# The Dynamic Model of a Semiotic System\*

Show me the stone that the builders have cast aside! It is the corner-stone. \*\*

St. Thomas, 701

1.0 To generalize about the attempt to develop principles for a theory of semiotics since the first premises were formulated by Ferdinand de Saussure is to come to the paradoxical conclusion that any reconsideration of basic principles has been certain confirmation of their stability, while any attempt to stabilize the methodology of semiotics has led inevitably to a reconsideration of these very principles. The works of Roman Jakobson, and, in particular, his concluding paper to the IX Congress of Linguists, have brilliantly demonstrated how modern linguistic theory has remained the same even when transformed into its opposite. Moreover, it is precisely in this combination of the qualities of homeostasis with dynamism that Jakobson rightly sees proof of the organic nature and vitality of a theory that is capable of radically reconsidering both its own internal organization and the system of its relationships with other disciplines:

In Hegel's terms one might say that the antithesis of the traditional tenet yielded to a negation of negation, i.e. to a synthesis between the immediate and the remote past.<sup>2</sup>

- \* First published as *Dinamicheskaya model' semioticheskoy sistemy*, Moscow, 1974, (Institut russkogo yazyka AN/SSSR: Problemnaya gruppa po eksperimental'noy i prikladnoy lingvistike, *Predvaritel'nye publikatsii*, 60) Translated by Ann Shukman.
- \*\* The translator has put many of the quotations in this article into his own English.

These remarks are fully applicable to the problem of the static and the dynamic in semiotic systems. The reconsideration of certain deeply rooted ideas in this area only confirms how well-founded the basic principles are for the structural description of semiotic systems.

1.1 From the earliest days a certain duality was inherent in the approach to the relationship of the synchronic to the diachronic aspects of semiotic systems. The differentiation between these two aspects of language description was one of the achievements of the Geneva school. The *Theses of the Prague Linguistic Circle* and later Prague school works, however pointed out that there was a danger of absolutizing this aspect and that the opposition was of a relative, heuristic rather than existential nature. In Jakobson's words:

It would be a serious mistake to treat the static and the synchronic as synonyms. The static section is a fiction: it is no more than an auxiliary scientific technique, not a particular mode of existence. We can consider the perception of a film not only diachronically, but also synchronically: but the synchronic aspect of a film is not identical with a single frame isolated or extracted from the film. The perception of movement is present also in the synchronic aspect of the film. It is exactly the same with language.<sup>3</sup>

Several works of the Prague school pointed out that, on the one hand, inasmuch as diachrony is the *evolution of the system*, it does not negate but rather throws light on the essential nature of synchronic organization at any given moment; and that, on the other hand, these categories were mutually transformable.<sup>4</sup>

Such criticism did not, however, cast doubt on the methodological value of the opposition of these two basic approaches to the description of a semiotic system.

The following remarks are intended to develop these long-standing notions and with them certain ideas of Tynyanov and Bakhtin concerning the dynamism of cultural semiotic models.<sup>5</sup>

1.2 The static quality which continues to be felt in many semiotic descriptions is not, one may suggest, the result of lack of effort on the part of the researcher concerned, but comes from certain fundamental features of descriptive methodology. Without a careful analysis of why the very fact of description transforms the dynamic object into a static model, and without the necessary correctives to these methods of scientific analysis attempts to arrive at dynamic models can be no more than good intentions.

#### 2.0 SYSTEMATIC - EXTRASYSTEMATIC

A structural description starts with the isolation within the object to be described of those system-elements and their relationships that remain invariant throughout any homorphous transformations of the object. From the point of view of a description of this type, this invariant structure is the sole reality.<sup>6</sup> In opposition to it are the extrasystematic elements which are characterized by instability and irregularity and which need to be eliminated in the course of the description. The need, when studying a semiotic object, of abstracting out the 'insignificant' features was discussed by Saussure, who pointed out the importance of passing over diachronic changes 'of little importance' when describing a single synchronic state of the language:

An absolute state is defined by the absence of changes, and since after all language is always in transformation, however slight, in order to study a state of the language, one must in practice ignore changes of little importance in the same way as mathematicians ignore infinitesimal quantities in certain operations such as the calculus of logarithms.<sup>7</sup>

This simplification of the object in the course of a structural description of it should not give rise to objections of principle since such simplification is a common feature of science. It should not be forgotten, however, that in the process of a structural description the object is not only simplified but also becomes more organized, more rigidly so than in reality.

