

**Remarks on the
Phonological
Evolution
of Russian
in Comparison
with the Other
Slavic Languages**



Roman Jakobson

translated by Ronald F. Feldstein

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Translated and annotated by Ronald F. Feldstein

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Every linguistic fact is part of a whole in which everything is connected to everything else. One detail must not be linked to another detail, but one linguistic system to another system.

—A. Meillet

The history of a language ... should not be restricted to the study of isolated changes, but should try to deal with them on the basis of their place in the system that experiences them.

—Resolution of the First International Congress of Linguists at The Hague

One must guard against attributing to separation that which can be explained without it.

—F. de Saussure

Contents

Translator's Foreword: The Significance of Roman Jakobson's <i>Remarks on the Phonological Evolution of Russian in Comparison with the Other Slavic Languages</i>	xiii
Notes on Early Common Slavic to Late Common Slavic	xix
Author's Preface	xxiii

1 Basic Principles 1

1.1 Phonological System: The Phoneme	1
1.2 Types of Phonological Oppositions: Correlations	2
1.3 Paired and Unpaired Phonemes	3
1.4 Relations between Disjunctive and Correlative Units	3
1.5 The Archiphoneme and Its Variants	4
1.6 Phonological System of Literary Russian	5
1.7 Relations between Phonemic Variants and Archiphonemes	7
Annotations to Chapter 1, Basic Principles	9

2 Remarks on Current Issues of Comparative Historical Phonology 15

2.1 Extending the Use of Comparative Historical Methodology	15
2.2 Contradiction (Antinomy) between Synchronic and Diachronic Linguistics and Ways of Overcoming It	15
2.3 Typology of Changes	19
2.4 Phonetic "Laws"	19
2.5 Laws of Reciprocal Relations of Correlations	19
2.6 Importance of Acoustics for Historical Phonology	21
Annotations to Chapter 2, Remarks on Current Issues of Comparative Historical Phonology	22

- 3 Remarks on the Evolution of the Phonological System of Proto-Slavic 25**
- 3.1 First and Second Velar Palatalizations 25
 - 3.2 Influence of Palatal Consonants on Following Vowels 26
 - 3.3 Reciprocal Influence of Vowels and Liquids inside Diphthongs 26
 - 3.4 Influence of Vowels on Preceding Consonants 28
 - 3.5 Unification of the Syllable 28
 - 3.6 Ultimate Fate of the Products of Velar Palatalizations 28
 - 3.7 Diphthongs of Proto-Slavic 29
 - 3.8 Elimination of Homogeneous Diphthongs 31
 - 3.9 Evolution of Nasal Diphthongs 31
 - 3.10 Fundamental Tendency of Diphthongal Evolution 33
 - 3.11 Qualitative Differentiation of Long and Short Vowels 33
 - 3.12 Evolution of “Long Vowel + *n*” Diphthongs 34
 - 3.13 Restructuring of Quantitative Relations 35
 - 3.14 Redistribution of Prothetic Consonants and Its Consequences 36
 - 3.15 System of Palatal Consonants and Dialect Variations in Their Evolution 37
 - 3.16 Dialect Differences in the System of Vowels in Sequences with Paired Softs and the Treatment of the Affricate *ʒ* 38
 - 3.17 Link between the Fate of *ě* and the Dialectal Treatment of the Sequence *ʒ’ä* 40
 - 3.18 Dependency of Nasal Diphthong Evolution on the Treatment of *ě* (*jat’*) 41
 - 3.19 Limitation of the Role of *j* 43
- Annotations to Chapter 3, Remarks on the Evolution of the Phonological System of Proto-Slavic 44
- 4 The Proto-East-Slavic Change of Initial *je-* to *o-* and Similar Developments in the Other Slavic Languages 59**
- 4.1 Reason for the Change of Initial *je-* to *o-* 59
 - 4.2 Conditions for the Loss of *j-* When Preceding *e* in Word-Initial Position 60
 - 4.3 A Bulgarian Parallel 63
 - 4.4 A Sorbian Parallel 64
 - 4.5 A Czecho-Slovak Parallel 65
 - 4.6 Hypothetical Isogloss of the Elimination of the Group “Initial *j + e + Soft Consonant*” and Attempt at an Explanation 66

- Annotations to Chapter 4, The Proto-East-Slavic Change of Initial *je-* to *o-* and Similar Developments in the Other Slavic Languages 67
- 5 Dialectal Facts about Proto-East-Slavic 71**
- 5.1 Fusion of *c* and *č* in Northern Russian 71
- 5.2 Treatment of the *sk + oi* Reflex in Northern Russian 71
- 5.3 Other Dialect Features; Disparate Nature of Isoglosses 72
- Annotations to Chapter 5, Dialectal Facts about Proto-East-Slavic 74
- 6 Consequences of the Loss of Weak *Jers* for the Slavic Languages 77**
- 6.1 Loss of Weak *Jers* as a Factor in the Breakup of Proto-Slavic 77
- 6.2 Consequences of the Loss of Weak *Jers* for the Correlation “Voiced ~ Voiceless Consonant” 78
- 6.3 Consequences of the Loss of Weak *Jers* for the Correlation “Soft Group ~ Hard Group” and Subsequently for Accent and Quantity 79
- 6.4 Changes in Czech 80
- 6.5 Changes in Western Bulgarian and the Confrontation of These Changes with Those of Czech 83
- 6.6 Changes in Northern Kashubian and the Problem of the Accentological Periodization of West Slavic 85
- Annotations to Chapter 6, Consequences of the Loss of Weak *Jers* for the Slavic Languages 89
- 7 The Establishment of the “Soft ~ Hard Consonant” Correlation in Russian and Other Slavic Languages, and Related Facts 99**
- 7.1 Treatment of Palatal Sonorants 99
- 7.2 Treatment of the Opposition of Front and Back Vowels 100
- 7.3 Details of the Establishment of the “Soft ~ Hard Consonant” Correlation in Ukrainian 101
- 7.4 Dialect Split of East Slavic Due to Weak *Jer*-Fall 104
- 7.5 Phonological Details of Belarusian 106
- 7.6 Diphthongs and the Role of Prothetic *v* in Ukrainian 107
- 7.7 Diphthongs and the Role of Prothetic *v* in Russian 111
- 7.8 Diphthongs and the Role of Prothetic *v* in Northern Belarusian 113
- 7.9 Evolution of Eastern Bulgarian Compared with Ukrainian 114

