Futurism and Phonology :
Futurist Roots of Jakobson's Approach to Language

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Ja videl
Vydel
Vësen
V osen',
Znaja
Znoi
Sinej
Soni.

[«I saw the making of springs into the fall, having learned about the glows of blue drowsiness»].

(Khlebnikov 1968, vol. III, p. 27)

This and some other Khlebnikov's poems from the late 1900s and 1910s sound as if they had been deliberately composed for the purpose of illustrating the basics of structural phonology. Each couplet represents a perfect phonological opposition reflecting a phonologically relevant distinctive feature (cf. Trubetzkoy 1969, pp. 33-37). Two initial couplets constitute two minimal pairs of words distinguished by the opposition between a non-palatal and palatal (or, to use a more universal and abstract nomenclature developed by Jakobson in the 1950s, 'non-sharp *vs* sharp' [Jakobson, Fant, Halle, 1953]) consonant : [v'] *vs* [v]. The second quatrain illustrates almost as perfectly phonological distinctions among the vowels : 'low *vs* medium' and 'high *vs* medium' (in Jakobson's later system, 'non-flat *vs* flat' and 'diffuse *vs* compact').

Using puns and paranomastic play for illustrative and diagnostic purposes is by no means uncommon in works on phonology. Paranomastic juxtaposition captured in a pun constitutes a situation in which a single distinctive feature becomes vividly exposed. Jakobson sometimes went so far in using this device as to construct a whole sentence permeated with multiple paranomastic alternations :

> It shows the strange zeal of the mad sailor with neither mobility nor passion.
> It showed the strange deal of the bad tailor with neither nobility nor fashion.
>
> <div align="right">(Jakobson, Waugh, 1987, p. 8)</div>

Khlebnikov' and Jakobson's examples of paranomastic play appear perfectly interchangeable, if not in their literary quality, at least as far as phonological purposes are concerned.

Jakobson's life-long admiration for Khlebnikov is well-known. Khlebnikov was the subject of his first extensive scholarly project (Jakobson 1919); late in his life, Jakobson, in his dialogical (with Krystyna Pomorska) memoirs, fully acknowledged the impact on his formative years of «revelations in word-creation offered by the greatest Russian poet of our century, Khlebnikov, by whom I have forever remained fascinated.» (Jakobson, Pomorska, 1982, p. 6).

However, for all these acknowledgments of the inherent kinship between the futurist poet's attempts to reshape language, on one hand, and the new generation of linguists' attempts to reshape its scholarly representation, on the other, it remains unclear in what concrete ways this connection might influence conceptual apparatus of structural linguistics. Structural phonology, particularly in its mature shape given to it by Jakobson in his American period, is a strictly formal, formidably technical linguistic discipline whose extensive conceptual framework adheres to the principles of rigorous logical deduction. On its appearance, it could not be farther from Khlebnikov's idiosyncratic «revelations» of the 1910s.

And yet, the fact that Khlebnikov's poetry fits so well into diagnostic procedures of structural phonology, is symptomatic of an intrinsic link between these two ways of treating language. For both Khlebnikov the poet and Jakobson the linguist paranomastic word-play was not merely an artistic or scholarly device ; it reflected the very essence of their treatment of language as a playground of limitless interconnections between form and meaning. To find a universal key by which these interconnections would be exposed in their totality, to bring into the world this infinite cosmos of potential metamorphoses unbounded from limitations of any particular

tongue and conventional norm, — such was the ultimate goal which under-
lied both Khlebnikov's poetic «creations» and Jakobson's scholarly pursuit
of the essence of the «sound shape of language.»

For Jakobson, this vision, in which typically modernist anti-empi-
rical drive merged with neo-romantic longing for an all-encompassing syn-
thesis, was more than a general source of inspiration; it had become a for-
mative force which played a crucial role in shaping his linguistic concepts.
Jakobson's phonological theory (or, to be precise, his reinterpretation and
reshaping of the Prague school phonology, which he undertook in the
1940-70s), for all its scientifically impersonal appearance, was very much a
product of its author's creative mind and cultural background. To show in
what concrete ways Jakobson's approach to language had stemmed from
messianic visions of Russian avant-garde may provide a relevant back-
ground not only to Jakobson's own work but to certain trends in the deve-
lopment of theoretical linguistics at large.

Our story begins in January 1914. By that time, a 17 years old Jakobson
had been already well connected to the group of «cubo-futurists,» as they
were largely known in literary circles, or «futurniks» (*budetliane*), as they
preferred to call themselves; he himself wrote poetry, under pseudonym
«Aljagrov», in a radically «trans-rational» fashion :

> mzglybžvuo jixjan'dr'*ju* čtlěščk xn fja sp skypolz*a* a Vt*a*b-dlkni t'japr*a*
> kak*a*jzčdi evreec černil'nica
>
> (Jakobson, Kruchenykh, 1915)

The *budetliane* were preparing for the visit to Russia of the acknow-
ledged founder of Italian futurism, Filippo Tommaso Marinetti. They re-
sented being viewed as provincial disciples of the maître of Western avant-
garde, as their critics gleefully suggested.[1] In a letter to Kruchenykh, «Ro-
man Aljagrov» expressed the group's militant attitude with an utmost ear-
nestness : «Marinetti, by the way, craves a meeting with you *budetliane*
and a debate. ... Smash him and his junk and trash to bits — you're so
good at it! And it's most important.» (Rudy 1985).

