Patrick Sériot University of Lausanne

# The Enigma of Similarities: Analogy as a Cognitive Method in Linguistics in Russia<sup>1</sup>

The French intellectual world, stemming from the tradition of the Enlightenment, is accustomed to explain the evolution of phenomena by the criterion of causation: in other words, what comes next is the consequence of what was before. In Russia, however, language change is often thought of in terms of "development tendencies" (Trubetzkoy) or "goal orientation" (Jakobson).

Yet, there is more: if for Meillet, an analogy of forms between unrelated languages is only a "plaything", for Trubetzkoy and Jakobson on the contrary, taking for granted that no resemblance can be due to chance, it is an evidence of "affinity", that is to say, a tendency to attraction.

This difference in approach to both comparative diachrony of languages and their geographical distribution has resulted in a rich tradition of linguistic typology in Russia (e.g. V. Khrakovsky's school in Leningrad). But what is less known is the intellectual origin of the idea that *any form of similarity is necessarily significant*.

This origin is twofold. On the one side it comes from the theology of the icon in the Eastern Church, in which the icon is not a sign of the divinity, but the effective presence of the divinity. This theology has found an extreme manifestation in hesychasm in the early twentieth century, a religious attitude whose principle is that "the name of God is God", leading to a philosophy of language which states that the name of the thing is the thing itself (S. Bulgakov, A. Losev).

The second source is the German *Naturphilosophie* of the Romantic era, which has blurred the border between natural sciences and sciences of culture (or of "spirit": *Naturwissenschaften / Geisteswissenschaften*). The Russian variant in the twentieth century links languages to a particular ground (or *Landschaft*), refusing any randomness in their distribution.

Finally, a third source is an amazing collusion between the Cratylism of the refusal of arbitrariness and a virulent anti-Darwinism issued from an orthogenetic

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biology in Russia named "nomogenesis" or development based on laws.

Those three intellectual streams, united by the refusal of chance and the passionate pursuit of "unitotality" (*vseedinstvo*) of the objects of research and of a synthesis of knowledge, are a key to understanding and explaining the peculiarities of the philosophy of language in Russia that hinder the understanding of some particularly ambiguous texts by Jakobson or Voloshinov, yet thoroughly read and commented in "The West".

This paper aims to present some ways of access to these paradoxical aspects of linguistics and philosophy of language in Russia.

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Roman Jakobson (1896-1982) is largely known in the so-called "Western world" as "an American scholar", as though his intellectual career had begun on his arrival in New-York in 1943. Nonetheless, the short epitaph which he asked to be written on his grave reads: "Russianness something more than nostalgia for one's past and a hint that, from the epistemological point of view, Eastern European science has some specific features which place it apart from Western science? What does "Russian" mean in this epitaph?

A close reading of Jakobson's texts, which he wrote in Russian or in Czech in the inter-war period, sheds some light on these questions.

First of all, we should note that the context of reception of a scientist is as important as his own culture for the general image we have of him. In fact, in this precise case, there are as many "national" perceptions of Jakobson as there are cultures of reception. The French Jakobson, for instance, gives the impression of a typical thinker of the Enlightenment, totally detached from any cultural environment:

"For him everything must become familiar to everybody, provided we adopt the point of view of Reason" (Milner 1978:53-54).<sup>2</sup>

"...being convinced, like Spinoza, Voltaire or like any Jew from Central Europe, that from men constituted into nations, no good can come" ( *ibid.*:56.<sup>3</sup>

Seen from the "other side", on the contrary, Jakobson is deeply involved in his national scientific culture:

"Since the very beginning, the scientific activity of Roman Jakobson (1896-1982) was associated with a profound assimilation of the principles of the Russian philological tradition" (Ivanov 1985:5).<sup>4</sup>

4 " (1896-1982)

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<sup>&</sup>lt;sup>2</sup> "Tout pour lui doit devenir familier à tous, pour peu qu'on adopte le point de vue de la Raison".

<sup>&</sup>lt;sup>3</sup> "Certain, comme Spinoza, comme Voltaire ou comme tout Juif d'Europe centrale, que des hommes constitués en nations, aucun bien ne peut venir".

This confrontation of receptions raises a delicate problem: in what respect are human sciences dependent on their cultural context? More precisely, if Chinese or Japanese thought is easily understood as being very different from the Western world, how *different* is scientific thought in Eastern Europe? Does this question make any sense?