- 7.10 The Place of This Phonological Type on the Slavic Linguistic Map 116
- Annotations to Chapter 7, The Establishment of the “Soft ~ Hard Consonant” Correlation in Russian and Other Slavic Languages, and Related Facts 118
- 8 Features Common to Russian and Absent in Other East Slavic Dialects 135**
- 8.1 Classification of Developments Linked to Weak *Jer*-Fall on the Basis of Their Degree of Spread 135
- 8.2 Russian Innovations Listed by Trubetzkoy 136
- 8.3 Elimination of Russian Reduced *i, y* 136
- Annotations to Chapter 8, Features Common to Russian and Absent in Other East Slavic Dialects 138
- 9 Russian Dialect Changes of Unaccented Vowels 141**
- 9.1 Critique of Hypotheses That Derive *Akan'e* from Old East Slavic Quantity 141
- 9.2 Attempt to Derive *Akan'e* from Intensity Relations 143
- 9.3 Types of Dissimilative *Akan'e* 145
- 9.4 *Akan'e* and Other Types of Change in the Unaccented Vowel System 146
- 9.5 Types of Nondissimilative *Akan'e* 148
- 9.6 Conditions on the Rise of *Akan'e* and Its Southward Spread 149
- 9.7 Genetic Relations between Different *Akan'e* Types 151
- 9.8 Northward Spread of *Akan'e* 151
- Annotations to Chapter 9, Russian Dialect Changes of Unaccented Vowels 153
- 10 Some Conclusions 159**
- 10.1 Impossibility of Separating a Single Linguistic Process from the System as a Whole 159
- 10.2 Spread of Linguistic Innovations 160
- 10.3 Breakup of a Common Language 162
- 10.4 Tendency toward Structural Linguistics in Contemporary Ideology 163
- Annotations to Chapter 10, Some Conclusions 166

Appendix A: Author's Transcription 169

Appendix B: On Cyrillic Transliteration 171

Appendix C: Major *Jakan'e* Types 177

Author's References 185

Annotation References 191

Notes 195

Index 205

Translator's Foreword: The Significance of Roman Jakobson's *Remarks on the Phonological Evolution of Russian in Comparison with the Other Slavic Languages*

Preliminary

Remarks on the Phonological Evolution of Russian in Comparison with the Other Slavic Languages (henceforth *Remarks*) is uniquely interesting in many ways. It was the first linguistics monograph by Roman Jakobson, one of the greatest scholars of the twentieth century in the fields of both literature and linguistics. Originally written in Russian, this groundbreaking book on the subject of historical phonology was never published in that form, and, unfortunately, the only known copy of the Russian original “perished under the German invasion of Brno in 1939” (Trubetzkoy and Jakobson 1975, 147). Until now, the only surviving edition has been the French translation by Louis Brun. Consequently, this new, annotated English edition represents the first opportunity for many linguists to become acquainted with a major early work by Jakobson, filling a long-standing, unfortunate gap in the linguistic literature.

Jakobson's Purpose

The subject of the book is as unique as its history. It was written as part of the new Prague School structural approach to linguistics and was published as the second volume of the Prague School series, *Travaux du Cercle Linguistique de Prague*. A look at the first three titles that were reprinted in the first volume of Jakobson's *Selected Writings* (1962, 1–116) offers some insight into the history of *Remarks*. These three entries form a kind of trilogy. The first two are short papers on the “sound law and the teleological criterion” (Jakobson 1928/1962a, 1–2) and how best to “completely and practically present the phonological data of any language” (Jakobson 1928/1962b, 3–6). They set forth a programmatic plan for a new type of teleological historical phonology. The third entry is a reprint of the 1929 French translated edition of this book

(with some small textual changes and corrections of misprints). A teleological study implies that phonological history is purposeful, moving toward a goal, rather than haphazard and accidental, and this is precisely what Jakobson had in mind. This book is a reaction to previous descriptions of diachronic (i.e., historical) phonology, which record sound changes, but which consider them to be “fortuitous and blind” (Jakobson 1928/1962a, 2, quoting Ferdinand de Saussure) rather than systematic and motivated. Jakobson’s new methodology was primarily intended as a corrective to the historical work of both the Neogrammarians of the nineteenth century (see Halle 1986, 36) and Saussure’s *Course in General Linguistics* (see Joseph 2000, 170–173).

The Neogrammarian school was known for presenting sound changes in an isolated manner that did not account for systematic phonological properties. On the other hand, Saussure’s *Course in General Linguistics* displayed a true understanding of the phonological system, in the context of a given synchronic state of a language. In fact, Jakobson greatly admired the famous Saussurean analogy between a synchronic phonological system and a game of chess, referring to it as “Saussure’s brilliant comparison between the play of language and a game of chess” (*Remarks*, section 2.2). However, Saussure felt that diachrony was different from synchrony and that the chess analogy did not apply to historical evolution, since “language premeditates nothing,” but “the chess player *intends*” to make changes (Saussure 1959, 89). This notion was contrary to Jakobson’s approach and it led him to conclude that Saussure never managed to escape the “Neogrammarian rut” (*Remarks*, section 2.2; Joseph 2000, 172). I might add that *Remarks* has been very controversial among adherents of Saussurean linguistics. Čermák (1997, 32) and Harris (2001, 94) have gone so far as to say that Jakobson did not properly understand Saussure. However, one can also argue that Jakobson accurately cited specific passages from Saussure’s *Course in General Linguistics* and clearly demonstrated that the history of Slavic phonology is not “fortuitous and blind.”

The Jakobson-Trubetzkoy Dialogue about *Remarks*

Thanks to the publication of Nikolai Trubetzkoy’s letters to Jakobson about the publication of *Remarks* (e.g., Trubetzkoy and Jakobson 1975, 144–149), we have an opportunity to see how the book was discussed behind the scenes. Trubetzkoy agreed completely with the basic idea of the book, that linguistic universals and phonological patterns can influence the direction of sound change, and he praised it as “remarkable” in his letters to Jakobson (Trubetzkoy and Jakobson 1975, 144). However, he felt that Jakobson’s book was too difficult for the average linguist to read, because of its style and the fact that

it was translated into French, rather than in the original Russian. In one of his letters to Jakobson, he stated that the difficulties were “the result of haste and not enough restraint when you deal with an extremely strong torrent of ideas” (1975, 147). In a written response to Trubetzkoy, Jakobson agreed that his style was difficult, but he said that it was the result not of haste but of the fact that he kept adding more and more detail as he worked on each chapter (1975, 148).