One may, for example, attempt a structural description of the system of Russian decorations of the eighteenth and early nineteenth centuries. The subject is suitable in many respects: it is a fact of structure of culture, wholly semiotic in its nature, and arose artificially as the result of a conscious system-creating activity on the part of its initiators. What presents itself is a hierarchy of decorations and their distinctive features. Taking each decoration in isolation and the total system of decorations as an invariant organization, we, naturally, leave out of consideration variations in the features that are without any obvious orderliness. For instance, since it was customary over a long period of time for the medals and stars to be commissioned by the actual person who had received the royal command to wear the decoration, the size of the decoration and the number of precious stones that adorned it were determined by the fancy and the wealth of the recipient, and had no immanent semiotic significance.

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Even ignoring such variants, however, the very fact of describing how decorations are organized increases the degree of systematization in that organization not only because description removes all that is non-structural (i.e., non-essential), but also for another reason. One of the chief questions to be faced in such a description is the definition of the hierarchy of decorations, a question that is all the more legitimate because in practice the hierarchy was part of the functioning of the system, i.e., there was the mundane question of the relative positions in which to pin the decorations on the coat. Paul I, it may be remembered, attempted to transform all decorations of the Russian Empire into the single Order of Russian Knights, in which all previously existing decorations were to be merely 'nominations' or classes.

The descriptions of Russian decorations as a hierarchical system inevitably, however, puts aside constant variations and indefiniteness of hierarchical values of particular elements. But these variations were themselves an important structural feature and a typological index characteristic of Russian decorations. A description will always be more organized than its object.

2.1 Any scientific methodology operates along such lines, and there cannot be objections of principle to it, since the distortion of the object as a result of its description is normal. But there are other, considerably more serious, consequences: while a description that eliminates from its object all extrasystematic elements is fully justified when constructing static models, and needs only certain correction coefficients, it presents difficulties of principle for the construction of dynamic models.

One of the chief sources of the dynamism of semiotic structures is the constant process of drawing extrasystematic elements into the realm of the system and of expelling systematic elements into the area of non-system. A refusal to describe the extrasystematic, placing it beyond the confines of science, cuts off the reserve of dynamism and presents us with a system in which any play between evolution and homeostasis is, in principle, excluded. The stone that the builders of a formed and stabilized system reject for being, from their point of view, superfluous and unnecessary, turns out to be the cornerstone of the subsequent system.

Any stable and perceptible difference in extrasystematic material may, at the next stage of the dynamic process, become structural. To turn again to our example of the arbitrary ornamentation of Russian decorations, it should be remembered that from 1797 the arbitrary

decoration of medals with jewels was stopped, and diamonds became the legitimized sign of the highest degree for many orders. In this case, it is clear that diamonds were introduced not because of a need to express the highest degree of the award, but, on the contrary, they had come into being outside the system, then had been brought into the system and acquired meaning. The gradual accumulation outside the system of variable material on the expressive level became the stimulus for the creation of a systematic and content differentiation.

- 2.2 The description of the extrasystematic poses considerable difficulties of a methodological nature. On the one hand, what is extrasystematic in principle evades analytical thought, and on the other, the very process of description inevitably turns it into a fact of the system. To formulate the demand that the extrasystematic material which envelops the structure be included in structural descriptions is, it seems, to suggest that the impossible is possible. Things look different, however, if we recall that extrasystematic is not a synonym for chaotic. The extrasystematic is a concept that complements the concept of the systematic. Each concept acquires full significance only in mutual interrelationship, not in isolation.
- 2.3 The extrasystematic may be considered under the following headings:
- 2.3.1 Since a description involves, as we have already mentioned, a higher degree of organization, the self-description of a semiotic system, the creation of a grammar of itself, is a powerful means for the self-organization of the system. At a given moment in the historical existence of a given language, or, more widely, of a given culture in general, a sub-language (and sub-group of texts) isolates itself in the depths of the semiotic system and comes to be regarded as the metalanguage for the description of the system. In the age of classicism, for instance, numerous works of art were created which were descriptions of the system of works of art. It should be emphasized that in this case the description is self-description, the metalanguage is taken not from outside the system, but is one of its subclasses.

