

## **Scientific thought and work of Yuri Lotman**

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1. The work of Yuri Lotman is a good proof of the fact that the history of literary ideas admits numerous nuances, interrelations and dialogues with other approaches to literary and cultural phenomena as well as with the discourses produced in the different fields of human knowledge.

For the last 20 years Lotman managed to collect views relating him directly to the ‘Russian formalism’ (yet today references can be found to his presumably ‘postformalist’ activity) or to ‘structuralism’ (confusing sometimes the notion of structuralism in Lotman with a narrow immanence-based theoretic perspective). The majority, however, have spoken for years about the central position occupied by him in the semiotic studies of the 20th century. But recently scholars (like Cesare Segre, at a conference held in honour of Lotman in Granada in 1995) have asked if he did not go beyond the limits of semiotics in his last books (Segre 1997, 1988). Curiously, and in order to add another term, since his works of the 1960s, Lotman has used at times the expression ‘structural-semiotic’ as a synonym for ‘structural method’. Anyway, when we refer to semiotics in Lotman, we should bear in mind that it is about an heterodox semiotics with a heterogeneous research interest, a solid semiotics, yet, always ready for a change as we will see below.

Generally speaking, and with a necessary warning to avoid reductionism, three important moments can be observed in the evolution of his ideas: the first, ‘structural- semiotic’, is marked by works, some of them published before and the others unpublished till then, compiled in the *Lektsii po strukturalnoi poetike* (*Lectures on Structural Poetics*, 1964), *Struktura hudozhestvennogo teksta* (*Structure of the*

*Artistic Text*, 1970) — containing articles already published in the previous volume and others that were published in the 100960s — or *Analysis of the Poetic Text* (1972).

The object of study common to those works, dominated by semantic analysis but with the presence of the pragmatic level, can be described with the very words Lotman uses for explaining the objective proposed in *Structure of the Artistic Text*:

“To offer a general outline of the structure of the artistic language, of its similarities and differences with regard to analogous linguistic categories, that is to say, to explain how an artistic text becomes carrier of a certain thought, of an idea, in what ways the structure of the text is connected with the structure of that idea” (Lotman 1970, 15).

The second landmark to consider is, perhaps, the most spread: it is “culture semiotics” that sometimes has been understood as a unique whole, when there can be observed an increasing interest in the study of the pragmatic level or in the receptional one (Lotman 1977a), in the study on the dynamics of culture (see, for example, Lotman 1974) or the relationships between the texts (see Lotman 1979 and 1981b). His interest in those and in other new themes culminates symbolically in a third moment: the one of the last years of his life, starting with works like *O semiosfere* (*About the Semiosphere*. Lotman 1984).

Speaking about three moments in his work is not contradicting the view of Desiderio Navarro (in my opinion it complements it) as he indicates two phases: one that has been called his initial ‘tectonic’, ‘neostructuralist’ phase, and the other phase that he considers more important, defined by him as ‘dynamic’, ‘postneostructuralist’, ‘post-modernist’ (“in the Hassanianic sense” as he annotates), the key concept of which will be that of ‘semiosphere’ (Navarro 1996, 17). Mihhail Lotman also distinguishes two phases in the evolution of the ideas of his father and the Tartu school seen from the point of view of philosophy: the first phase, the one of the 1960s in which the Kantianic basis of his postulates about “the statics of semiotic systems” stands out; and the second one, that of the 1970s, has a different philosophic basis (M. Lotman cites the *autocrescent logos* in Heracleitus) the dynamics of semiotic systems being regarded as a “cornerstone” of his studies now (M. Lotman 1995, 34).

However, his work can also be defined in another way: as a product of his peculiar *structuralist* activity. I am employing here the Barthesian notion of structuralism; namely, the activity characterized by having man as a “manufacturer of meanings”, the *homo significans* as an object of studies (Barthes 1963, 261). And there has never been another task for him from his earliest works at the end of the 1940s till his death in 1993. Barthes and Lotman have similarly studied not only literature but also other arts and diverse fields of culture. Although structuralism in Lotman is connected with the tradition of the Russian literary studies that, as he himself remarks, “has generally remained in the shadow”, his attitude is very similar to the one expressed by Barthes at that time. In fact, Lotman considers himself a member of the ‘party of the unsatisfied’ because he does not seek to ‘take care of’ what some think has already been solved and arranged but, above all, to ‘search’ new ways, in spite of the imperfections that may arise in this search, “Structuralism does not aim at assuming an exclusive position in science, and in authentic science such a position cannot exist”, he writes in 1967. In the same essay he affirms that a literary scientist must never accept “an interpretation to which he has got used to as an ultimate truth” (Lotman 1967, 75–76, 85–86) The provisional nature of the critical language of structuralism has also been observed by Barthes in the conclusion of his famous essay as follows: “the investigator knows that there only needs to emerge a new language from the history that would talk to him in its turn, to consider his task completed” (Barthes 1963, 262).