There are two possible sources of difficulty in reading this work. First, Jakobson assumes a basic knowledge of the history of Slavic phonology; to explore this topic, see an introductory work such as Townsend and Janda 1996, 21–119, Lunt 2001, 181–221, or Jakobson 1955. Second, Jakobson frequently uses metaphors that relate to the potential juxtaposition or avoidance of incompatible phonological features in a given dialect zone. Terms such as “struggle” and “conflict” refer to a system that must deal with the simultaneous presence of incompatible phonological features by eliminating one or both of them. On the other hand, if the presence of incompatible features is avoided, Jakobson sometimes says that the conflict was “prearranged” or that the dialect used a “prepared formula” or “model” for dealing with it. As explained in the annotations to the various chapters, the Slavic dialect zones differ mainly in the chronological order in which the various rules applied as a reaction to the loss of the weak high short vowels, known as *jers*, and this can be understood in terms of isoglosses passing through different zones at different rates of speed, which could create a different phonological result in each zone.

Jakobson's Methodology

Jakobson's methodology represents one of the earliest uses of the concept of the distinctive feature, although Jakobson did not use this term, and he did not develop distinctive feature theory fully until two or three decades after the 1929 publication of *Remarks* (see Jakobson and Halle 1956). In 1929, Jakobson had not yet been able to treat all of the features as binary. In *Remarks*, he refers to series of binary feature oppositions as *correlations*, and to isolated binary pairs and nonbinary oppositions as *disjunctive*. A decade later (see Jakobson 1938/1962), he had revised the disjunctive features, such as the opposition of the various places of consonant articulation (labial, dental, palatal, velar), and also treated them as binary features (ultimately *grave-acute* and *compact-diffuse*; see Jakobson and Halle 1956, 29–31). This led to a disagreement between Jakobson and Trubetzkoy in 1936, since Trubetzkoy was not in favor of treating all features as binary (Eramian 1978, 280–281). In any case, Jakobson is able to avoid the piecemeal treatment of individual sounds

in *Remarks* by focusing on their common denominator at the feature level. He starts by establishing pairs of distinctive features that either are incompatible and unable to cooccur in phonological systems or have to occur together. For example (sections 2.5, 6.3):

1. Phonemic pitch must cooccur with phonemic vowel quantity. Since phonemic pitch was viewed as a tonal curve across the two moras of a long syllable, pitch implied quantity.
2. A phonemic intensity accent cannot cooccur with phonemic vowel quantity. If accent is truly phonemic and free, it will occur on either mora of long syllables within a system of phonemic quantity, producing a system of phonemic pitch rather than an atonal intensity accent.
3. If there is no opposition between pitch and unaccented syllables, there is also no phonemic opposition between two types of pitch (e.g., rising vs. falling).
4. The features of phonemic pitch and phonemic consonant palatalization cannot cooccur. Although this applies both to the Slavic languages and to other language families, Jakobson does not present it as a universal law, due to Polivanov's Japanese data (see *Remarks*, section 6.3 and note 2 of chapter 6).

On the basis of these four rules of inclusion or exclusion, Jakobson traces the reaction of each Slavic dialect zone to the loss of *jers*. Dialects could either anticipate the potential development of incompatible features due to *jer* loss and modify the system prior to the loss of *jers*, or fail to anticipate the incompatibility and face a conflict of two phonological features, which often led to the loss of both. Each zone reacted in its own way as *jer* loss progressed from the extreme southwest of the Slavic territory (Slovene and Serbo-Croatian) toward the east (Bulgarian) and the northwest (East Slavic).

Russian Unaccented Vowel Systems

After discussing the phonological systems that resulted after the loss of *jers*, Jakobson goes into considerable detail about the various Russian phonological systems of unaccented vowels (chapter 9). Russian dialects typically have a smaller inventory of vowels outside accent and a larger inventory of accented vowels. This means that certain oppositions can occur under accent but are neutralized in unaccented position and that the different vowel systems can serve as redundant signals of accent. The Russian word commonly used for a generic type of vowel reduction is *akan'e*, which literally refers to the merger of /a/ and /o/ outside accent. Jakobson examines many contemporary analyses

of this dialect feature and its origin and places the developments in their proper historical context, as well as providing a teleological analysis of how the interplay of inherent and prosodic sonority led to the system of vowel reduction. He also demonstrates that the change could only have proceeded from south to north, since the non-*akan'e* dialects require only a simple rule of merger to undergo it, but the *akan'e* dialects would require a complex set of rules to reverse it and revert to a non-*akan'e* (*okan'e*) system.

Since the neutralization of vowels in unaccented positions usually causes the merger of two vowel heights in those positions, Jakobson examines the relation between inherent sonority (i.e., vowel height) and prosodic sonority (i.e., accent vs. absence of accent). Again, he provides a masterful analysis of distinctive features, analogous to his analysis of the interrelationship of inherent and prosodic tonality features (i.e., consonant palatalization and phonemic pitch), which are incompatible in the Slavic languages. Such analyses constitute some of the great achievements of *Remarks*, which were far ahead of their time and prefigure linguistic work undertaken many decades after the book's first appearance in print.

Conclusion

Jakobson ends *Remarks* by placing his study in the context of the exciting structural developments of the early twentieth century, including Einstein's theories and modern biology. Indeed, Jakobson's study of evolving systems, rather than of individual sounds, was an outstanding linguistic achievement. I am pleased to make it available here in English.

I would like to dedicate this translation to the memory of two sadly departed but unforgettable colleagues, who were of immense help to me in my studies and in my teaching career: Charles Townsend, who taught me the basics of Slavic and Jakobsonian linguistics, and Kees van Schooneveld, who gave me the opportunity to teach the contents of this book.

Notes on Early Common Slavic to Late Common Slavic

As Roman Jakobson states at the beginning of his preface, *Remarks* presumes a knowledge of Slavic languages that is usually found in textbooks. I would recommend Townsend and Janda 1996, 21–119, Lunt 2001, 181–221, and Jakobson 1955 as introductions to the history of Slavic phonology and a supplement to this book. Explanatory information is also presented in the annotations that follow each chapter. The notes in this section provide a bare outline of the most salient facts about the history of Slavic.