An essential aspect of this process of self-organization is the fact that, in the course of further ordering, a certain part of the material is shifted into an extrasystematic position and ceases to exist when viewed through the prism of such self-description. Hence a higher degree of organization in a semiotic system is accompanied by the

shrinking of that system: in extreme cases the metasystem becomes so rigid that it almost ceases to intersect with the real semiotic system which it claims to describe. In such cases, however, the authority of 'correctness' and 'real existence' lies with the metasystem and the real layers of social semiosis shift into the area of the 'incorrect' and 'non-existent'.

For example, from the point of view of Paul I's military, bureaucratic utopia, the sole existing system was the changing of the guard which was organized to a point of extreme cruelty. It was taken as the ideal of state order, and the political reality of Russian life was taken as 'incorrect'.

2.3.2 The feature of 'non-existence' (that is, 'extra-systematics') turns out to be at once both a feature of extrasystematic material (from the internal point of view of the system) and a negative indicator of the structural features of the system itself. Griboedov, for instance, summing up the political achievements of the Decembrist movement in the drafts of his tragedy Rodamist and Zenobia, points out, as a structural feature of aristocratic revolutionism, the fact that the people from this point of view 'do not exist' as a political force. (Griboedov, in writing this tragedy, was of course more interested in the doings of Russian conspirators of the 1820s than in the history of ancient Armenia at the time of the Roman occupation.) "In general," he wrote, "one should note that the people took no part in their affairs, and as it were did not exist". Academician V. F. Shishmarev, in a discussion of André le Chapelain, who wrote a well-known medieval treatise on courtly love, De amore, remarks:

With regard to peasant girls, the courtly author advises the friend to whom the book is addressed not to be ashamed of his actions, even if he has recourse to violence.9

This advice can be easily explained: according to André le Chapelain the peasant is capable only of *amor naturalis* within the bounds of courtly love, *fin'amors*, he "as it were does not exist". Consequently, actions taken towards people of this type can also be considered as non-existent.

In this case, it is clear that the description of the systematic (the 'existing') is at the same time an indication of the nature of the extrasystematic (the 'non-existing'). One could speak, then, of a specific hierarchy of extrasystematic elements and their relationships, and of 'the system of the extrasystematic'. From this standpoint the world of the extrasystematic could be seen as the system inverted, its symmetrical transformation.

2.3.3 The extrasystematic may be allo-systematic, i.e., may belong to another system. In the sphere of culture we constantly come across the tendency to treat an alien language as non-language, or in less extreme cases, to treat one's own language as correct and the foreign language as incorrect and to explain the difference between them by the degree of 'correctness', that is, the degree of order. An example of when speech in a foreign language is perceived as a corrupted ('incorrect') version of one's own can be found in Tolstoy's War and Peace:

"It's like that in Krench," said the soldiers in chains. "Come on, Sidorov!"

Sidorov winked and turning to the Frenchmen began rapidly babbling some incomprehensible words:

"Kari, mala, tafa, safi, muter, kaska," he mumbled. ... 10

There are many examples of when a foreign language is taken as non-language, as an inability to speak. For instance, in the Russian Chronicles: "The Yugrians are a tongue-less people", 11 or the etymology of the word *nemets*. 12 But the inverted perception of one's own system as 'incorrect' is also possible:

Like rosy lips without a smile I do not like Russian speech Without grammatical mistakes.

(Pushkin, Eugene Onegin, Chapter III, stanza XXVIII).

Sometimes one's own speech may be compared with the inability to speak. Thus Križanić, bemoaning the lack of development in Slavonic, wrote in *Politika*:

As a result of the above-mentioned beauty, and magnificence, and richness of other languages, and as a result of the shortcomings of our own, we Slavs are, compared with other peoples, like a dumb man at a feast.<sup>13</sup>

2.3.4 In such cases, since both the object to be described and its extrasystematic surroundings are treated as structural data, however distantly placed they may be, a metalanguage for the description must be sufficiently distant from them so that from its standpoint they appear as homogeneous.