2. I agree with Peeter Torop who claims that *there are several Lotmans* (Torop 1992, 39). I would like to pay attention here to one of ‘those Lotmans’ from a very concrete angle: his relationship with a thought produced from the field of natural sciences. This link reveals how, next to the significant differences between the two periods that Navarro and M. Lotman indicate, there is something that remains during his more than 40 years as a scientist, something that today helps to speak about his entire work as an example of coherence: the desire not to dwell on what is already known but to think constantly about going on in search of new fields of study, at the time rethinking what has been written, introducing nuances into what has been said

and inserting the results of his 'meta-reflection' in his discourse.<sup>1</sup> Maria Corti has precisely stated that the "dominant feature of his thought was that of being always on the way" (Corti 1994, 8).

As it has been indicated already, the tradition of the Russian literary studies that 'has remained in the shadow', according to Lotman, contributes to the notion of structuralism; the linguistics of N. I. Marr and its application to literary studies by Olga M. Freidenberg, the artistic typology of the 1930s and 1940s (G. A. Gukovski, V. M. Zhirmunski, V. I. Propp among others), or the attempts at constructing functional models of art, like those of I. N. Tynianov, V. Shklovski or S. M. Eisenstein, form a part of this tradition (Lotman 1964, 156).

M. Lotman also pointed out an event participating in the construction of the concept of structure, namely, the transference of problems (like that of structure) from the field of speculative philosophy to that of objective scientific knowledge in the late 1950s and early 1960s which became an important activity in the semiotic school of Tartu.

At that time, the most recent theories of nascent cybernetics, of the theory of information and of structuralist linguistics constituted the major object of his interest (M. Lotman 1997, 65).<sup>2</sup>

In 1967 Juri Lotman brought forth the ideal qualities that have to be combined in a scholar of literature, which are quite different from those of a traditional philologist. The scientist, far from specialization in an inflexible discipline, must command the empirical material as well as the "habits for deductive thinking elaborated by exact

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<sup>1</sup> Desiderio Navarro thinks that "the 'genre' of the article has been the 'natural' way in which he has expressed himself, due to "a cognition of his role of a theoretical investigator, as that of an explorer of the *avant-garde*, who discovers a terrain, carries out the initial study of that, reports his results ... and sets off immediately for the discovery of new lands, leaving to others the work of colonization, of systematic cartography and exploitation" (Navarro 1996, 13–14).

<sup>2</sup> The cybernetic ideas of the 1950s, in M. Lotman's recollections, had an influence on the formation of the Tartu group: "the heuristic processes of cybernetics (let us consider among them, for example, the method of the 'black box', the principle of the inverse relation, the homœostasis, etc.) were understood as approaches that possessed a general methodological and scientific significance" (M. Lotman 1997).

sciences”, be a linguist, have experience “in the work with modelling systems”, have knowledge of psychological science, be able to reflect on the general problems of semiotics and cybernetics, collaborate with mathematicians, “and — he ends up saying- in an ideal case, incorporate in himself a literary scientist, a linguist and a mathematician” (Lotman 1967, 85).

The ideas of the group of French mathematicians known by the name of Bourbaki lie at the basis of the concept of structure developed by him in his *Lectures on Structural Poetics*. The structural study presupposes the determination of “the correlation of elements between themselves and their relationships with the structural totality”, while studying “the functional nature of the system and that of its parts”. For that purpose, the structure has to be analysed by taking into account the “physical” level<sup>3</sup> (that is a more concrete level, a *given* structure) as well as the “mathematical” level<sup>4</sup> (that proves to be more abstract, a *whichever* structure). According to Lotman “it will be necessary to construct models of structures” of the two kinds for literary studies (Lotman 1964, 144–145).