Two terms are frequently used to refer to the early history of the Slavic languages: *Proto-Slavic* and *Common Slavic*. They overlap to some extent, but have different emphases. *Proto-Slavic* refers to the unattested and reconstructed language that was the ancestor of the modern Slavic languages. *Common Slavic* refers to a period when the Slavic dialects were mutually comprehensible and could still be considered a common language. (Of course, the linguistic definition of a single language with several dialects, as opposed to several related languages, is not precise.) Traditionally, the first attested Slavic writing, copies of Evangelical texts written in Old Church Slavonic, is viewed as early South Slavic, rather than Late Common Slavic, because it displays several marked South Slavic dialect features characteristic of Macedonian and Bulgarian, such as the change of the $\widehat{or}/\widehat{ol}$ diphthongs to *ralla* sequences. Under this view, the last manifestation of Common Slavic is the period preceding these texts. While the traditional view of Common Slavic places it before the first appearance of Old Church Slavonic texts due to the above-mentioned South Slavic features, Trubetzkoy held the view that the Common Slavic period lasted until the loss of mutual comprehensibility. Since he identified this loss with the fall of the weak *jer* vowels, he famously termed *jer*-fall as “the last event of Common Slavic” (quoted by Jakobson in section 6.1). Jakobson’s *Remarks* is one of the best and most detailed treatments of the events that transformed Late Common Slavic into the separate Slavic languages.

Two main phonological tendencies preceded the loss of *jers* in the period between Early Common Slavic and Late Common Slavic. Both tendencies related to the pattern of the individual syllable. Inherent phonological features are often classed as either sonority or tonality features (Jakobson and Halle 1956, 29), depending on whether a given feature is related to levels of energy or frequency, respectively. It happens that there was a particular Common Slavic direction of phonological evolution in both areas, which may clarify the pattern as a whole.

The trend in sonority was toward the open syllable or *rising sonority*, meaning an ideal syllable that started with the least sonorous obstruents, continued with sonorants such as liquids, nasals, and glides, and ended with the most sonorous sounds—the vowels. Since Common Slavic inherited a pattern that was not rising in sonority, a number of changes were required to bring the system into alignment with the new syllabic pattern of rising sonority. Word-final consonants had to be deleted or incorporated into vowels that preceded them; for example, some nasal consonants underwent the latter process, giving rise to nasal vowels. Syllable-final consonants could be deleted or join the following syllable. Diphthongs with falling sonority also changed to fit the rising-sonority model. When low vowels were followed by high, new monophthongs resulted. When vowels were followed by nasal consonants, new nasal vowels resulted. When vowels were followed by the liquids *r* and *l*, in the so-called liquid diphthongs, the Slavic modification to rising sonority was late enough to produce different results in the various zones, which Jakobson treats in detail (see section 3.7 for general discussion of Proto-Slavic diphthongs). The result of all of these changes was a syllable that usually ended in a vowel (i.e., an open syllable). In this connection, one might recall the language universal that all languages have open syllables, but only a subset has closed syllables.

The corresponding trend in tonality split all syllables into a high-tonality type, which were of a higher frequency and contained either palatal, palatalized, or front-vowel components, and a low-tonality type, which lacked any of the high-tonality elements. Since the result was a syllable with uniform tonality, the term *syllabic synharmony* is used to describe this trend. The direction of change caused lower-tonality elements to change to higher tonality. Thus, whenever a nonpalatal or nonpalatalized consonant was followed by a front vowel, it was subject to change. Jakobson uses terms typical of the Slavic linguistic tradition for high-tonality consonants (palatal and palatalized) and for low-tonality consonants (nonpalatal and nonpalatalized): *soft* and *hard*, respectively. The various types of palatalization arose because of the tendency toward syllabic synharmony; since new front vowels could enter the language

as diphthongs changed to monophthongs, there were several waves of palatalizations, both regressive and progressive. Much debate has ensued about the relative chronology of these palatalizations. It also should be noted that the term *palatalization* itself is ambiguous, since it can mean the change of a sound either to a palatal consonant (with a single palatal point of articulation) or to a palatalized consonant (with a primary point of articulation and a simultaneous secondary palatalization).

In reading *Remarks*, it will be helpful to keep both major tendencies in mind: rising sonority and syllabic synharmony. These two phonological patterns, and their interruption by the coming process of *jer*-loss at the very end of the Common Slavic period, go a long way toward explaining the many individual changes that they subsume under these major headings.

Author's Preface

I avoid presenting detailed facts of Russian and other Slavic languages that are described in textbooks. A number of issues have had to be presented without argumentation, or at least without detailed argumentation; that task is for specialized studies. Raising them in the present sketch would run the risk of failing to see the forest for the trees. The bibliographical references and critical notes are not intended to exhaust the current literature on the subject, nor to cover the "history of the question."

I am pleased to thank professors L. Brun, F. Dominois, N. Durnovo, O. Hujer, S. Karcevskij, O. Kraus, V. Mathesius, and N. Trubetzkoy for their advice, guidance, and personal cooperation in this work.

Without the insightful research of the latter in the field of the prehistory of Slavic languages, this work would have been impossible. This research, built on a broad and fruitful application of the principle of relative chronology, strives to account for the facts of language through intrinsic linguistic factors and to derive a series of changes from the same initial principle; in short, to discover the internal logic of linguistic evolution (a methodology previously indicated by the Russian linguistic tradition). It was N. S. Trubetzkoy who created the necessary foundation for moving from the history of facts to the history of the evolution of the system.

It is to him that I respectfully dedicate this essay.

Finally, it is my pleasant duty to recall everything that I owe to the thought-provoking works of A. Meillet, which have sought and successfully established the characteristic tendencies of language evolution.