Marinetti's visit brought to light profound differences between the
Russian group and their ostensible Western mentors. Marinetti's ideas of

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[1] For instance, Kornei Chukovsky sarcastically lamented that the lack of sky-
scrapers «somewhere in Shuia or Ufa» undermined futurist credentials of his
literary opponents; the critic suggested that Russian futurists, with their
preoccupation with the archaic, represent a «Votyak-Persian, Bashkiro-Chi-
nese, Assyro-Babylonian-Egyptian» breed of the avant-garde movement
(Chukovskii 1922, pp. 48-49).

futuristic transgression of conventional boundaries of speech were targeted primarily at two domains of language : phonetics, where he advocated extensive usage of onomatopoetic and emotive interjections as a means of expanding vocabulary ; and syntax, where he relied on ellipsis and unconventional word order as means of «liberating» words from bonds of their grammatical interconnections. A futuristic discourse envisioned by Marinetti employed either conventional words, only «unhampered» from the «strings» of syntax and punctuation (the so-called «parole in libertà»), or purely expressive sounds appealing to senses directly, without secondary signification. This programme found its most notorious realization in Marinetti's description of the battle at Adrianople, replete with such expressions as «*traak-traak .... pic-pac-pam-tumb .... flic flac zing zing scia-aaack .... ciaciacia ciaiaak*» etc., along with hectic syntax and absence of punctuation (except exclamatory sign).

The Italian version of rebuilding language pointedly ignored the domain of language *signification*, i.e., the case when a connection of a certain sound combination with a certain meaning is established not arbitrarily but on the basis of word derivation. The Italians' approach to language reflected their ideal of uninhibited will of an individual casting off all memories of the past in his thrust into the future. «Syntactic» and «onomatopoetic» aspects of language allowed for limitless expansion of means of expression not tempered by the past state of language. Contrary to that, «morphological» and «etymological» aspects of language are inextricable from collective memory shared by speakers of the language. Any innovation in this domain, even of the most radical kind, had to appeal to this common stock of memory ; a neologism would be understood due to its compliance with a known derivational or morphological pattern. Along this route, any advance into the future proceeded by evoking memories of the past; any individual diversion from conventions contained an appeal to the collective inheritance of language memory.

For this reason, etymological and paranomastic word-play remained unappealing to Italian futurists; for the same reason, however, this aspect of language constituted the very core of the avant-garde consciousness of Russian *budetliane*. They perceived willful syntactic manipulations with ready-made words (not to say of toying with interjections) as something extremely shallow and naive. A truly avant-garde innovation had to set in motion all layers of collective language consciousness deeply rooted in the language's past, in order to produce their futurist transfiguration. With this task in mind, *budetliane* confronted Marinetti with deliberate condescension, deeming his ideas outmoded and «provincial». As Benedikt Livshits stated later in his memoirs, he proclaimed to Marinetti at their meeting: «Your militancy is altogether superficial. You struggle against selective parts of speech, without even trying to get beyond the surface of etymolo-

gical categorization.» (Livshitz 1989, p. 484). Their discussion turned sour : Marinetti declared Livshits' views «metaphysical» (for him, the most odious and unfuturistic word) and dismissed his opponent, «leaving to my unchecked consumption all primordial abysses of the word, not worth, in his opinion, even an inch of Tripolitanian land.» (Livshitz 1989, p. 488).

As to the controversy over the Italians' preference for expressive «noises» over the established set of phonemes as vehicles of signification, its remote echo can be found in Jakobson's later fascination with the idea of functional asymmetry of the two hemispheres of the human brain. Jakobson contended that perception of sounds of language as components of phonological structure is maintained by the left hemisphere (generally responsible for logical reasoning), while reception of non-phonological «noises» is delegated to the right hemisphere (dealing primarily with emotive and kinetic functions). Thus, phonology and onomatopoeia, like etymology and syntax, appear sharply separated and opposed to each other — not only on the linguistic and cultural map, but on the neurophysiological map of the brain as well (Jakobson, Waugh 1987, p. 38; Jakobson 1980).

It is fair to say that simultaneity and synthesis were essential characteristics of the «chronotope» of Russian futurists. Their artistic world-outlook was panchronic rather than future oriented, omni-directional rather than prospective. *Budetliane* saw the future not as a one-way «leap forward» but as a synthesis in which a «linear» flow of empirical time would be overcome, and all time layers brought together.

This general attitude of Russian futurists of the 1910s had found its most elaborate realization in Khlebnikov's ideas concerning language, expressed in a number of his essays and poems. Khlebnikov turned the futurists' vision of a panchronic synthesis into a tangible goal attainable, as far as language was concerned, with an almost scientific predictability. His works provided a crucial link between the creative world of the futurist movement as a whole, on one hand, and the way it was later transfigured into a formal linguistic theory by Jakobson, on the other.