He conceives mathematics not “as a distinct branch of science, but as a method of scientific thought, and a methodological basis for the discovery of the most general regularities of life”. It is neither about uniting two sciences (one particular science and mathematics) into a third one, nor about applying simple mathematical methods, but about something that possesses much more scope: the creation of new methodology for the humanities, the elaboration of a new method of scientific thought (Lotman 1964, 152–154).

He finds that the main difficulty in the use of mathematical methods in literary studies “consists in the fact that the basic concepts of literary science have not yet been formulated”. In the *Lectures on Structural Poetics* he seeks precisely to “bring nearer the moment of the solution of this task” in the specific field of the verse theory. Only in the secondary fields, he admits, the methods of mathematical statistics have been relatively efficient. Here he points out the essay of

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<sup>3</sup> i.e., the material nature of the structure and of the functions and relations of its elements.

<sup>4</sup> i.e., the nature of the relationships between the elements, making abstraction of his material realization, and *the system of relations* which is present in the structure.

A. N. Kolmogorov and A. M. Kondratov on *The Rhythms of the Poems of Mayakovsky* (1962), where they apply mathematical methods to the study of verse. For Lotman, this work reveals the impossibility of the application of the statistical method in reaching the conclusions that would not turn out to be “subjective and indefinite”, in spite of the fact that those investigators assemble “enormous statistical material”. In *Structure of the Artistic Text* he, however, recognizes the advances of the studies by Kolmogorov and his school, particularly of what concerns the problem of the entropy of the poetic language and the possibility of measuring artistic information.

I would like to give here a short explanation concerning quite a widespread idea on those ‘structuralist’ years, namely, that at times it has been misinterpreted, in my opinion, that Lotman adhered unconditionally to “almost mathematical poetics” (Vázquez 1997, 240–241). I do not believe that his interest in mathematics could be interpreted as a devotion to what had been achieved by that time. Lotman and Kolmogorov himself were on the alert even about “the excessive enthusiasm about the still quite modest results of mathematical-statistical, theoretical-informational and, particularly, cybernetic studies of poetry” (Lotman 1970, 41). According to Kolmogorov, the experiments carried out in the 1950s and 1960s in order to create models of the processes of artistic creation by computers, “surprise us with their primitive character”, whereas the formal analysis of the artistic creation carried out beyond the influence of information and cybernetic theories has achieved a more elevated level (Kolmogorov, quot. in Lotman 1970, 41). In this concrete case the theories of the Russian academic are good for reflections on the entropy of the artistic language of the author and on its difference in relation to that of the reader’s language, “the same artistic text, seen from the point of view of the sender or the addressee, appears as the result of the consumption of distinct entropies and, therefore, as the carrier of different information” (Lotman 1970, 45–46).

This idea is related to quantum physics, to the method of the ‘black box’ in cybernetics (Lotman 1995, 31) or to the “principle of complementarity” by Nils Bohr (M. Lotman 1997, 81). In the same way that atomic physics has demonstrated that, on the atomic scale, the observation of a phenomenon modifies in an unpredictable way the phenomenon itself, Lotman proposes a revision of the communication scheme of Roman O. Jakobson. In contrast with the Jakobsonian

scheme of communication conceived of as direct transmission of a message already elaborated, Lotman is known to have understood the act of communication as an act of transformation, as an act of translation, through what “the text transforms the language to the addressee” and the text itself transforms, “stops being identical to itself” (M. Lotman 1995, 34):

“Thereby, the communication act [...] has to be considered not as simple transfer of a certain message that keeps coinciding with itself, from the conscience of the sender to the conscience of the addressee, but as a *translation* of a certain text from the language of my ‘me’ to the language of your ‘you’” (Lotman 1977b, 54–55).

3. However, his work is not only what was published during the initial period. From the second half of the 1970s and, above all, the first years of the 1980s evolution towards a dynamic approach of semiotic systems became obvious, with the dialogue between science and humanities standing out. For example, in an essay of 1977, double inclination of the system of culture towards both diversity and stability or uniformity rose to the fore. Thus, the elements of the system of culture “specialize as its parts, on the one hand, and at the same time, acquire an increasing autonomy with independent structural formations on the other” (Lotman 1977b, 52). In order to avoid “schizophrenia of culture”, its disintegration and transformation “into a situation of the ‘tower of Babel’ of the semiosis of a given culture” produced by the increase of diversity, he observes that culture possesses mechanisms “of orientation contrary to diversity” that guarantee the stability and the “arranged character of the whole” (Lotman 1977b, 55–56). This phenomenon, visibly contradictory, is explained by Lotman resorting to cybernetic theories and to that of the law of supercomplicated systems which maintains that “the stability of the whole increases with an increase of the internal diversity of the system” (Lotman 1977b, 52).