1 Basic Principles

1.1 Phonological System: The Phoneme

By the *phonological system* of a language, I refer to the inventory, proper to that language, of the “meaningful distinctions” that exist among the concepts of acoustic-motor units—that is, the inventory of oppositions that can be linked to differences in meaning (inventory of *phonological oppositions*). All phonological oppositions that cannot be broken down into smaller oppositions are referred to as *phonemes*.¹

For practical reasons, in the present work I restrict the use of the term “phonological system” by convention: I use it only to refer to the system of meaningful oppositions that is realized within the confines of the word; that is, I ignore the system of oppositions that is manifested only within sequences of words, which serve to express syntactic rather than lexical and morphological meanings. The latter is a separate system, though linked with the former. The nature of this linkage could be translated into a series of precise formulas. The phonological elements of word sequences are, for example, intonation, pauses, accent as a sign of the unity of the phrase, the hierarchy of accents (sentence accent), and so on.

In the Slavic languages, the system of meaningful elements realized within the word is unitary and not subdivided into linked subsystems with specialized functions. However, this is an individual case. Certain other languages exhibit greater functional specialization of phonological elements. Thus, in the Semitic languages the vowel system is morphologized and serves exclusively to express internal root inflection. In most of the Germanic languages, accent as a meaningful element is realized not within the word but only in compound words, where it serves to mark the reciprocal relation of the constituents.

The well-known definition of a phonological system as a “collection of sound concepts” has involuntarily concentrated our attention on the acoustic-motor units themselves. Their types of interrelations have not been subjected

to the required analysis; however, it is within them that the essence of the phonological system resides. The sign itself is fortuitous and arbitrary.

1.2 Types of Phonological Oppositions: Correlations

The phonological system presents two basic types of oppositions:

1. Oppositions of *correlative* phonemes, and
2. Oppositions of *disjunctive* phonemes²

The first type of opposition manifests a consciousness of the correlation of opposed phonemes, defined by the existence of a series of binary oppositions of the same type within a given phonological system, which I will conventionally refer to as “correlated pairs.” The basis for classification (*principium divisionis*) is abstracted by the linguistic consciousness; the common properties are identified and then can be conceived of in the abstract, outside of the specific pairs that are being opposed.³ On the other hand, of course, one can also abstract the common elements that unite the two members of an opposition, and this substratum is a kind of real unity within the phonological system. The grammatical alternation of two members of an opposition (i.e., the morphological use of this opposition) can be an important concomitant factor that helps us to discern both the substratum and the basis for classification (*principium divisionis*). However, neither this grammatical alternation nor the articulatory relationship can be abstractly conceived of alone and autonomously, as defined above, when a given phonological opposition is isolated in the language. As a result, certain phonemes can be opposed to each other as a correlation within one phonological system, if there exists a system of parallel oppositions; however, in the absence of such a system, within another phonological system the very same phonemes can function as disjunctive. For example, within phonological systems where an entire series of vowels can be both long and short (e.g., Czech, Hungarian, and Ancient Greek), the long and short entities constitute a correlation. On the other hand, where the short vs. long opposition is sporadic (e.g., Abkhaz *ā, ǎ*; see Jakovlev, *a* 59), the phonological elements are disjunctive.⁴

The phonological system of Russian has the following correlations:

1. Voiced ~ voiceless consonants (presence or absence of voice)⁵
2. Soft ~ hard consonants (degree of height of the inherent tonality)
3. Intensity accent ~ unaccented vowels (degree of loudness of the voice)⁶

Correlations of the Czech phonological system:

1. Voiced ~ voiceless consonants
2. Length ~ shortness (quantity) of vowels

Correlations of the literary Serbian phonological system:

1. Voiced ~ voiceless consonants
2. Length ~ shortness of vowels
3. Pitch accent ~ unaccented vowels (degree of voice pitch)
4. One ~ another structure of syllabic intonation

1.3 Paired and Unpaired Phonemes

When considering a correlation, besides the pairs of the existing correlation $A_1—A_2$, $B_1—B_2$, $C_1—C_2$, ..., one takes into account phonemes that do not have a partner (i.e., a correlative phoneme)— D_1 , E_1 , ..., F_2 , G_2 , ...—and that are more or less associated with the features of existing correlational pairs (D_1 , E_1 , ... with A_1 , B_1 , C_1 , ...; F_2 , G_2 , ... with A_2 , B_2 , C_2 , ...), because the content of the correlation, the basis for classification (*principium divisionis*), is to some extent abstracted and thought of by itself. From the perspective of a given correlation, we conventionally refer to phonemes of the type $A_1—A_2$ as “paired” phonemes, and those of the $D_1—F_2$ type as “unpaired” phonemes. For example, if we consider the correlation “voiced ~ voiceless consonants,” we distinguish the “paired” voiced consonants, which have “paired” voiceless consonants as correlatives, from the “unpaired” voiced consonants, which lack voiceless partners, and the “unpaired” voiceless consonants, which lack voiced partners.

1.4 Relations between Disjunctive and Correlative Units

In analyzing the phonological system, it would be dangerously illogical to project both correlations and oppositions of disjunctive phonemes onto the same plane and to deal with them without taking into account the essential difference between the two categories, as well as their specific features.

It is not only the correlations and the relationships between disjunctive phonemes that are incommensurable; the terms of the two types of oppositions themselves do not always coincide in number. Thus, in contemporary literary Russian, the categories of the “voiced ~ voiceless” correlation are only opposed to each other preceding unpaired voiced phonemes. To be realized, the opposition of the “accented ~ unaccented” correlation requires at least a disyllabic sequence. In precisely the same way, it is only in a combination of phonemes

that the Czech opposition of “length ~ shortness” is fully realized, because, first, the quantity of the vowel has a relative duration that oscillates outside the framework of a determined “tempo,” and second, in the final syllable of the word, quantitative relations are distorted and tend to fade.

However, while the phonemes as such constitute the terms of the correlations in the examples cited, one can conceive of cases where the phonological system presents entire sequences of phonemes that are opposed to each other inseparably. For example, several Turkic languages (Kazakh[-kirgiz], [Kara-] kirgiz, Turkmen, Tatar, Bashkir) manifest the so-called *synharmonic law*, as stated by Jakovlev: “Both vowels and paired hard and soft consonants can only be either all hard or all soft within the boundaries of a single word in a language of this type; conversely, within the limits of a single word there cannot be both hard and soft vowels or paired consonants” (Jakovlev, *a* 61ff.; see also Šaraf 97ff.). Setting aside the synharmony of the word, which serves to distinguish words as wholes within the flow of speech and thus is a fact of “syntactic phonology,” I emphasize the synharmony of the syllable—that is, the phonological opposition neither of “soft consonant ~ hard consonant” nor of “front vowel ~ back vowel”—separately, but, rather, of “soft group ~ hard group.” In written form, the sign indicating softness could apply to the entire syllable (or the entire word) and treat it as a whole, a practice followed in some Latinized Turkic alphabets (Šaraf, 101).