Khlebnikov perceived language — Russian language first of all, but ultimately language in general — as a continual field of meaning whose every component is semantically linked to some other components, which in their turn are linked to some further ones, and so on without end. In principle, any meaning can be transformed to any other, no matter how remote, by proceeding along an uninterrupted chain of shifts involving all intermediate links. Thus, any language contains an infinite potential for semantic metamorphoses, which, however, remains unrealized in practical use, due to limitations of the speakers' memory. A map of language meanings that we have in our mind is ridden with gaps; they break continual paths of semantic metamorphoses, mounting artificial barriers between dif-

ferent domains of meaning. As a result, speakers remain oblivious of inter-
connectedness of all meanings inherent in language :

> There exist features that, by shifting continuously from one to another,
> bridging the gaps of which we the humans have no premonition, would
> transform the blue color of a cornflower into the sound of coccooing, or
> into a child's cry. ... Perhaps only on the threshold of death, in a single ins-
> tant when everything would launch into flight for life, rush in panic, jump
> over all barriers ... — perhaps only in that instant our mind will overcome,
> with a horrendous speed, all crevices and ravines, smash all settled configu-
> rations and borderlines. Yet it is also possible that this is what routinely
> happens in everybody's mind, every time when a certain perception A
> shifts, with a horrible speed, into another perception B.[2]

While seeing fulfillment of his vision of language in apocalyptic
light (the mind would be able to grasp it only in the very last instance, on
the threshold of death), Khlebnikov does not exclude a possibility that this
phenomenon is latently present — without our awareness — in our every-
day experience as well. This possibility poses a challenge for the poet : to
bring into life the full potential of the meaning of language, all its «mul-
tiple and infinitely stretched, ever-changing multitude of variety» (mnogo,
neopredelenno protjažennoe mnogoobrazie, nepreryvno izmenjajuščeesja).

A concrete way to do it would be to make carriers of meaning, i.e.,
words as densely related to each other as possible. Khlebnikov creates mul-
titudes of new words by analogy, using existing derivational patterns. His
goal is to fill up all potential derivative relations, leaving no «gaps» bet-
ween separate signs :

> Having changed in a known word one sound to another, we at once create a
> route from one of the valleys of language into another, like the road buil-
> ders breaking new lines of communication through the mountain ridges of
> language muteness. ... If we already have a couple of such words as *dvor*
> ['court'] and *tvor* ['creation'?], and are aware of the word *dvorjane* ['gentry'],
> we can build the word *tvorjane* — creators of life. ... Likewise, we can build
> after the word *boec* ['fighter'] such words as *poec* ['he who sings'?], *noec* ['he
> who groans'?], *moec* ['he who does washing'?]. ... A government [*pra-
> vitel'stvo*] dealing only with what and whom it likes [*nravitsja*] might have
> called itself *nravitel'stvo*.[3]

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[2] «Pust' na mogil'noj plite pročtut» [Let it be written on his grave-stone]
(Khlebnikov 1986, p. 578).

[3] «Naša osnova» [Our Basis] (Khlebnikov 1986, pp. 626-627). Cf. realization
of some of these ideas in Khlebnikov's poems : Èto šestvujut tvorjane,

It should be noted that the language thus built would become a phonologist's dream : instead of actually available scarse number of «minimal pairs» of words, the fully «accomplished» language would systematicaly exploit phonological correlations throughout all its vocabulary.

Having recognized the possibility of filling up all phonological gaps between single words, Khlebnikov had eventually come to viewing all potential combinations of any sounds as an integral system. He compared this emerging system of primary elements of language and their potential combinations with Mendeleev's periodical system of chemical elements. To build such a system to its full potential would mean bridging derivational gaps not only between words within one particular language but across the boundaries between different languages as well; the primary language elements would provide uninterrupted links between all words of all languages, turning all of them into a continual field :

> The entire language is to be dissolved into its fundamental elementary truths, whereafter it would be possible to build for the sounds something similar to Mendeleev's law, that ultimate pinnacle of the chemical thought. ... If it will be confirmed that the laws for the simple elements of the alphabet are identical for the whole family of languages, then it will become possible to build the world language for the whole family of nations — the language in whose verbal mirrors the whole itinerary from New York to Moscow would be reflected.[4]

Khlebnikov's «trans-rational language» (*zaumnyj jazyk*) was intended not as a willful artistic creation but as a first glimpse into the future utopian state of language, when all potential links between the primary language elements will be realized and their meaning will be revealed in its totality. In his article «To the Artists of the World!» written after the revolution Khlebnikov, evoking in mind N. N. Fedorov's quest for the «common cause,» exhorted «all artists and thinkers» to concentrate their efforts on a «common task» : «to create the universal written language common to all the peoples of the third satellite of the Sun, to build written signs which would be comprehensible and acceptable for this entire star populated by the humanity and lost in cosmos.»[5]

In one of his last works, a short article dedicated to Khlebnikov, Jakobson paid an emotional and insightful tribute to Khlebnikov's language

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zamenivši *d* na *t*» [There the gentry of creativity proceed, having changed their *d* to *t*], etc.

[4] «Naša osnova» (Khlebnikov 1986, pp. 624).

[5] «Xudožniki mira!» [To the Artists of the World!] (Khlebnikov 1986, pp. 619, 621).

project. He emphasized the integrating nature of all Khlebnikov's creative efforts aimed at grasping the common denominator for all meanings in all languages :

> Khlebnikov tirelessly sought, by comparing words of a single language, or even of the whole family of languages, for the common meaning of every sound of speech. ... It was Khlebnikov, «the Ambassador of the Globe,» to whom it was given to account for all temporal continuities and discontinuities imprinted in human speech, all unceasing transformations of the transrational into the rational, of a fairy-tale anticipation into reality, of the miracle into an everyday routine and everyday routine into the miracle.
>
> (Jakobson 1981, pp. 322-323)

These words can be taken as a paraphrasis of Jakobson's own efforts to build a unifying and universal linguistic theory. Let us now examine, in view of this implicit connection, Jakobson's ideas as they gradually developed throughout more than half of a century.