This accepted, it is obviously impossible to use as research metalanguage an apparatus of self-description such as that worked out by the cultures of Classicism or Romanticism. From the viewpoint of Classicism itself, self-descriptions such as Boileau's *L'art poétique*, or 200 Ju. m. lotman

Sumarokov's Instructions to Those Wishing to Become Writers, are metalevel texts which, in relation to the empirical culture of their period, fulfill two roles: (1) increasing the degree of its organization, and (2) eliminating levels of texts which are shifted into the ranks of the extrasystematic. From the perspective of the modern researcher, these texts are part of the object of description and will be placed on the same level as that where all other texts of the culture of that time are placed. If a researcher puts the language elaborated during an epoch for its self-description on the level of metalanguage, then inevitably he must exclude from his area of study that which the men of that epoch for polemical reasons also excluded.

2.3.5 There is another point to be borne in mind: the creation of a system of self-description reorganizes and simplifies the object of research (by cutting off what is 'superfluous') not only in its synchronic but also in its diachronic state: that is, self-description creates the history of the object from the point of view of its own model of itself. When a new cultural situation is formed and, with it. a new system of self-description, its past state is reorganized, i.e., a new conception of history is created. This has dual consequences: on the one hand, forgotten predecessors and cultural figures are discovered, and historians of earlier periods are accused of blindness. Facts preceding the given system and described in its terms, lead naturally, only to the system, and only within it do they acquire unity and definition. Concepts of the type 'pre-Romanticism' come into being in this way: only that which led to Romanticism and achieved unity within its structure is picked out from among the cultural facts of the period that preceded Romanticism. A typical feature of such an approach is the fact that the movement of history is presented not as an alteration of structural states, but as a shift from an amorphous state that nonetheless contains within itself 'elements of structure', to a structured state.

On the other hand, a consequence of such an approach is the affirmation that history as a whole begins from the moment that self-description of the given culture arises. In Russia, in spite of the exceptionally swift alternation of literary schools at the end of the eighteenth and beginning of the nineteenth centuries, we come across the idea, repeated many times from different positions, that: "We have no literature." Thus, Karamzin, at the outset of his creative career, in the poem "Poeziya" [Poetry], totally ignored the preceding history of Russian literature and prophesied that Russian poetry would appear in the near future. In 1801, at a meeting of the

"Friendly Literary Society", Andrey Turgenev, thinking of Karamzin, declared that there was no literature in Russia. The same idea, but in each case with a different content, was to be put forward later by Kyukhelbeker, Polevoy, Nadezhdin, Pushkin, and Belinsky.

It follows, then, that the study of a culture at any given historical stage must include not only a description of its structure from the viewpoint of the historian, but must also translate into the language of the historical description the culture's own self-description and the culture's own description of the historical development of which it considers itself to be the final outcome.

### 3.0 MONOSEMIC - AMBIVALENT

The principle binary relationship is one of the basic organizing mechanisms of any structure. Sometimes, however, one is confronted with the presence of a wide area of structural neutralization between the poles of binary opposition. The structural elements accumulating here are ambivalent, not univalent, in relation to the constructive context surrounding them. Strict synchronic descriptions, as a rule, ignore this fact of the system's lack of complete, internal orderliness, although it is this that gives the system its flexibility and the heightened degree of non-predictability in its behavior. It is for this reason that the internal capacity of the object for creating information (the inexhaustibility of hidden possibilities) is far greater than its description would indicate.

An example of such over-ordering is the instance, well-known to scholars, when a poet creating a work cannot decide among the variants and keeps them all as a possibility: in this case, the text of the work will be that artistic world in all its variations. The 'definitive' text which we find on the page of a book is a description of the more complex text of the work, a description arrived at through the simplifying mechanism of typography. In the process of such a description, the orderliness of the text increases and its informative capacity decreases. There are many interesting cases when a text in principle does not include a fixed sequence of elements, but leaves the reader free to choose. In such cases the author, as it were, shifts the reader (and also a certain part of his own text) on to a higher level. From the vantage-point of such a metaposition the degree of conventionality of the rest of the text can be seen, the text in fact presents itself as a text and not as an illusion of reality.

For example, in Kozvma Prutkov's poem "My Portrait", the lines:

When in a crowd you meet a man Who is naked

are followed by Prutkov's remark: "Variant: wearing a frockcoat." Obviously here what is being introduced is a philological 'level of the publisher' (in this case, a parodic level) from which, by imitating a supratext point of view, variants are seen as equivalent.

More complex is the case in which the alternative variants are included in the single text. In Pushkin's Eugene Onegin we find:

He sleeps in heartfelt slumber Like drunken traveller on his sack Or, more delicately, like a moth Who has sucked on blossoms of spring.