1.5 The Archiphoneme and Its Variants

Taking the delimitation of concepts set forth above as our starting point, we can establish a new entity, essential to phonology: the *archiphoneme*. On the one hand, the archiphoneme cannot be subdivided into smaller disjunctive phonemic oppositions, and, on the other, it cannot share with another archiphoneme a common substratum that can be isolated by the linguistic consciousness; that is to say, one archiphoneme cannot be a correlative of another archiphoneme.⁷ The archiphoneme is a generic concept, an abstract unit that can join one or more pairs of correlated variants (correlative phonemes). Just as the extragrammatical variants united within a phoneme can be *combinatory* or *autonomous* (*stylistic* variants),⁸ the correlative variants of archiphonemes (correlative phonemes) can likewise be either autonomous or combinatory themselves. The *combinatory correlative variants* of an archiphoneme are correlative variants that manifest themselves only in combination with the correlative variants of another archiphoneme, which are equally combinatory. That is, none of these pairs of correlative combinatory variants is a paired correlation; instead, each is only a *fraction* of a pair. A correlation of phonemic pairs is possible only if these pairs are inseparable.

Let us suppose that the pair $A + B$ is opposed to the pair $A_1 + B_1$. In such a case, A and A_1 can be opposed to each other independently, outside of their combination with B and B_1 , while the opposition of B and B_1 is impossible outside of their combination with A and A_1 . In this case, it is A and A_1 , and neither $(A + B)$ nor $(A_1 + B_1)$, which are the basis of the correlation, while B and B_1 are merely extragrammatical variants. The opposition of B and B_1 is one of the types of *concomitant extragrammatical difference* attached to a correlation; the phonological difference that exists between A_1 and A_2 is accompanied by combinatory extragrammatical differences between these phonemes. For example, the Russian phonological opposition “intensity accent ~ unaccented” is accompanied by the extragrammatical differences “pitch accent—unaccented” and “length—shortness.” Only one of the acoustic-motor oppositions constitutes the content of the correlation, and it is this opposition that is least distorted in emotive speech, while the combinatory extragrammatical elements are usually also utilized as stylistic differences.⁹ Nevertheless, the boundary between the phonological content of the correlation and the concomitant extragrammatical differences is usually fluid, and it can happen that these roles are reversed, so that the concomitant extragrammatical difference becomes the phonological content of the correlation, and its former phonological content becomes a concomitant extragrammatical difference and is seen to be utilized as a stylistic difference.

1.6 Phonological System of Literary Russian

To illustrate what I have said about the archiphonemes and their phonological content, I will give an overview of the inventory of the archiphonemes of contemporary literary Russian (see figure 1.1). Correlative phonemes united into an archiphoneme are shown in parentheses.¹⁰

The correlation “length ~ shortness of consonants” does not exist in literary Russian. One encounters long consonants only at morphological boundaries, that is, where one part of the long consonant belongs to the root and the other part to an affix: for example, *ras-sadit* ‘offer seats’, *vin-nyj* ‘wine’. Such long consonants are felt to be a sequence of two short ones. The long soft husher consonants (<žž, šč) are independent phonemes; they are not the correlatives of the short hard hushers, since hard hushers can occur in the environment where hard paired consonants cannot (before *i* and *e*). The [long soft and short hard husher—RF] consonants \bar{z} — \dot{z} , \bar{s} — \dot{s} (*ščit* ‘shield’—*sšit* ‘sewn’) are also not correlatives since literary Russian does have long hard hushers as single phonological units.

Isn’t there a reason to consider the velars of the Russian phonological system as hard unpaired, since the corresponding softs appear only before

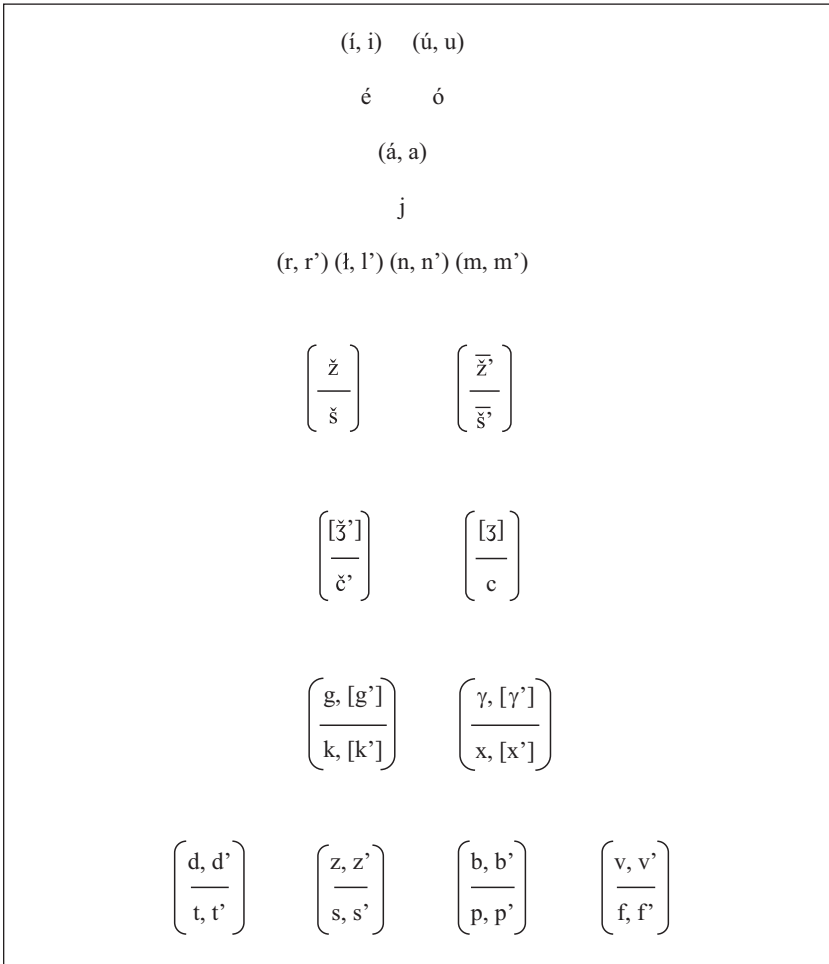


Figure 1.1
Russian phonological system

front-vowel phonemes—that is, strictly speaking, in the role of combinatory extragrammatical variants? We could recognize such a variant for voiced affricates as well, and speak of unpaired voiceless affricates in a similar way. However, the presence of the correlations “soft ~ hard consonant” and “voiced ~ voiceless consonant” permits the relationships $k'—k$, $\text{ž}—\text{č}$, and so on, to be interpreted on the basis of the pairs of these correlations. I will refer to phonemes that are identified in this way as *imaginary* or *supplementary* phonemes (in square brackets in figure 1.1). These phonemes occupy a place intermediate