During the fifteen years preceding the Second World War Jakobson actively participated in building a theoretical framework and conceptual apparatus of what has become known in history of linguistics as Prague structuralism. Although the Prague linguists addressed all domains of language as mutually related strata of its structure, much of their efforts were concentrated on defining and describing the sound structure of language; out of their collective work emerged an altogether new linguistic discipline called phonology.

Even at this early stage of the development of the phonological theory, its kinship to Khlebnikov's ideas of the 1910s could be clearly discerned. A phonological system is supposedly built out of «minimal» oppositions between phonemes, each based on a single distinctive feature. Within such a system, it is possible to reach from any phoneme to any other through a chain of «minimal» steps, each involving a single shift of a feature. The system thus built overcomes all the «gaps» and inconsistencies typical for the empirical use of sounds in speech. In the latter, minimal oppositions between words appear rather rarely ; in most cases, distinction between words in speech is based on multiple differences involving more than one sound unit and more than one distinctive feature. This is why «minimal pairs» of words actually existing in a language are so precious for phonological description ; even a single minimal opposition found in a language is considered a sufficient evidence of phonological relevance of the feature figuring in this opposition. Thus, phonological description creates a system whose full potential for correspondences remains largely unrealized in existing languages. It addresses not a real state of a language but rather an «ideal» state that the

given language would have had, had it filled in all the «gaps» between its actually existing words. This appeal to an implicit systemic ideal was strikingly similar to Khlebnikov's idea of the ultimate language in which the whole semantic route «from Moscow to New York» could be seen as an uninterrupted chain of transformations of signs.

However, for all the affinity between the Prague phonology and its futurist antecedents, there were also important differences. By the second half of the 1930s, Jakobson became increasingly dissatisfied with the direction in which the Prague collective project was moving. There were two main points on which Jakobson's thought went beyond the premises of the Prague structural theory; both of these points of his departure can be related to the earlier aspirations and endeavors of the futurist movement.

First, one of the central ideas (perhaps, the central) underlying Jakobson's intellectual efforts throughout all his life was that of overcoming temporal linearity to which speech seems to be irredeemably condemned. Frustrated with the inevitability with which any speech act — even a densely built poetic line — had to proceed word by word, sound by sound, the 18 years old «Aliagrov» once proposed, rather naively, a new poetic technique which would use simultaneous sound clusters, or «chords»; a poetic line of such type would include vertically attached sound strings, thus becoming — at least on paper — thoroughly non-linear (Jakobson 1914).

Much later Jakobson would address the same problem by proposing his famous definition of the poetic function of language : «The poetic function projects the principle of equivalence from the axis of selection into the axis of combination.» (Jakobson 1960, p. 358). In other words, poetic language, through intensive employment of sound repetitions, paranomastic juxtapositions, and syntactic parallelisms, projects onto linear combinations of speech elements a network of non-linear (paradigmatic) correspondences. This definition asserted the ability of poetry to achieve transfiguration of the linearity of language.[6] The ideal which Khlebnikov — and the adolescent Jakobson — had been «tirelessly seeking» came into being, at least as a theoretical concept.

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[6] According to Jakobson, the very name «verse» had initially meant a discourse evolving in a non-linear fashion, as a network of oppositions, while the notion of the «prose» (etymologically from «pro-vorsa») implied progressive evolvement. «Prose» advances «point by point,» while the «poetry» (poetry as principle, including poetically oriented prosaic texts) proceeds «point counter point,» to use Aldous Huxley's expression. It is interesting to note that this idea of linearity of prose vis à vis «counterpointal» property of poetry was opposite to M. Bakhtin's idea of the perfect homogeneity of poetical discourse, in contrast to a «polyphonic, nature of the prose.

Still, this definition could be applied to poetic language only. The picture of common language presented by the early structuralist model remained dominated by linearity. Acceptance of phonemes as ultimate elements of language inevitably led to the conclusion that the build-up of all larger units in speech — from morphemes and words to phrases and sentences — proceeds along «the axis of contiguity» by syntagmatically linking elements one by one. This idea was unacceptable for Jakobson. Lately in his life, after having successfully conquered this difficulty, he continued relentlessly bashing the notion of linearity and its champions :

> In the 1920s the analysis of sense-discriminative constituents of language did not go beyond the successive segments of the sound sequence. ... This view was a corollary of the traditional, especially Saussurean, thesis ascribing a mere linearity to the sounds of language which are measurable in one dimension only : «c'est une ligne.»
>
> (Jakobson, Waugh, 1987, p. 22)

> Saussurean ideology ruled out any reconciliation between the two aspects of time, simultaneity and successivity. It resulted in never seeing any dynamism in the system, and never seeing anything but a purely linear movement in the actual speech ; this reductionist approach precluded recognition of the phoneme as a cluster of simultaneously present distinctive features.
>
> (Jakobson, Pomorska, 1982, p. 46)

Although what Jakobson is referring here to is primarily the early stage in the development of the structural phonology, including his own early works of the 1930s, he does not miss an opportunity for scoring a point against the Romanic spirit, with its penchant for superficial manipulations with language along the linear axis. His diatribes against the «Saussurean ideology» sound as a distant echo of *budetliane*'s battles against their ostensible Italian mentors.

