerned, only in one instance is a morphological feature made use of in the statement of a rule, and this rule - on verbs with non-semilfactive - nu -- covers the behavior of this very morphological feature.

The picture is slightly more complicated where the desinences are concerned. Here, besides make-up in terms of phonemes (desinence beginning in a consonant versus desinence beginning in a vowel; desinence beginning in -u- versus desinence beginning in other vowels) and the syllabic structure (syllabic versus non-syllabic desinence), the morphological aspect is more heavily employed: the 1 sing. present endings and the imperative as such figure in the rules on the stress, which also make use of the distinction between simple and complex desinences. These instances where morphological notions are introduced constitute a bare minimum. Jakobson's classificatory criteria exhibit a maximal homogeneity, which is in sharp contrast to the mixed nature of those of his predecessors.

The second respect in which Jakobson's approach to the Russian verb morphology differs from the traditional one is his systematizing technique. All traditional classifications - whether they start from the infinitive- or from the present-stem - consist of a grouping of the Russian verbs into a number of major classes, which then are subdivided further on the basis of various criteria, the latter classes each being provided with their own separate statements about stress, softening, endings, etc. None of these classifications solve the problem of matching present- and infinitive-stems. For Jakobson, the starting-point is the totality of the basic stem-forms. Given these forms, rules are stated about truncation (which solves the crucial problem of matching the different stem-forms in one paradigm), about softening, stress, selection of endings, etc., each of these phenomena being considered in its completeness, ie. in its implications for the totality of the basic stem forms. These stem-forms are then classified according to their behavior in each particular respect (eg. the phenomenon of truncation necessitates a division into open and closed stems, with further subdivisions.) The statement of the different behavior features of the verb-stems may involve the subdivision of the basic stem-forms according to different principles; for instance, the rules for the personal endings of the present-tense involve the distinction between stressed and unstressed stems but no distinction of syllabic structure; on the other hand, distinctions of syllabic structure play a role in the rules for palatalization, where accentuation can be left out of account.

It is Jakobson's achievement to have employed a minimum of distinctions to describe a maximum of the total number of Russian verbs. Each

subdivision made in the totality of basic stem-forms, whether it concerns phonemes, accentuation, or syllabic structure, invariably plays a role not in one but in several different rules; in this way the yield is maximal and the number of subdivisions necessary to describe the behavior of the stem-forms remains at a minimum. In this way, Jakobson manages to cover the complete Russian verb morphology with an amazingly small number of rules which leave very few exceptions. The comparison of his treatment with that of the traditional school strikingly demonstrates the great advances made in structural linguistics during the last decades.

B I B L I O G R A P H Y

Only books and articles mentioned in the text are included in the bibliography.

Berneker, E., Vasmer, M.,(rev.), Russische Grammatik, Berlin,

Walter de Gruyter and Co., 1947.

Bloomfield, L., Language, London, George Allen and Unwin Ltd., 1935, p. 218.

Bloomfield, L., Dictionary of Spoken Russian, War Department - TM 30-944, 1945.

Bloomfield, L., Spoken Russian, War Department - EM 525, 1945.

Cornyn, W. S., "On the Classification of Russian Verbs, " Language,

Vol. 24:1, p. 64 ff., Baltimore, 1948.

Forbes, N., Russian Grammar, Oxford, Clarendon Press, 1916.

Guihomard, W., Des systèmes traditionnels de classement des verbes russes .

Mélanges publiés en l'honneur de M. Paul Boyer, 324-33, Paris, 1925.

Jakobson, R., "Russian Conjugation, " Word, Vol. 4:3, p. 155 ff.,

New York, 1948.

Karcevski, S., "Études sur le système verbal du russe contemporain, "

Slavia, 1, p. 242 ff., Prague, 1922.

Karcevski, S., Système du verbe russe. Essai de linguistique synchronique,

Prague, 1927.

Lundqvist, J., Rysk Språklära , Helsingfors, 1914.

Mazon, Andre, Grammaire de la langues russe, Collection de Grammaires

de l'Institut d'Études Slaves V, Paris, 1949.

Ozhegov, S. J., Slovarj russkogo jazyka. Gosudarstvennoe izdateljstvo

inostrannyx i nacionaljnyx slovarej. Moskva, 1952.

Saussure, F. de, <u>Cours de linguistique générale</u>, Paris, Payot, 1922.

Ščerba, L. V., <u>Grammatika russkogo jazyka</u>, Moskva, Gosudarstvennoe

　　učebno-pedagogičeskoe izdateljstvo ministerstva prosvešČenija

　　R.S.F.S.R., 1950

Unbegaun, B. O., <u>Grammaire russe</u>, Collection - Les langues du monde,

　　Lyon - Paris, Éditions I.A.C., 1951.

Ušakov, D. N. (red.), <u>Tolkovyj slovarj russkogo jazyka</u>, Gos. Inst.

　　"Sovetskaja Enciklopedija, " Moskva, 1935.

Vinogradov, V. V., (red.), <u>Grammatika russkogo jazyka</u>, Tom I. Fonetika

　　i Morfologija Akademii Nauk S.S.S.R. Institut Jazykoznanija,

　　Moskva, 1953.