Simonetta Salvestroni has pointed out the consistency observable in Lotman’s work. She recalls, for example, how, from the 1960s he started paying attention to the functioning of dialogical mechanisms. Since then, the Italian scholar says, he continued expanding his interest. As a proof of it there is the compilation of texts entitled *Testo e contesto* (*Text and Context*, 1980) and his essay *Mozg-tekst-kultura-iskusstvenny intellekt* (*Brain-text-culture-artificial intellect*, 1981a),

apart from the writings compiled in her edition (Salvestroni 1985, 19). In the same way “the study of the topological organization of dynamic systems” can be tracked down in his *Structure of the Artistic Text* (1970) up to the essays gathered in *Tipologia della cultura* (*Typology of the Culture*, 1975) or the above mentioned *Text and Context*. According to Salvestroni, at present this study on the dynamic systems “is remarkably advancing thanks to the help coming from Vernadski” (1985, 42–43).

The reader’s attention is attracted by the “deep affinity” of the texts published in those years “with a series of works written recently in various cultural and geographic areas of the western world”, that demonstrate Lotman’s interest in the dialogical interaction between the scientific and the humanistic fields” (Salvestroni, 1985, 10–11). The essays by Gregory Bateson, Paul Watzlawick, Gerald Holton, Ignacio Matte Blanco, Josef Maria Jauch, Y. Elkama, Geoffrey Chew or by the already-mentioned Vernadski on the biological-epistemological investigation, the study of the hemispheres of the brain, scientific imagination, the quantum theory or the philosophy of science, share a common dedication of their attention “to what is dynamic and interactive, the interest for the unifying aspects, the more or less clear repulse to the dichotomic scheme of setting up mind against nature, avoidance of extremities or else the investigation of a balance between the polar pares like reason-imagination, continuous-discontinuous, dynamism-homeostasis” (Salvestroni 1985, 13).

4. Doubt has been cast on Lotman’s latest work by Cesare Segre, who considers *Kultura i vzryv* (*Culture and Explosion*, 1992) and *Cercare la strada* (*To Look for the Way*, 1994) his testament written “as if he had been urged by the fear of not being able to communicate all his ideas to us”. Judging by the style the language he uses, in effect it may be interpreted like that: professor Segre observes how, as opposed to “the habitual expressive neutrality in works of history and of semiotics of culture”, in his latest works “he gives rein to the taste for the metaphor and to personal evocation” (Segre 1997, 91). However, if we attend to the titles of some chapters in *Culture and Explosion*, we establish that he does not break up with what we have been expressing up till now, but above all, we perceive his relation with the ideas of Ilya Prigogine: «Discontinuous and Continuous», «The Logic of the Explosion», «The Moment of Unpredictability» ... In the third



chapter of *To Look for the Way*, that also has a very significant title («Explosive Processes»), he admits explicitly the connection with the ideas of Prigogine (and Stengers) in *Between the Time and the Eternity\** (Lotman 1994, 35)

As was the case in relation to the majority of the authors mentioned above, Lotman was not aware of the works of Prigogine either when he wrote for the first time about the fortuitous and the unpredictable. His essay *O roli sluchainyh faktorov v literaturnoi evolutsii* (*On the Role of Fortuitous Factors in Literary Evolution*), published for the first time in German in 1987 and afterwards, in 1989, in the *Semeiotiké* of Tartu, was written and presented at the Semiotics Seminar of the University of Tartu in 1985. Lotman himself recognizes that the works of Prigogine, which he for the first time got access to in 1986, when *The New Alliance* (or *Order as the Result of Chaos*, as it was translated in the United States) was translated into Russian, made “an extraordinarily strong impression” on him (Lotman 1989, 101), partly because, as Mihhail Lotman indicates, “coincided with his own intuitions and theoretical reflections” (M. Lotman 1997, 78. See Prigogine and Stengers 1994a)<sup>5</sup>.