# I. On the Sources of Typology: similarity without a common ancestor

In the 1930s Jakobson has an explicit target: "naturalism" in linguistics. What does that mean?

"The doctrine of Schleicher, the great naturalist in the field of linguistics, has been undermined for a long time, but one can still find many traces." (1936 [1971:234])

"Is it necessary today to remind that language belongs to the social sciences, not to natural history? Is it not an obvious truism?" (*ib*.)

Jakobson's target is "orthodox evolutionism":

"It is the tendency to explain the grammatical and phonetic similarities of two languages by their descent from a common ancestor-language, and to consider only the similarities which may be explained in such a way that remains without any doubt the most stable element of this doctrine". (*ib*.)

"The similarity of structure is independent from the genetic relationship of the languages in question and can connect either the languages of the same origin or of different ancestry". (*ib*.:236)

Now, we can pose the problem in the following terms: what is the value, or the explanatory power of the resemblance of form? Does it rely on *chance?*, on *cause?* on a *hidden plan?* or: why are similar things similar?

A way of tackling this puzzling question is a close reading of the way the so-called «bourgeois science» was presented in the Soviet Union in the 1920s-1930s. Was it, strictly speaking, idealistic or materialistic?

The first step on the way of solving the problem in our linguistic field is the notably interesting paper which Ernst Cassirer (1874-1945) wrote in New-York a few days before he died (Cassirer 1945). He drew attention to the striking similarity between the French naturalist Georges Cuvier (1769-1832) and Jakobson's and Trubetzkoy's structuralism. His argument relies on the common epistemological attitude they shared: the "law of correlation of the parts in a whole". What is true for the organs in their relation to the organism they belong to is also true for the phonemes inside a phonemic system of a given language. Willingly or not, Cassirer had the intuition that the implicit way of reasoning for Jakobson and Trubetzkoy was the very naturalistic model they explicitly refused.

We shall now go a little bit further.

The great German writer Goethe is known abroad mainly for his literary works. Nonetheless, he saw himself essentially as a scientist-naturalist. His anti-Newtonian Farbenlehre (Theory of colors) was for him more important than his Die Leiden des jungen Werthers (The Sorrows of Young Werther).

Goethe was a promoter of *idealistic morphology*, the main theses of which can be summarized as follows:

- two forms may be similar without any contact either in space or in time
- no similarity in form can be due to *chance*

The consequence of those two principles is that there exists a *hidden plan* to be discovered and exposed. I will try now to show how this idealistic morphology is a useful clue toward(s) figuring out some features of <u>Jakobson's</u> work that distinguish him sharply from "classical" structuralism.

# II. The Theory of Types

How can we explain and justify the similarity of objects which look like one another?

There are three main possibilities:

- 1) a common ancestor
- 2) teleological convergence
- 3) harmony and transcendence

Jakobson and Trubetzkoy chose the last two and rejected the first.

The reason, for them, is that similarity with a mechanical cause does exist but is *meaningless*. On the contrary, similarity of pure form, without any *contact* whether in time or space, means that there is some plan, some design, a hidden teleology which governs those correspondences of form.

Here we are confronted with an important and irreconcilable opposition between a positivist attitude, which considers that a similarity without contact does not have the slightest interest, and idealist morphology, which, on the contrary, strives to unmask the hidden reason of similarity.

The first approach, for instance, will not be interested in the phenomena of doppelgangers, those people who look like each other, without having a common origin: their resemblance is due to pure chance, therefore not bringing any information on the only issue which has a value for them: reconstructing the common origin. French linguist Antoine Meillet, in his implicit polemics against Jakobson, is a concrete example of this epistemological attitude:

"The classification according to the general traits of structure was found to be devoid of any practical or scientific usefulness; it is just an entertainment, of which no linguist could ever take advantage" (Meillet 1921:76-77).<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> "Il [ce classement d'après les traits généraux de structure] s'est trouvé dénué de toute utilité soit pratique, soit scientifique; c'est une amusette dont aucun linguiste n'a pu tirer