Another aspect of the Prague phonological theory that went against the grain of Jakobson's intellectual mould concerned the idea of uniqueness of the phonological system of every language. On the first glance, this idea was an inevitable result of the systemic approach employed by structural linguistics : if all components of language are related to each other in a united system, then the character of each of those components must depend on its place in the system. The very wholeness of the system makes it unique : even if some sounds in different languages resemble each other, this physical similarity underscores systemic differences based on the fact that within each language these sounds represent phonemes involved in a unique relational network of oppositions.

Jakobson's attitude towards Prague phonology had reached a crisis point by 1938. According to his own retrospective account :

> In the dramatic atmosphere of the years '37 and '38 that foreshadowed the advent of fatal events, one's thought was compelled to cast off all marginal academic concerns and concentrate on those that seemed to have foremost significance and urgence. ... During my stay, on the eve of '38, in Vienna with Trubetzkoy, who was intensely working on his book on phonology, I clearly realized that the idea of phonological system was still not entirely freed from the curse of fragmentariness, since the principle of binary oppositions had not yet been inequivocally established as its foundation. Perhaps never in my life have I been so overflown by feverishly running quests and thoughts as in the beginning of '38.
>
> (Jakobson, Pomorska, 1982, p. 25)

The atmosphere of 1937-38 vividly reminded (especially in a retrospective view) the epoch at the treshold of the First World War. Apocalyptic overtones in Jakobson's account evoked in mind the picture, once drawn by Khlebnikov, of the human consciousness in the last moment before extinction. At that critical moment, according to Khlebnikov, the mind would suddenly overcome, with a supernatural speed, all barriers that blocked its pace in the ordinary existence. It was this critical moment at which the vision of the total language emerged, in which all potential correspondences would be fulfilled, leaving no gaps and fragmentariness. Now, a quarter of a century later, this apocalyptic revelation appeared once more, this time not as an artist's vision of the absolute language but as a linguistic concept.

The essence of Jakobson's new approach consisted in his refusal to acknowledge phonemes as elementary units of language ; this role has shifted one level lower, or deeper, into the language structure : to distinctive features as carriers of binary oppositions between phonemes. Prior to this decision, distinctive features were considered attributes of phonemes rather than phenomena in their own right. The new theory turned distinctive features from attributes into elements — and moreover the ultimate elements into which the whole structure of language could be dissolved. From this point of view, phoneme appeared a complex phenomenon: a cluster of several distinctive features.

Unlike phonemes, the distinctive features are not bound by linearity ; they always appear in speech in simultaneous clusters. Thus, every segment of speech, in spite of its apparent linear shape, turns on the structural level into a matrix-like phenomenon. Aliagrov's dream of a language with simultaneous sonic «chords» has proven to be attainable by the means of linguistic theory in a more effective way than by wildest creative phantasies.

Another striking result of shifting descriptive priorities from phonemes to distinctive features was the emergence of a universal phonological model rising above peculiarities of any particular phonological system. Distinctive features can combine into phonemes in many possible ways, allowing an infinite variety in the repertory and characteristics of phonemes in different languages ; however, the repertory of distinctive features themselves is quite limited and to a large extent remains the same in all languages. Even given a possibility of some variations in the number of distinctive features employed in various languages, these variations are much narrower in scope comparing with the diversity of various phonemic systems. Unlike phonemes, distinctive features could be described as a universal system, so that every particular language would be viewed as a sub-system within the network of universal parameters. Such a system would indeed work as the periodical matrix of chemical elements, capable of accomodating not only all hitherto known elements but also those to be discovered yet or artificially created. Khlebnikov's quasi-scientific phantasies about language have been transformed into a severely rationalist linguistic theory.

After Khlebnikov had reached the idea of the primary elements of language (be it sounds or written characters), he had turned to «all artists and thinkers of the world» with the task of building the universal language that could be used by all the people of «the third satellite of the Sun.» The messianic emphasis of this appeal could be felt all the more acutely amidst the destruction and chaos of the war. Twenty years later, the time had come for Jakobson's own *Wanderjahre*. Like Khlebnikov in 1919-1921, he was launched by the coming apocalyptic events on a prolonged journey. For years he lived literally on the road, just barely escaping the advent of German armies : in the fall of 1938, Germany invaded Czechoslovakia while Jakobson was visiting Holland and Danemark ; he then moved to Norway, after that to Sweden, having arrived finally, in 1943, to New York. All along this itinerary, Jakobson had been working on a book expressing his new idea of language elements; the book came out in 1942 in Stockholm under the title : *Kindersprache, Aphasie und allgemeine Lautgesetze* (Jakobson 1942).

Jakobson's book offered for the first time categories for the universal description of the sounds of language. Jakobson asserted that while sounds of different languages vary, the fundamental types of their relations, embodied in distinctive features, are subject to uniform and universal «laws». Not only the general repertory of distinctive features is the same in all languages but the order in which a child grasps them in the process of language acquisition also follows a universal pattern. At first sight it may appear that children learning different languages have to deal with different sounds and their combinations ; however, this apparent diversity is super-

ceded by the uniformity of underlying phonological oppositions. The process of grasping this relational aspect of language has to proceed in a uniform order dictated by an intrinsic hierarchical order among the distinctive features. This «universal law» remains intact in all concrete languages, for all the diversity of their sounds.