In fact, in 1981 he published *Brain-Text-Culture-Artificial Intelligence*, where curious affinity with the theories at the time and later expounded by Ilya Prigogine can be detected. According to Lotman, culture is known, for generating information, for constituting a “thinking device”; but he observes that in order to make a text to produce new messages it is necessary to “make another text to go through it, as it happens in practice when to a text ‘connects’ a reader who preserves in the memory some previous messages”, in other words, “there has to be created a *semiotic situation*, presupposing an explosive transition from the state of Nature to the state of Culture” (Lotman 1981a, 211–212).

This idea is developed further in other works to follow, including the already-mentioned *On the Role of Fortuitous Factors ...* It is here that he observes that the paradoxical situation to be created (“to produce texts it is necessary to have already a text”) is similar to the

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<sup>5</sup> There are even some researchers who examine *Structure of the Artistic Text* as related to the ideas formulated by Ilya Prigogine much later (See Abrioux 1995).

one produced in the autocatalytical reactions described by the Nobel Prize Winner in Chemistry: in order to achieve “the synthesis of some substance, the presence of the same substance is needed. In other words, to secure substance X, we should start with a system containing X from the very beginning” (Prigogine and Stengers 1994b; *apud* Lotman 1989, 246).

The fortuitous and the regular, the chaos and the order, the static and the dynamic, pairs that are nothing but linked aspects. For Prigogine, order rises from chaos, it is not imposed from outside, thus, chaos has to contain a certain potency capable of generating order. Lotman finds similar phenomena in literary texts. For example, what is known as ‘influence’ may be regarded as catalytical function “of the texts that come from the outside to the inside of one or another culture”. “The eternal question of ‘romantics before romanticism’” may also be considered a similar phenomenon (Lotman 1989, 246–247). For Mihhail Lotman his father’s conception about the *energy* of artistic creation can be compared to what Prigogine holds with regard to autocatalytical reactions (M. Lotman 1997, 78). If the tradition arisen from Humboldt distinguishes between language as a finished product (*ergon*, speech, text) and language as creative potency (*energeia*, language), in Lotman *energeia* “is firstly a property of the text and not of the language” (M. Lotman 1995, 35).

According to Lotman, the ideas of Prigogine open up new paths for the study of fortuitous processes. Moreover, he sees in them “a real basis for the reconciliation of natural and humanistic sciences”. This nexus is found in a study by Prigogine on the irreversibility of time that constitutes for Lotman the basis “of the universal model of the historical process (that flows in time)” (Lotman 1989, 101). In an interview, published also in 1989, Prigogine declares the following: at bottom the reintroduction of time is also the reintroduction of the coherent universe characterized by common time: all that we: the galaxies, the molecules, the stars, the living creatures and the cultures have in common is time; we all have the same direction of time, I would even say that the universe is characterized by temporal coherence” (Mataix 1989, 119).

If Prigogine recognized that philosophy and science acted in him as ‘inciters’ of his intellectual activity (Mataix 1989, 118), Lotman declared to Peeter Torop (in what I believe was his last interview) that the world we live in “is created on the conflictive unity of the models

of art and science. The classical idea of science has been associated with the foreseeable (that is to say, with the cyclic or gradual processes, with the cause-result relationships), while the not foreseeable associated with explosive moments in which cause-result relationships disappear, is characteristic of art. But the new scientific theories (Lotman, although he did not cite him on this occasion, was thinking of Prigogine) have contributed one of the most important ideas: “it is the idea of the historical, scientific or some another sense of unpredictability, unpredictability being a scientific object”. As opposed to that notion “that is maintained with too much strength”, of art being “a pretty flower”, he responds that, like science art is “another way of thinking, another system of modelling the world. In essence, it is the creation of another world, parallel to our world [to that of science]” (Torop 1993, 128).

5. I would like to conclude this article by drawing attention to the way in which the ideas of Lotman are expanded. He himself uses the comparison of circles that water forms when a stone is dropped in it (“these circles try to seize all the space”) to explain the tendency to the globalization of semiotics: “we find ourselves always in a different sphere, in endless annexations of different types of thinking”. If in the 1950s and 1960s we might have thought “that mathematics was the science of science and was able to resolve it all”, it is still maintained now, almost thirty years later, that “mathematics is something more complex, since it is not only a science, but it is also a method of thinking” (Torop 1993, 129).