On the opposite, Soviet biologist Aleksandr Ljubiš ev (1890-1972), who during his whole life professed a very explicit Platonism without ever getting into political troubles, constantly maintained the opinion that no similarity of form can be due to chance: if frost flowers on a frozen window-pane look like tree leaves, if the form of a sea-shell resembles the form of a galaxy, all those phenomena can be summed up by a common reflexion: *Eto ne slu ajno!* ['It is not by chance!'].<sup>6</sup>

In the 1920s Jakobson was deeply interested in a non-Darwinian biology, which was becoming increasingly popular in the Soviet Union: the nomogenesis of L. Berg (1876-1950). Nomegenesis is a theory which claims that evolution is governed, determined and regulated by *laws* (in Greek: *nomos* = law); it is a variant of *orthogenesis*, a general view of biological evolution which rejects any randomness.

In a letter to V. Shklovsky dated February 26, 1929, Jakobson wrote: "I read Berg's book on nomogenesis with passionate interest." In later years he recommended this work to Noam Chomsky<sup>8</sup> several times.

In *Nomogenez*, published in 1922, Berg explicitly rejected Darwinian theory. Drawing support from Owen's theories, he emphasized the notion of *convergence*, i.e. the unrelated organisms' independent acquisition of similar characteristics. But whereas Owen was trying to understand homologies, Berg overturned the value scale. The focus of his research was *analogies*, and he sought to show that in diametric opposition to Darwinian theory, evolution did not proceed by divergence from a common ancestor but rather by the convergence of unrelated organisms living in the same environmental conditions.

Another unforeseen source of Jakobson's ideas in the interwar period is the theory of types of N. Danilevsky (1822-1885). Danilevsky was an extreme nationalist anti-Western thinker, both a historian and a biologist. He is known in Russian intellectual historiography for his book against Darwin (1885) and his book against Europe (1869). Both are extremely aggressive. Jakobson ranked Danilevsky among the "wonderful fruits" of Russian philosophy due to his antipositivism (Jakobson 1929b [1988:55]).

N. Danilevsky proposed a theory of *closed types*. In this domain, he followed very closely the French naturalist Georges Cuvier (1769-1832), who maintained that the living kingdom was divided into four *types* ("embranchments"), which are totally different from one another and impenetrable to one another.

parti".

<sup>&</sup>lt;sup>6</sup> Ljubiš ev's works were reprinted by Y. Lotman in the Tartu semiotic journal *Trudy po znakovym sistemam* in 1977.

<sup>&</sup>lt;sup>7</sup> Letter published in Toman 1994:61.

<sup>&</sup>lt;sup>8</sup> *Ibid*.:23.

<sup>&</sup>lt;sup>9</sup> Berg 1922:105.

This theory of closed types was important for Jakobson and Trubetzkoy, who used it in their linguistic work to prove that the Russian (or "Eurasian") culture was totally alien to the "European" one. Thus, for Trubetzkoy there is a clear opposition between the continuous and the discontinuous in languages. For instance, he claims that Russian and Mordvinian, which are totally unrelated genetically, present a phonemic *continuity* (they belong to the *same type*), whereas Russian and Czech, linked by an obvious kinship, display a discontinuity (they are the members of two *different* phonemic types).

Goethe, the main representative of idealistic morphology, thought that all the plants go back by "metamorphosis" to an ideal, primordial proto-plant (*Urpflanze*), which is not a common ancestor, but an ideal prototype. Trubetzkoy and Jakobson share Goethe's concept of archetype, but add to it the very different principle of closed type, borrowed from Cuvier.

## III. Metaphor and Metonymy

In our quest for the poorly known sources of Jakobson's way of thinking, another unexpected candidate appears: Paracelsus (1493-1541).

In the Renaissance, a way of curing headaches was to eat walnuts. What is the *link* between both? It is the *similarity* between the form of a walnut and the form of the human brain. If one thinks that no similarity of form is due to chance, then it is normal that there is something superior which links walnuts and the brain. This kind of medicine thus takes its sense (and its delusional efficiency), provided that one admits the premise that form *is* a content. It is called *sympathetic medicine*.

My point is that Jakobson took this question of similarity of form very seriously. Let us take his definition of poetry:

"The poetic function projects the principle of equivalence from the axes of selection to the axes of combination" (Jakobson 1960:358).