(Chapter IV, stanza LI)

The inclusion in the text of the stylistic alternatives transforms a narration about events into a narration about narration. In Mandelshtam's poem "Ya p'yu za voennye astry ..." [I Drink to the Asters of War], the lines:

I drink, — but have not yet thought up Which of the two to choose — Merry Aste Spumante Or the wine of the pope's castle

give two variants and the reader is warned that the author "has not yet thought up" how the poem will end. The lack of an ending and the lack of definition confirm to the reader that he has before him not reality, but a text which can be 'thought up' in different ways.

The actual process, or moment of becoming, may thus appear in the text, and this is particularly clear in some films by contemporary directors who make use of the possibility of giving parallel versions of an episode without showing preference for either of them.

There is another aspect as well: every real text has an inherent propensity to incorrectness. This does not mean the incorrectness generated by the speaker's intention or attitude, but his simple mistakes. For example, although Pushkin made internal contradiction a structural principle of the text of Eugene Onegin, <sup>14</sup> there are occasions in the novel when the poet simply leaves loose ends. In stanza XXXI of Chapter III, for instance, he says that Tatyana's

letter is kept among the author's papers:

Tatyana's letter lies before me; I preserve it reverently.

But in stanza XX of Chapter VIII there is a direct indication that Onegin keeps the letter:

She, whose letter he preserves Where her heart speaks ...

In Bulgakov's novel *The Master and Margarita* the heroes die twice (both deaths take place simultaneously), once together in a basement room "in an alley near the Arbat", and the next time, separately, he in hospital and she in "A Gothic house". The 'contradiction' obviously is part of the author's intention. But when later we are told that Margarita and her maid Natasha "disappeared, leaving their belongings behind" and that the investigation tried to ascertain whether they had been kidnapped or fled, we have a case of carelessness on the part of the author.

Even these obvious technical slips cannot, however, be totally excluded from consideration. There are plenty of examples that show the reaction they have on the structural organization of various texts (see, for example, the discussion about the meaningfulness of the misprints in Hoffman's preface to Lebensansichten des Katers Murr). Let us consider here only one case: an examination of Pushkin's manuscripts leads one to conclude that in certain instances one can find traces of the influence of certain obvious slips of the pen on the further development of the poem, either by prompting the succeeding rhyme or influencing the course of the narration. S. M. Bondi in an analysis of the draft of the poem "Vse tikho, na Kavkaz idet nochnaya mgla ..." [All is still, the darkness of night comes on the Caucasus! found two such cases:

(1) In the word *legla* [lay down, fell] the letter 'e' was written by Pushkin without a loop so that the appearance of the word coincided by chance with that of the word *mgla* [darkness]. Was it not this chance slip of the pen that led the poet to the variant *idet nochnaya mgla*?<sup>15</sup>

And so thanks to a technical slip in graphics the line:

Vse tikho — na Kavkaz nochnaya ten' legla
[All is still — the shade of night fell on the Caucasus]

was transformed into:

Vse tikho — na Kavkaz idet nochnaya mgla [All is still — the darkness of night comes on the Caucasus].

(2) The word net [not] was written by Pushkin in such a way that it could be taken for let [years]: thus substituting mnogih net [many were gone] for mnogo let [many years], Pushkin (as with the words legla and mgla at the beginning of the poem) did not correct the word net. 16

These examples show that mechanical distortions, can, in certain circumstances, act as a reserve for a reserve (a reserve of the extrasystematic surroundings of the text).<sup>17</sup>

- 3.1 Ambivalence as a cultural-semiotic phenomenon was first assessed by M. M. Bakhtin. His works provide numerous examples of it. Without going into all the aspects of ambivalence, one should at least remark that the growth of internal ambivalence corresponds to the moment of the system's transformation into a dynamic state in the course of which that non-defined is structurally re-disposed and acquires, within the framework of the new organization, new monosemic value. In this way an increase in internal univalence can be considered as an intensification of homeostatic tendencies, while a growth of ambivalence is an index of an imminent dynamic leap.
- 3.2 It follows that one and the same system can be in a state both of ossification and of softening. The actual fact of description may change it from the second state into the first.
- 3.3 The state of ambivalence arises in two possible ways: as the relationship of a text to a system now not operative, but preserved in cultural memory (a norm-violation that is allowable in certain circumstances); and as the relationship of a text to two mutually unconnected systems, when, in the light of one system, the text is permitted, but, in the light of the other, forbidden.