The newly found universal law was stated in a solemn and dramatic way :

> No matter whether there would be a French or Scandinavian child, English or Slavic, Indian or German, Estonian, Dutch, or Japanese, every description worth mentioning confirms again and again that a *relative* position in time in which a certain group of sounds would be acquired remains always and everywhere the same.
>
> (Jakobson 1942, pp. 32-33 ; emphasis Jakobson's).

The universal order by which the acquisition of distinctive features proceeds all over the world, from the Pacific to the Atlantic and from the Northern to the Southern seas, whenever a child is learning a language, is then described in some details as the following. First, there occurs the vocalic-consonantal split, out of which the primary vowel *a* and the primary labial consonant (in its turn splitting into a nasal *m* and non-nasal *p*) emerge; then the primary consonants split into labials and dentals (*m-n, p-t*), while the vowel splits into a broad *vs* narrow one (*a-i*) ; afterwords, the narrow vowel may also split into oppositions *i-e*, or *i-u* :

> What emerges in a child's language first is an *a* functioning as the first vowel and, usually, a labial plosive as the first consonant. Distinction between the nasal and non-nasal comes as the first consonantal opposition (i.e., *papa-mama*); it is followed by opposition between the labial and dental (*papa-tata* and *mama-nana*). ... After the two abovementioned consonantal oppositions, the first vocal opposition appears in the child language: namely, that of a broader vowel and its narrower counterpart, for instance, *papa-pipi*. ... The following stages in the development of a child's vocalism bring either a split of the narrow vowel into a palatal and velar one, as for example in *papa-pipi-pupu*, or a third, intermediary degree of openness, i.e., *papa-pipi-pepe*.
>
> (Jakobson 1942, pp. 34-35)

(What is remarkable about these universal laws is that the examples of first emerging words, presumably produced by a pure deduction, are in fact words of Russian nursery language).

The pattern of language acquisition by a child is mirrored by the pattern of language reduction in cases of aphasia resulting from brain damage (the studies of aphasia had become prominent between the two world wars). The latter process is subject to the same universal laws, albeit in the

reverse order: the layers of the system acquired last by the child are those that disappear first in the case of language impairment. The greater the damage, the deeper sinks the patient into basic layers of language ability, as if traveling back in time into infant stages of his language, until his capacity for distinguishing words are reduced to the most elementary distinctive features. This two-way developmental pattern, capable of evolving in both progressive and regressive directions, can be viewed as a remarkable manifestation of the Futurists' approach to time, according to which any move forward into the future proceeded by simultaneously reaching the depths of the past.

Khlebnikov's penetration into primordial depths of Russian etymology enabled him to grasp the universal primary elements of language; afterwards, he was eager to bring his transcendental insight out on a cosmic scale, for the benefit of the whole «third satellite of the Sun». The development of Jakobson's theory underwent similar stages. The analysis of the primeval elements of child language was followed by two books dedicated to a systematic description of the phonological universals valid for all languages worldwide (Jakobson, Fant, Halle, 1953 ; Jakobson, Halle, 1956).

What distinguished these books from the previous one was the disappearance (or at least marginalization) of the developmental perspective. The universal set of distinctive features took the shape of an absolute panchronic system. The theory stated that the whole variety of sound patterns in different languages can be reduced to the uniform structural core consisting of a strictly limited set of binary — always and only binary — oppositions between polar distinctive features. This universal structure did not appeal anymore to the pattern of language acquisition experienced by children of all races and continents ; rather, it was presented as a fundamental objective law whose relevance lay outside any boundaries of space and time.

Another development in the works of the 1950s, comparing with the *Kindersprache*, concerned their approach to the consonantal and vocalic subsystems. In the *Kindersprache* consonants and vowels were described conventionally by separate sets of articulatory parameters. By the early 1950s, Jakobson and his co-authors abandoned traditional articulatory features inherited from phonetics, such as «wide», «narrow», «labial», «dental«, etc. Instead, they formulated a new set of features based on acoustic characteristics : «high», «low», compact», «diffuse», «strident», «mellow», «sharp», «flat», etc. The new distinctive features, divorced from customary articulatory properties of sounds, constituted a more coherent system whose parameters could be uniformly applied to vowels and consonants. As a result, the sound domain of language appeared as a wholly united and symmetrically built system.

In this latest version of the theory, the universal phonological system comprised twelve binary distinctive features. Since 1953, attempts have been made to revise the inventory and the ultimate number of features.[7] It has proven to be hard, however, to dispel the magic of the number «12». In any case, the general principle, according to which the sound structure of every language could be derived from a system of strictly limited in number, hierarchically organized binary distinctive features, remains predominant in contemporary theoretical linguistics.

Jakobson's last book on phonology, *The Sound Shape of Language* (1979), offered a synthesis of all stages of the theory as it had been developing throughout four decades. The developmental model of the *Kindersprache* and the typological model of the *Fundamentals of Language* appeared side by side as two different dimensions of the unified theory. The picture has become truly all-encompassing : it accomodated the developmental pace of language acquisition as well as panchronic typology of languages of the world, hereditary parameters of language competence built in the biological structure of human brain along with creative devices employed in the poetic and magic discourse.