In this very famous but very intriguing formula Jakobson enlightens the highest role he assigns to similarities and contiguities in verbal art. A clue to understand this enigmatic formula is given surreptitiously by Jakobson in a paper from 1956 where he writes:

"The principles underlying magic rites have been resolved by Frazer into two types: charms based on the law of similarity and those founded on association by contiguity. [...] This bipartition is indeed illuminating". (Jakobson 1956 [1971b: 258]).

What Jakobson found in the British anthropologist James Frazer (1854-1941) is the principle of *sympathetic magic* in primitive cultures, divided into magic by contact and magic by resemblance.

Here is the passage from Frazer's *The Golden Bough* which is decisive for our discussion:

"If we analyze the principles of thought on which magic is based, they will probably be found to resolve themselves into two: first, that like produces like, or that an

effect resembles its cause; and, second, that things which have once been in contact with each other continue to act on each other at a distance after the physical contact has been severed. The former principle may be called the Law of Similarity, the latter the Law of Contact or Contagion. From the first of these principles, namely the Law of Similarity, the magician infers that he can produce any effect he desires merely by imitating it: from the second he infers that whatever he does to a material object will affect equally the person with whom the object was once in contact, whether it formed part of his body or not. Charms based on the Law of Similarity may be called Homoeopathic or Imitative Magic. Charms based on the Law of Contact or Contagion may be called Contagious Magic." (J. Frazer: *The Golden Bough*, chap. 3).

Little by little we begin to piece together the parts of the puzzle: similarity -> metaphor (syntagmatic axis) contiguity -> metonymy (paradigmatic axis)

The next step in this reconstitution of the origins of Jakobson's ideas in the interwar period could be the *Naturphilosophie* of the first half of the 19<sup>th</sup> Century.

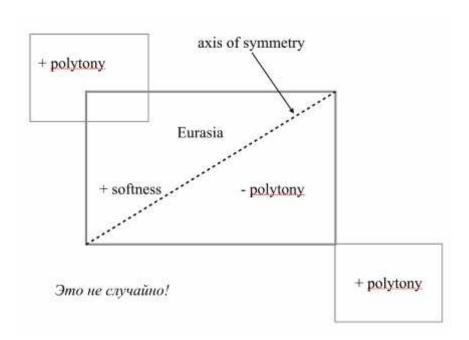
The notion of *function* was soon to emerge. It was on this basis that the British anatomist Richard Owen (1804-1892) developed the opposition between *homology* and *analogy* that from then on dominated comparative anatomy, especially after it was redefined in the theory of evolution.

In 1843 Owen systematized the *Naturphilosophie* opposition between *affinity* and *analogy*, except that the word *affinity* was replaced by *homology*. Organs or body parts that had the same *function* in different animals regardless of their origin (e.g., wings in birds and wings in insects) were *analogous* while organs of the same origin in different animals and regardless of form or function were *homologous* (e.g., birds' wings and whales' pectoral fins).

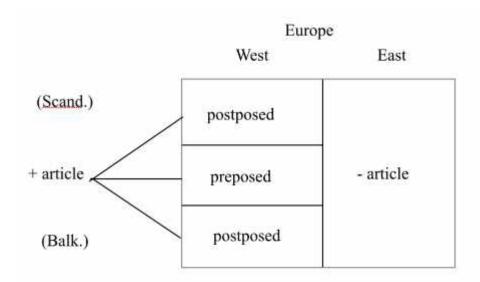
I wish to draw attention on the striking parallelism of argumentation in Jakobson and Richard Owen: the opposition between homology and analogy in the philosophy of nature in the middle of the 19th Century is used by Jakobson to support the idea of difference between language families and language unions.

In this regard, his booklet "K kharakteristike evrazijskogo iazykovogo soiuza" (1931) [For the characterization of the Eurasian language union'] is of primordial importance. The main idea of Jakobson is that language unions are more important, or more real, than language families in order to explain the existence of Eurasia. Jakobson goes further than Trubetzkoy. Thus, despite the obvious genetic link between Russian and Czech, those two languages belong to two completely different cultural worlds, and this difference is based on the fact that Czech does not have the hard/soft phonological correlation, whereas all the languages of Eurasia possess it. It is also a way of contrasting Romanian and Moldovan.