Ambivalence is possible because in a culture's memory (i.e., the memory of any cultural collective, including the individual) there is preserved not one, but a whole set of metasystems regulating its behavior. These systems can be mutually un-connected and can possess different degrees of actuality. This makes it possible, by altering the place of one system or another on the scale of actuality and obligation, to translate a text from incorrect to correct, from

forbidden to permissible. The functioning of ambivalence as the dynamic mechanism of culture, however, lies in the fact that the memory of the system in the light of which the text was forbidden, does not fade, but is preserved on the periphery of the system's regulators.

In this way, it is possible to shift and reposition on the metalevels, thus altering the interpretation of the text, and also to reposition the text itself in relation to the metasystems.

# 4.0 NUCLEUS - PERIPHERY

The space of a structure is not uniformly organized. It always includes in itself some nuclear formations and a structural periphery. This is especially obvious in complex and supercomplex languages that are heterogenous in nature and that inevitably include subsystems that are relatively structurally and functionally independent. The relationship of nucleus to periphery is made more complex by the fact that each sufficiently complex and historically prolonged structure (or language) functions as a described structure itself. It may be described by an outside observer, or by itself. In either case, however, the language becomes a social reality from the moment of its description. But description is inevitably deformation (and for this reason any description is not only fixation but a culturally creative act, a stage in the development of the language). Without going into all aspects of this deformation, let us note that it inevitably entails a negation of the periphery, the transposition of it into the class of non-existence. The irregular disposition of univalence and ambivalence in a semiotic space is obvious: the degree of rigidity in the organization diminishes from center to periphery, as is natural if we recall that the center is always the natural subject for description.

- 4.1 Tynyanov's works discuss the mechanism for the mutual alternation of structural nucleus and periphery. The more flexible mechanics of the latter make it suitable for the accumulation of structural forms, which, at the following historical stage, become dominant and move into the center of the system. The continuous alternation of nucleus and periphery is one of the mechanisms for structural dynamics.
- 4.2 Since in every cultural system the relationship of nucleus to periphery acquires supplementary value features as the relationship

of top to bottom, the dynamic state of a system of semiotic type is, as a rule, accompanied by the alternation of top and bottom, valued and valueless, existing and non-existing, describable and not worth describing.

## 5.0 DESCRIPTION - NON-DESCRIPTION

We pointed out that the very fact of description heightens the degree of organization and diminishes the dynamism of the system. It follows from this that the demand for description arises at certain moments of the immanent development of a language. The use of a highly complex semiotic system can be represented as a pendulumlike process that swings between speech in one language and communication with the help of many languages; such languages only partially intersect and ensure a limited, and at times even insignificant, degree of understanding. The functioning of a highly complex sign system does not presuppose complete understanding, but a tension between understanding and non-understanding; the shift of accent from one pole to another of the oppositon corresponds to a particular moment in the dynamic state of the system.

5.1 The social functions of sign systems can be divided into primary and secondary. A primary function implies the communication of a fact, and the secondary function the communication of another person's opinion about a fact known to 'me'. In the first case the participants in the act of communication are concerned with the authenticity of the information. The 'other' in this case is an 'I' who knows what is not known to 'me'. Once the information in received, 'we' are fully equivalent. The shared interest of the sender and the receiver of the information is to see that the difficulties of understanding be reduced to a minimum and consequently that the sender and the receiver have a common view of the message, i.e., should use a single code.

In more complex communicative situations, the 'I' is concerned that the interlocutor be really 'another', since the incompleteness of the information can be usefully completed only by the stereoscopic effect of different points of view towards the message. In this case what is useful is not the ease but the difficulty of mutual understanding since difficulty is associated with the presence in the message of 'another's' position. The act of communication is not a simple transmission of a constant message, but a translation which

entails both the surmounting of sometimes quite considerable difficulties, and specific losses, and, at the same time, the enrichment of the 'I' by texts bearing another's point of view. As a result the 'I' acquires the possibility of becoming 'another' with regard to myself.