between the basic paired phonemes and the combinatory extragrammatical variants.¹¹

1.7 Relations between Phonemic Variants and Archiphonemes

I use the term *basic variant* of a phoneme (or of an archiphoneme) to refer to the particular combinatory extragrammatical variant of the phoneme (or archiphoneme) that is the least dependent on extrinsic conditions and that is realized in the most numerous and clearest conditions for phonemes (or archiphonemes) of the language (cf. Jakovlev, *b* 69ff.). The variant that is found to be least dependent on extrinsic conditions is the one that is found in the most varied environments, while the variant that is always associated with just one environment acquires the value of a *secondary variant*—that is, of a combinatory variant in the true sense of the term. For example, if the vocalism of the accented syllable manifests a larger number of phonological differences than that of the unaccented syllable, or if, for the same number of phonological elements, the accented syllable is differentiated with greater phonetic clarity, the basic variants of vocalic archiphonemes are drawn precisely from within the inventory of the accented vowels. If the long vowels have a larger number of phonological elements than the shorts, the basic variants of the archiphonemes are the long vowels; in the opposite case, the basic variants are the shorts. If one variant of a vocalic phoneme occurs only after a hard consonant and word-initially, and a second variant is found only after a soft consonant, the difference is viewed roughly as follows: the second variant is conditioned by the position after a soft consonant, while the first occurs everywhere other than after a soft consonant, that is, in all other environments; in other words, the first variant is the basic one and the second, the secondary one. However, if the first variant occurs only after a hard consonant, while the second one occurs both in word-initial position and after a soft consonant, then, naturally, the second variant is the basic one. If the vocalic phoneme is represented by a total of two combinatory variants and if one is conditioned by a preceding hard consonant and the other by a preceding soft, with no other occurrences in other environments, the two variants are considered to be equipollent. The Russian accented *e* is high before a soft consonant and low in all other positions, that is, before a hard consonant and in final position. Therefore, the low *e* is the basic variant of the *e* phoneme.

The trend toward unification of a phoneme (or archiphoneme)—that is, toward phonetic approximation or merging into a single variant for variants that are markedly differentiated—is particularly strong when there is a basic variant of the phoneme (or archiphoneme), but it is also not uncommon for

equipollent variants to result. Where a basic variant exists, the tendency to unify the phoneme (or archiphoneme) occurs most often in the secondary- to basic-variant direction.

The basic variant tends to represent a phoneme (or archiphoneme) in the linguistic consciousness. In the Russian literary language, accented vowels after soft consonants are distinguished from accented vowels in all other environments, that is, after hard consonants and word-initially; accented vowels before soft consonants are distinguished from accented vowels before hard consonants and in word-final position. The basic variants of Russian vowels are accented vowels not adjacent to a soft consonant.

Annotations to Chapter 1, Basic Principles

1.1 Phonological System: The Phoneme

In a 1959 lecture, Jakobson criticized the two theses that he viewed as the “basic principles” of Saussure’s *Course on General Linguistics*: “arbitrariness of the sign” and linearity (Jakobson 1985, 28–29). Specifically, he called linearity a “dangerous simplification.” However, in 1979 he described his own definition of the phoneme as related to this concept, as presented in the *Course*. Along with coauthor Linda Waugh (1979, 18), he cited his early definition of phonemes as “oppositions that cannot be dissociated into smaller oppositions.” The authors claimed that this view was a “corollary” of Saussure’s view of linearity and that it was typical of analyses in the 1920s, “which did not go beyond the successive segments of the sound sequence.” They contrasted this claim, that there were no oppositions smaller than the linear segment, with the later view of phonemes as being composed of simultaneous distinctive features.

In the first endnote of this book, Jakobson specifically refers to Saussure’s view of the “phoneme.” Harris (2001, 94–95) later criticized Jakobson for misinterpreting Saussure on several points, including the fact that the term “phoneme” was due not to Saussure himself but to the editors of the *Course*. In the transcript of a 1963 lecture, published in 1989, Jakobson mentioned the fact that Saussure used the term “phoneme” in another sense (e.g., Jakobson 1989, 28), namely, “an invariant in the past,” or the invariant of a protoform, in contrast to all the different reflexes in the daughter languages. However, this may not have been as clear to Jakobson at the time *Remarks* was written in the 1920s.

For these reasons, it should be noted that the juxtaposition of Jakobson’s and Saussure’s views of the phoneme has a long and complicated history in linguistics.

1.2 Types of Phonological Oppositions: Correlations

Correlations are binary and based on a single feature. Jakobson uses the term “correlation” with the symbol ~ to indicate a series of oppositions that differ only by a single binary feature: for example, palatalized vs. nonpalatalized consonants (usually called “soft ~ hard consonants” by Jakobson), length vs. shortness of vowels, voiced vs. voiceless consonants. Note that there is good reason to use the terms “soft” and “hard,” rather than “palatalized” and “non-palatalized,” since Russian treats certain palatals (with a primary palatal articulation) and palatalized consonants (with a secondary palatalization) similarly, and one of the most convenient ways of referring to both types at once is to call them “soft” and “hard,” or perhaps “high tonality” and “low tonality.” Traditional linguists have often confused the terminology and referred to both palatals and palatalized consonants with the same word, but Jakobson and Horace Lunt (1956, 306–307; 1966, 87) often pointed this out as an error. Thus, it is not merely the Russian linguistic tradition that motivates Jakobson’s use of the terms “hard” and “soft.”