This opposition is reinforced by a fascination for symmetry. Here, like in Platonism, geometry is a means of interpreting geography:



Another example of this overwhelming role of geometry and symmetry is Jakobson's interpretation of the place of the articles in Western European languages:



In order to link Jakobson's interest for symmetry and similarity, we have to turn now to Greek philosophy, more exactly to Empedocles' formula: ò  $\Ho$ u  $\Ho$ oµ í  $\ro$ oµ í  $\ro$ i .

This formula receives different translations according to each language. In English it reads: *like is only known by like / like produces like*. But in French it is:

seul le semblable attire le semblable. The Russian version is also different: podobnoe stremitsja k podobnomu. I think a more or less adequate translation of "è i " would be "refers to".

This philosophical principle leads to a dispute in physics in the 17<sup>th</sup>-18<sup>th</sup> Centuries about "action at a distance". According to the concept of action at a distance, bodies act on each other with no material mediator, through the void, and at any distance. An example of a force considered as an example of direct action at a distance is Newton's force of universal gravitation. On the contrary, in the conception of short-range interactions, they are transmitted by special material intermediaries.

The subject of the dispute is contactless action. Jakobson transposes the dispute from physics to linguistics: action without a contact in space becomes for him similarity without a contact in time.

It is now possible to understand that Jakobson strove to build a synthesis, or ambiguous mix between:

- a) the Romantic values of the *Naturphilosophie* and
- b) the principles of anti-positivistic and anti-Darwinian natural sciences.

His emphasis on *function* masks a fascination with the necessary relation *form / content*, which was the "mainstream" of Russian intellectual thought in the years 1920-1930 (from Potebnja and Losev to Stalin through Marr). If *a form without content is not a form*, one understands the impossibility of the arbitrariness of the sign for Jakobson. In addition to quoting Joseph de Maistre – "Let us therefore never speak of chance and arbitrary signs" <sup>10</sup> – Jakobson relies heavily on the neo-Platonic principle of the *link*, which he calls "metod uvjazki".

Thus, we can rebuild Jakobson's axiological scale of values:

– Metonymy	+ Metaphor
Horizontal axis	Vertical axis
Syntagmatic axis	Paradigmatic axis
Combination	Selection
Contiguity	Similarity
Prose	Poetry
Pasternak	Maiakovsky
Realism	Romanticism
Language family (Sprachfamilie)	Language union (Sprachbund)

<sup>&</sup>lt;sup>10</sup> De Maistre 1821 [1980:103]. Jakobson frequently cited this line from *Les Soirées de Saint-Petersbourg* in his 1930s writings, and he came back to it in the *Dialogues* at the end of his life (1983, p. 88).

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Magic by contact	Magic by similarity
Divergence from a common	Convergence from a difference
ancestor	
Mechanics	Function
Causality	Goal
(Phylogenesis)	Nomogenesis
Randomness / Chance	Zakonomernost'
	(Gesetzmäßigkeit)
Chaos	Order

We can now conclude this long story. The basis of Jakobson's unity of thought in the 1920-1930s is the idea of contactless likeness:

- cause is replaced by purpose
- therefore language unions are more real than language families;
- magic by similarity underlies the metaphor
- therefore contactless links are more important than 'mechanical' links.

The general premise is that any form of similarity is significant.

The texts by Jakobson in the interwar period are at the crossroads: they are both echoes of an anti-Darwinian biology and an attempt at synthetizing the idealistic morphology of German romanticism with Neo-Platonism.

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*პატრიპ სმრიო* ლოზანის უნივერსიტეტი

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# რეზიუმე

დასავლური და რუსული ინტელექტუალური სამყარო სოციოკულტურულ ფენომენთა ასაზსნელად ორ ურთიერთსაპირისპირო საშუალებას იყენებს დასა- ვლეთი მიზეზობრიობას მიმართავს, რომან იაკობსონი კი მისი ცზოვრების რუსულ და ჩეზურ პერიოდში — "მიზნობრიობას" ანიჭებდა უპირატესობას. უფრო მეტიც, რუსული ტრადიციის ძალიან ბევრ წარმომადგენელს უცილობელ ფაქტად მიაჩნია, რომ მსგავსების ნებისმიერი ფორმა გარდაუვლად მნიშვნელოვანია. სტატიაში გამოვლენილია რუსეთში ენათმეცნიერებისა და ფილოსოფიის მიმართ ასეთი დივერგენციული დამოკიდებულების ისტორიული წყაროები.