- 5.1.1 The communication of information between a non-identical addresser and addressee implies that the 'personalities' of the participants in the communicatory act be interpreted as sets of inadequate codes that possess certain common features. The area of intersection of these sets of codes ensures that there is a certain essential level of low understanding. The sphere of non-intersection gives rise to the need for establishing equivalences between different elements and lays the basis for translation.
- 5.1.2 The history of culture reveals a constantly active tendency towards the individualization of sign systems (the more complex they become, the more individual). The sphere of non-intersection of codes in each 'personal' set continuously grows more complex and richer, and this process at the same time makes the message as it is dispatched from each subject both more valuable socially and more difficult to understand.
- 5.2 When the complexity of particular languages (of individuals or of groups) passes the limit of structural equilibrium, there arises the need to introduce a secondary coding system that is common to all. The process whereby social semiosis acquires a secondary unification necessarily entails the simplification and primitivization of the system, but, at the same time, it actualizes the unity of the system by creating the basis for a new period of complication. For example, the creation of a single national linguistic norm is preceded by the development of differing and varied means of linguistic expression the period of the Baroque was succeeded by Classicism.
- 5.3 The need to stabilize, to pick out from the multi-faceted and dynamic linguistic condition elements of static and of the system's homostatic identity to itself, is satisfied by metadescriptions. Subsequently metadescriptions are transformed from the sphere of metalanguage to the sphere of language and become a norm for actual speech and a basis for further individualization. The oscillation between the dynamic state of linguistic non-describability and the static state of self-descriptions and descriptions made from an outer position that become part of the language, is one of the mechanisms of semiotic evolution.

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#### 6.0 THE NECESSARY - THE SUPERFLUOUS

The problem facing a structural description is closely bound to the problem of distinguishing what is essential, or operative, without which the system in its synchronic state could not exist, from those elements and relationships which, from a static position, are superfluous. One cannot consider the hierarchy of languages from the simplest, such as traffic signals, to the most complex, such as the languages of art, without being struck by the increase in redundancy. Numerous linguistic mechanisms work to increase equivalences and mutual substitutions at all levels of the structure (at the same time, of course, other supplementary mechanisms work in an opposite direction). However, what looks redundant from the synchronic point of view appears differently from the dynamic position and constitutes the structural reserve. It may be suggested that there is a certain connection between the maximum of redundancy characteristic of a given language and its capacity to change while remaining itself.

#### 7.0 THE DYNAMIC MODEL AND POETIC LANGUAGE

The antinomies discussed in the preceding paragraphs are features of the dynamic state of a semiotic system, its immanent semiotic mechanisms which allow it while changing with the changing social context to preserve homeostasis, i.e., to remain itself. It is not too far-fetched to see that these same antinomies are inherent in poetic language as well. This coincidence is not a chance one. Languages intended for primary communicative functions can operate in a stabilized state. For them to carry out their social role they have no need of special 'change-mechanisms'. It is different with languages intended for more complex types of communication. Here the absence of a mechanism for continuous structural renewal deprives the language of the de-automized connection between addresser and addressee, which is the most important means for concentrating in one message an ever-increasing number of other points of view. The more intensively the language oriented towards a message about other speakers and towards the specific transformation by them of the messages that 'I' already have (i.e., if it aims at an allencompassing perception of the world), the quicker its structural renewal must be. The language of art is an extreme realization of this tendency.

7.1 One may conclude from the foregoing that the majority of existing semiotic systems are found on the structural spectrum between the static and dynamic models of language, and swing from one pole to the other. The one tendency is most nearly realized in artifical languages of the simplest kind, while the other extreme is found in the languages of art. For this reason, the study of the languages of art, and, in particular, of poetic language is no longer a narrow branch of functional linguistics, but lies at the basis of attempts to model dynamic processes of language.

Some years ago, academician A. N. Kolmogorov demonstrated that in an artificial language which had no synonyms poetry was impossible. One might put forward the proposition that it is impossible for a semiotic system such as a natural language and other more complicated systems to exist unless there is poetry in it.

8.0 Two types of semiotic system are therefore identifiable according to whether they are directed towards the communication of primary or secondary information. The first type can function in a static state, but for the second, dynamics, that is *history*, is an essential condition of their 'work'. Correspondingly, the first type has no need for extrasystematic surroundings to serve as a dynamic reserve. For the second type, this is essential.