Although the book's apparent subject is phonology, its meaning is by no means confined to this particular domain of language structure. It reveals the very essence of Jakobson's thought on language, a conceptual core underlying his approach not merely to phonology, not even to language at large, but to any communicative activity taking place in the human society. The book's central theoretical concept — the system of binary distinctive features — is presented in this universal key as «the basic formal prerequisite for the semiotic aims of language». (Jakobson, Waugh, 1987, p. 60).

Jakobson's general strategy of dealing with language can be described as synthesis through reduction. He is trying to penetrate into the deepest levels of language, to reduce, or «dissolve», language matter into the absolutely minimal elementary particles. A scholar able to reach these ultimate depths is rewarded by discovering the universal structural principle that underscores all variety of communicative activities taking place at the surface. Suddenly, as if opened by a magic key, the previously fragmented and separated facets of knowledge come together, revealing the absolute order to which they all are subordinated and by which they are united. All limitations and idiosyncrasies of human communications, scattered in

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[7] When Chomsky and Halle layed out foundations for the generative phonology, they operated with a somewhat larger and less strictly defined number of distinctive features. In principle, however, the features remained derivative from Jakobson's theory ; Chomsky and Halle merely split some of the original features into more elementary units (Chomsky, Halle, 1968, Chap. 4 & 5).

space and time, confined to different social and cultural spheres, come together as manifestations of and contributions to that universal order.

Phonological distinctive features serve as this magic key because they represent the most elementary of possible relations : presence or absence of a single acoustic parameter. This binary alternation constitutes the absolutely minimal change in the form capable of producing a change in the meaning. It captures the very point at which sound and meaning are united into a sign; to put it in Jakobson's words, distinctive features serve «as the pivotal, utterly structured totality of links between the *signans* and *signatum*». (Jakobson, Waugh, 1987, p. 60). The twelve features contain in themselves all possible shifts of the meaning that can be produced in all languages by altercation of the sound form. The whole unified field of language signs, to which any particular language adhers as its partial realization, grows out of this structural core.

Along with the universal theory of language, the book gives an overview of the development of linguistic ideas throughout all the history of civilization ; it cites evidence, scattered among the millenia, of theoretical insights into language that had been preparing way for the appearance of the unified theory :

> The international quest for the ultimate constituents of language able to discriminate meaning has endured through millenia.
>
> (Jakobson, Waugh, 1987, p. 13)

Among the theory's precursors cited in the book are ancient Greek philosophy, Indian and Arabic philology, scholastic theory of signs, various examples of magic discourse, and, of course, achievements of the avant-garde poetics and modern science. The system of binary oppositions (at one point called «the Grail of the distinctive features» [Jakobson, Waugh, 1987, p. 123]) assumes the mantle of the «common cause» of philologists, poets and philosophers of many nations and generations, in their quest for the linguistic «Grail». It triumphs over any opposition and scepticism :

> Pessimistic voices, despairing of knowing exactly the past, present, and future stages of linguistic world, have been and will still be raised against the quest for universals : «Mais qui pourrait se vanter d'avoir fait un examen exhaustif de toutes les langues existantes ou attestées ? Et que dire des langues disparues sans laisser de traces et celles qui apparaîtront demain sur la terre ?» (Martinet).
>
> (Jakobson, Waugh, 1987, p. 61)

(Typically, these pessimistic voices advocating fragmentariness of knowledge sound from the French corner). To this argument the book replies that indeed nobody can garantee that somewhere «in the jungles of Brazil» a language could not be eventually discovered whose patterns would partially deviate from the universal system; this, however, would mean for the linguistic universals exactly what the discovery of oviparous mammals («the Australian echidna and the Tasmanian duckbill platypus») meant for the biological classification : namely that it only reiterated, by producing a borderline case, the basic biological characteristics of the mammals. This scientific argument curiously reminds one of Mayakovsky's favorite rhetorical devices : an emphatical statement reinforced by suggestion of a hypothetical exception which may exist somewhere in a place as remote as South America :

> They say, somewhere — it is Brazil, I think, —
> There exists one happy man.
> > (*Vladimir Mayakovsky. A Tragedy*, 1913)

> It may well be that half a dozen of unheard-of rhymes
> Still remains, of all places, in Venezuela.
> > («Conversation with an income tax collector about poetry», 1926)[8]

This, probably inadvertent, reminiscence reiterates the connection of Jakobson's linguistic thought with its futurist roots.

Budetliane, in their vision of the future fulfillment of their mission, had been aware of the fact that for all its global and unifying character, it had necessarily to come from Russia. Khlebnikov maintained, using his favorite mathematical metaphors, that «if any living language used by people can be compared with Euclidian geometry, than it is the task of the sons of Rus' (*rusichi*), not attainable by other nations, to create a language in the spirit of Lobachevsky's geometry».[9] Livshits provided further argument in order to explain the exclusive nature of Russian mission and destiny. According to him, Russian avant-garde artists were distinguished from their Western colleagues by their unique ability to penetrate into the deepest layers of the matter of their art :

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[8] «Govorjat, čto gde-to — kažestja v Brazilii —
Est' odin sčastlivyj čelovek !»

«Možet, pjatok nebyvalyx rifm
Tol'ko i ostalsja, čto v Venecuèle!»
(Maiakovskii 1955, vol. 1, p. 160 ; vol. 7, p. 121).