The term “disjunction” was used by Jakobson in the 1920s for oppositions other than correlations—that is, those that could not be expressed as a binary series. Later (1938/1962, 272–279), however, he adopted new types of binary features and thus eliminated the concept of disjunction from his phonology. For example, he modified the features for consonantal places of articulation from the nonbinary labial-dental-palatal-velar to the binary compact/diffuse and grave/acute. Trubetzkoy took a different route. He refined the concept of disjunction to include many different types of opposition, but retained various nonbinary types, such as the places of articulation for consonants, in contrast to Jakobson’s approach. (For more details, see Eramian 1978, 275–288.)

For Jakobson, a “correlation” must not only be binary—it must also be found in more than just one binary pair. His precise definition, published in French (1928/1962b, 3) and cited by Eramian (1978, 275), reads as follows (translation mine): “A phonological correlation consists of a series of binary oppositions, defined by a common principle that can be conceived of independently of each pair of opposed terms.” Thus, Abkhaz long and short *a* (i.e., *ā*, *ǎ*) have the binary opposition of length, but form a disjunction, rather than a correlation, since *a* is the only Abkhaz vowel that exhibits the quantity opposition; in this, Abkhaz contrasts with languages like Czech and Hungarian, where a large series of vowels displays a quantity opposition. Jakobson’s thinking is that if more than one pair displays a binary opposition, the abstract distinctive feature itself can be thought of as an abstract entity in the speaker’s linguistic knowledge and is not bound to a single phonological pair.

In this section, Jakobson presents the oppositions found in Russian, Czech, and Serbian. This choice reflects the fact that these languages represent the three major branches of Slavic. One can assume that Jakobson used the combinations of cooccurring phonological oppositions in the Slavic branches to deduce which features could cooccur in the evolution of Slavic and which could not. For example, he knew that languages with the pitch opposition (in the southwest of Slavic) never have phonemic palatalization, whereas the languages in the Northeast display the opposite situation. Additionally, languages geographically located between these zones (e.g., Czech, Slovak, Macedonian, Western Bulgarian) often lack both features.

1.3 Paired and Unpaired Phonemes

In this section, Jakobson introduces the notions “paired” and “unpaired.” Paired phonemes participate in a binary opposition: for example, a “soft” (palatalized) paired phoneme is opposed to another phoneme that agrees with it in all of its phonological features, except for the fact that it is “hard” (non-palatalized). An unpaired hard or soft phoneme participates in no such binary opposition on the basis of palatalization.

1.4 Relations between Disjunctive and Correlative Units

Jakobson cautions against equating correlations and disjunctions and states that all oppositions must be qualified in terms of various environmental restrictions that apply to them. For example, the accent opposition requires at least two syllables for its realization; the Russian voicing opposition occurs only in a specified environment. Sometimes sequences of phonemes function together, as in vowel harmony or as in Common Slavic synharmonic syllables, where the entire syllable, including both vowels and consonants, was either a high-tonality “soft” or a low-tonality “hard” syllable.

1.5 The Archiphoneme and Its Variants

In this section, Jakobson introduces the concept of “archiphoneme”: the set of features common to two paired phonemes, which differ by a single binary feature. Thus, in certain positions of neutralization, when the single opposing feature is suspended (as with voicing in word-final position), the occurring sound, which lacks the binary distinction, can be considered equivalent to the “archiphoneme.” Both phonemes and archiphonemes can have both “combinatory” and “autonomous” variants. Combinatory variants are similar to allophones, which are predictable from the phonological environment.

Autonomous variants are stylistic variants (called “optional” by Baudouin de Courtenay).

Jakobson also mentions concomitant extragrammatical features. In contrast to distinctive differences, which always differentiate two phonemes, concomitant extragrammatical features occur only under certain conditions, related to stylistic and other factors. Unlike distinctive features, they are predictable; for example, pitch distinctions can accompany Russian accent, but—unlike the distinctive feature of intensity—they are a concomitant extragrammatical feature that is not necessarily present. Jakobson also refers to vowel quantity as a concomitant extragrammatical feature of accent. Finally, he points out that distinctive and extragrammatical features can switch roles in the history of a language.

Note that Jakobson uses the symbol ~ to indicate the distinctive difference between phonemes and the symbol — to identify concomitant extragrammatical features: for example, “intensity accent ~ unaccented,” but “pitch accent—unaccented,” in the case of Russian.

1.6 Phonological System of Literary Russian

Jakobson presents the phonemic system of Russian in chart form. Correlations that constitute archiphonemes (i.e., differ by a single binary feature) appear in parentheses. (Note that in Jakobson’s later system of distinctive features, phonemic oppositions such as /p/ vs. /k/ and /p/ vs. /t/ are also binary.) In a note, Jakobson discusses the unusual status of the variants [i] and [y] of the phoneme /i/.

Jakobson addresses the question of palatalized velars in terms of hard ~ soft pairedness. Since this correlation exists for other phonemes but is a predictable, combinatory extragrammatical feature for velars, he assigns it the status of an “imaginary” or “supplementary” phoneme, placed in square brackets in his chart.

1.7 Relations between Phonemic Variants and Archiphonemes

In the case of multiple combinatory variants, the one that occurs most widely and independently, and is the least dependent on extrinsic conditions, is considered to be the “basic variant.” For example, basic variants of Russian vowels are drawn from the inventory of accented vowels, rather than unaccented. Russian /e/ has both higher and lower variants, but the lower variant is basic since the higher one occurs only before a soft consonant and the lower one occurs elsewhere.

This section has been plagued by misprints in various editions. The 1929 edition had two misprints or erroneous translations into French. The first error, which was corrected in the 1962 edition, used the word “before” (French *devant*) instead of “after” (*après*) in the sentence “the second variant is conditioned by the position after a soft consonant, while the first occurs everywhere other than after a soft consonant.” The second error has not been corrected in any previous edition of which I am aware. The word I have translated as “soft” originally appeared as the word “hard” (French *dure*) in the sentence “However, if the first variant occurs only after a hard consonant, while the second one occurs both in word-initial position and after a *soft* consonant, then, naturally, the second variant is the basic one.” In other words, it would not make sense to refer to both vocalic variants as occurring after hard consonants, as the French text reads; if that were the case, the two consonants would not be variants (allophones) in complementary distribution.

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