I have already considered on more than one occasion the expansion of his ideas as an indication of unitary coherence in diversity and of stability in change in his gradual or explosive evolution. This coherence in expansion is detected even in the way in which he presents his reflections that, as I said in the beginning, are characterized for a double direction that actuate simultaneously: one looks towards the future, searching for new paths; and the other that looks towards the already said, making it possible to integrate the results of his ‘meta-reflection’. Maria Corti has observed in his work “a fruitful intertextuality” that may be confirmed on the evidence of some chapters of *Culture and Explosion* and *To Look for the Way*, but also on the basis of the essays of the 1970s and his two last books (Corti 1994, 9–10).

The objective of this work has not been to make an exhaustive journey through the work of Lotman in order to clarify his relationships with the scientific thought of the 20th century. But the examples that have been exposed are more than sufficient for demonstration of how his work constitutes an extraordinarily productive model for the role that semiotics can play in the dialogue between nature and culture.

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### **Юрий Лотман: научное мышление и труды**

В статье характеризуется Юрий Лотман как ученый — дается обзор развития его научной мысли и соотношения ее с научными открытиями и направлениями его времени. Собрав разные мнения о развитии идей Лотмана, автор выделяет три главных “ядра”: структуральная семиотика 60-х годов, куда относятся “лекции по структуральной поэтике” (1964) и “Структура художественного текста”

(1970); семиотика культуры, и более поздний интерес к динамике культуры и межтекстовым отношениям, выраженный в работе “О семиосфере” (1984).

Характеризуя Лотмана как ученого, автор подчеркивает прежде всего вечную неудовлетворенность уже достигнутым, постоянное движение вперед, интерес к математике и точным наукам в связи с стремлением применить их методы в гуманитарных науках. Такая разносторонность позволяет говорить о “нескольких”, по выражению Пезтера Торопа, Лотманах.

### **Juri Lotmani teaduslik mõttetöö**

Artikkel kõneleb Juri Lotmanist teadlasena — antakse ülevaade tema mõtte arengust ja suhestumisest oma aja teaduslike avastuste ning suundadega. Autor annab omalaadse meta-ülevaate Lotmanist, ühendades erinevaid arvamusi tema ideede arengust. Üldistavalt võib öelda, et esimesel, neostrukuralistlikul perioodil oli tema jaoks peamine staatika semiootilistes süsteemides, sellal kui postneostrukuralistlikus järgus liikus uurimise keskmesse semiootiliste süsteemide dünaamika. Kuigi ta tegeles sügavuti ka vene formalismiga, tuntakse teda peamiselt kui semiootikut.

Eristatakse kolme “tuuma” Lotmani töödes: 1960. aastate strukturaal-semiootika, kuhu mahuvad tööd “Loengud strukturaalpoetikast” (1964) ning “Taideteksti struktuur” (1970); kultuurisemiootika; ning kolmandaks hilisem huvi kultuuri dünaamika ja tekstidevaheliste suhete vastu, nt. töös “Semiosfäärist” (1984). Lotmani kui teadlase iseloomustuses tuuakse esile kõige esile rahulolematust juba saavutatuga, pidevat edasiliikumist, uute alade avastamist; laia teadlasehaaret, mis eeldas matemaatika ja teiste täppisteaduste tundmist, et rakendada neid meetodina humanitaaraladele. Taoline mitmekülgus annabki põhjust rääkida “mitmest” Lotmanist, nagu Peeter Torop seda on teinud.

Lühidalt käsitletakse ka J. Lotmani viimaste raamatute väljenduslaadi; ent olulisemaks osutuvad sisulised paralleelid, mida saab nendest töödest tõmmata nii tema eelnevate mõtete kui ka uute avastustega keemia vallas. Nagu öeldud, liiguvad fookusesse kultuuri dünaamilisus, dialoogisuhted eri tekstide vahel, kaose ja korra suhe. Need ideed on seotud Vernadski ja Prigogine'i töödega; viimaseid luges Lotman alles 1986. aastal, kuid isegi enne seda võib nende vahel leida teatud mõttelist sugulust.

Tsiteeritakse intervjuud Lotmaniga, kus too kõrvutab kunsti ja teadust kui paralleelseid ja siiski erinevaid viise modelleerida maailma. Juhuslik,

mis on pigem kunstile omane, on Lotmani sõnul muutunud teaduslikuks uurimisobjektiks.

Eelkõige on märgatav Januse-taoline sidusus Lotmani ideedes: vaadates küll pidevalt tulevikku ning olles otsingute keerises, vaatab teine pilk tahapoole ja paigutab mineviku-ainest, juba öeldut, ringi vastavalt oma meta-refleksioonile.