[9] «Kurgan Svjatogora» [«Sviatogor's Hill»] (Khlebnikov 1986, p. 580).

What is important is our closeness to the matter, which overcomes all in-
termediary stages between matter and creator. The Europeans for whom this
ability will ever remain beyond their reach have justly noted it as our pro-
perty. Yes, we do have the feeling for the matter, all down to its primeval
state as a cosmic substance, and this is why we are capable to build our art
on the principles of cosmic universality.

<div align="right">(Livshits 1989, p. 506)</div>

In Jakobson's theory, as it emerged more than half a century later, it
was the ability to reach to the deepest layer of language structure that made
it possible to establish structural foundations of all sign systems on the
universal scale.

Khlebnikov's expectations of the advent of the new cosmic language
did not come to life. He died soon after having sent his appeal to the
«third satellite of the Sun». A decade later, the death of the younger mes-
siah of the movement followed. Mayakovsky's suicide was perceived by
many — notably by Jakobson who paid an emotional tribute to this event
(Jakobson 1930) — as the symbolic end of the epoch which had started
early in the century with visions of new «dawns» and messianic aspira-
tions. In the 1930s, many of the principal actors of the 1910s died or lived
in poverty and oblivion ; some (like Livshits) perished in the years of ter-
ror.

However, the «common cause» of Russian avant-garde was not lost.
The late 1930s — a point at which the original movement had seemingly
come to an almost total extinction — witnessed its new rise. The original
utopian dream was reshaped but not abandoned. Its goal still was to con-
quere space and time by means of language, to overcome fragmentation of
the meaning scattered among different languages and different epochs.
What was different was the approach to this common cause : instead of
transfiguring the language, it was now aimed at transfiguring the concep-
tual framework of language description in a way that would reveal in lan-
guage its transcendental potential. The new linguistics offered description
of existing languages in such terms as if they were emanations of the ideal
«cosmic» language : totally organized, united, and redeemed from the curse
of linearity. The ability «to project the principle of equivalence from the
axis of selection into the axis of combination» appeared, according to the
unified theory, not an exclusive property of the poetic language but the ge-
neral principle of any communication. All idiosyncrasies of particular lan-
guages, although remaining on the empirical level, hardly mattered any-
more, since they could be perceived as secondary phenomena derivative
from the universal construct projected by linguistic theory.

When we are facing an intellectual or artistic phenomenon of such
scope and intensity as Jakobson's vision of language, its nature cannot be
fully explained by linking it to a sole source, no matter how important.

The newly emerging artistic or scholarly paradigm of epochal dimensions always absorbs a multitude of diverse sources, close and remote, likely and unlikely, powerfully forging all of them into its own unique shape. This is certainly true for the Jakobsonian linguistics. Its origins and development can be followed along many different trajectories. Its roots can be found in trends in modern philosophy, developments of the twentieth-century biology and theoretical physics. Most of all, Jakobson's theory of language evolved from the previous linguistic tradition; it was built on the foundation established by his immediate and more remote predecessors; among its most obvious sources were Saussure's idea of *langue* as the «only true object» of linguistics, Charles Peirce's theory of sign, research tools and methods worked out by Prague and American structural linguistics. Jakobson was always attentive to and extremely generous in acknowledging any source or an echo of his ideas, no matter how remote, as he was severe to the non-believers.

Yet, to use a term of Jakobsonian poetics, the futurist utopia can be considered the «dominant» of Jakobson's intellectual world : a truly formative force superceding and reshaping all other influences. The shape of the final intellectual product reflects the author's individuality as well as numerous sources he had absorbed ; but it is oriented along the vector projected by the «dominant». To reach into the primeval level of language where form and meaning meet together, to spot the very first instance of language inception at which empirical time and space cease to exist, in order to bring this knowledge out on the cosmic scale, reconciling all the diversities, bringing together all epochs and all facets of human communication — such was the ultimate goal of Russian *budetliane* to which Jakobson ever remained faithful and towards which all his scholarly endeavours were oriented.

Structural linguistics of the 1920-1930s, both in Europe and America, primarily concentrated on descriptive aspects of the newly emerging theory. It exposed infinite variety of languages whose differences in structural organization superceded substantial similarities and differences between languages attainable by a positivist (non-structural) approach. The new approach was stemmed from philosophical inheritance of the previous century : empiricism in America, tradition of the «organic» thinking in Eastern Europe. Unlike most of the principal actors on the scene of the structural linguistics between the two wars, Jakobson as a thinker was shaped by utopian and messianic ideas of the avant-garde of the 1910s. This difference in his background had played an important role in the way he eventually reshaped the whole framework of the structural linguistics. By the 1950s, theoretical linguistics, poetics and semiotics had emerged as a comprehensive discipline uncompromizingly oriented towards general and universal values. Its priorities have shifted towards the search for the essen-

ce of human communication underlying and superceding all particulars of different languages and other communicative systems.

For all vicissitudes in the development of linguistic theory in the last two or three decades, it seems fair to say that the concept of the universal structure inherently present in all languages (and presumably imprinted in the hereditary structure of the human brain) still dominates contemporary theoretical linguistics, however remote it finds itself from an overheated atmosphere of Russian avant-garde prior to the First World War. The world of modern linguistics seems to be moving forth without knowing of or caring for a peculiar chain of causes and effects that had originally set it into motion.

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