We have already noted that poetry is a classic case of the second type of these systems and can be studied as a special model for them. In actual historical conflicts, however, there are cases of orientation by certain schools of poetry towards primary information, and vice versa. For example, when we consider how in Russian poetry of the eighteenth and nineteenth centuries there was a growth in the significance of extra-textual connections (in order to understand and to perceive a poem it was necessary to go outside the text and relate it to the personality of the author, to the history of poetry, and so on, i.e., to what, from this point of view, was extrasystematic), then this process can be interpreted as the reorientation of poetic texts from primary to secondary semiotic systems.

8.1 In pointing out the contrasts between the two types of semiotic systems, one should avoid making the antithesis an absolute. It is a question, rather, of two ideal poles that are in a complex, interacting relationship. And it is within the structural tension between these poles that the single complex semiotic whole that is culture unfolds.

#### NOTES

<sup>1</sup> Quoted from M. K. Trofimova, "Iz rukopisey Nag-Khammadi" ["From the manuscripts of Nag-Khammadi"], Antichnost' i sovremennost' (Moscow 1972), 377.

<sup>2</sup> Proceedings of the Ninth International Congress of Linguists (The Hague 1964), 1137. Russian translation: R. Jakobson, "Itogi devyatogo kongressa lingvistov", Novoe v lingvistike IV (Moscow 1965), 579.

<sup>3</sup> "Prinzipien der historischen Phonologie", Travaux du Cercle linguistique de

Prague IV (1931), 264-65.

- <sup>4</sup> R. Jakobson, Remarques sur l. évolution phonologique du russe comparée à celle des autres langues slaves (Travaux du cercle linguistique de Prague II), 1929, 15.
- <sup>5</sup> See Stefan Żólkiewski, "O badaniu dynamiki kultury literackiej" ["On the study of the dynamics of literary culture"], Konteksty nauki o litteraturze (Z dziejów form artystycznych w litteraturze polskiej, XXXIV) (Wrocław 1973).
- <sup>6</sup> For an analysis of the concept 'structure', see Emile Benveniste, "'Structure' en linguistique", *Problèmes de linguistique générale* (1966), 91-98. Russian translation: Emil' Benvenist, *Obshchaya lingvistika* (Moscow 1974), 60-66.
- <sup>7</sup> Ferdinand de Saussure, Cours de linguistique générale (1969), 142. Russian Translation: F. de Sossyur, Kurs obshchey linguistiki (Moscow 1933), 104.

<sup>8</sup> A. S. Griboedov, Sochineniya (Moscow 1956), 340.

- <sup>9</sup> B. F. Shismarev, "K istorii lyubovnykh teoriy romanskogo srednevekov'ya" ["On the history of theories about love in the Romance middle ages"], *Izbrannye stat'i. Frantsuzskaya literatura* (Moscow-Leningrad 1965), 217; M. Lazar, *Amour courtois et fin'amore dans la littérature du XII-e siècle* (Paris 1964), 268-78; *ibid*.: 288 for literature on André le Chapelain.
- L. N. Tolstoy, Sobr. sochineniy v 14 tt. IV (Moscow 1951), 217.
- <sup>11</sup> Polnoe sobranie russkikh letopisey I (Moscow 1962), column 235.

12 'A German', etymologically 'a dumb man' [Trans.].

<sup>13</sup> Juri Križanić, *Politika*, 1663-66. Russian translation: Yu. Krizhanich, (Moscow 1965), 467. In the original: "Búdto czlowek njêm ná piru", *ibid.*; 114.

I have reviewed it all sternly;

There are very many contradictions,

But I do not want to correct them ... (Chapter I, stanza LX)

15 S. Bondi, Novye stranitsy Pushkina (Moscow 1931), 19.

<sup>16</sup> *Ibid.*, 23.

- <sup>17</sup> Careless handwriting in Cyrillic script makes possible the confusion between the letters 'm' and 'le', and between 'n' and 'l' [Trans.].
- Juri M. Lotman, who is Head of the Department of Russian Literature at the State University of Tartu, was born in Leningrad, in 1922. His research has focused on Russian literature of the 18th century, the typology of cultures, and the construction of a structural theory of literary texts. He has published numerous works in these and related semiotic domains, including his seminal book, Lekcii po strukturalnoj poètike. Many of his works have been translated into English and other languages. Since 1969, he has served as a member of the Editorial Committee of this journal.