

Verse as a semiotic system

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Abstract. Poetry is an important challenge for semiotics, and a special area of study for the Tartu-Moscow semiotic school, since the first volume of *Sign Systems Studies* was Juri Lotman's monograph *Lectures on Structural Poetics* (1964). From then on the concept of poetry as one of the secondary modelling systems has evolved, since in relation to poetry, the primary modelling system is natural language. In this paper, the concept of semiotic system has been re-examined and the treatment of primary and secondary semiotic systems has been significantly revised. A semiotic system can be characterized not only by its internal structure and other systems to which it is related, but also by the field upon what it is realized. The latter aspect has gained almost no attention in any treatment of semiotics; the execution of a sign is understood in the spirit of Saussure and Hjelmslev as a material realization of an abstract element (for instance, a chess piece knight can be realized with wood or plastic, but it can also remain purely virtual). At first, distinction is made between language and sign system. Every sign system consists of language and field. There are three different kinds of fields: 1) just a background – footprints on sand are a sign on the background of sand; 2) a material structured field (a football ground or a chess board in the game called Chapayev) and 3) an abstract structured field, which in its turn consists of other fields (for instance, the chess board which consists of 64 fields). Differently from a football ground, a chess board can be a purely virtual one on which virtual pieces are moved (for instance, in case of blindfold or correspondence chess). The field in its turn can be language and one language can use another language as its field. In this case we speak of primary and secondary sign systems. For instance, the prosodic system of language is a field for a verse metre, while the semantic system of language is a field for a narrative.

1. Preliminary remarks

When we discuss the semiotics of poetry, then – the same way as in the case of the semiotics of culture in general – there can be two approaches which are principally different. According to the first – conditionally speaking, Peircean – standpoint, in the expression “the semiotics of poetry” poetry means the object, and semiotics means the method of research. That is, the semiotics of poetry is the semiotical study of poetic texts. It is approached in this way by many authors, for instance, Michael Riffaterre (1978). From this standpoint the specifics of poetic text is concentrated in the sphere of rhetoric and stylistics. According to Riffaterre, poetic text differs from prose text, first of all, in respect of its syntactics. As to the semantics of poetry, the specifics of verse text belong to the sphere of reference, not signification: “Poetry expresses concepts and things by indirection. To put it simply, a poem says one thing and means another” (Riffaterre 1978: 1). This means that the semiotic specifics of poetry can be approached at best from the outside, the question of specific semiotic mechanisms does not even arise in verse.

Nevertheless, it should be mentioned that from the Peircean viewpoint it is possible to vary the way we discuss poetry: poetic text has a specific semiotic orientation. While prose text (especially non-fictional prose) is oriented on symbolicity, that is, its connection with the signified is optional, conventional, as it is usual in natural language, then poetry rests on iconicity: the relationship between signifier and signified is obligatory. This means, among other things, that differently from prose, poetic text cannot be adequately retold, every retelling not only breaking the structure of the text, but its meaning as well. This approach is indisputably attractive and it is in many ways close to the treatment of the specifics of verse in the Tartu-Moscow school. However, there is one basic shortcoming: it is not only the elevated iconicity that characterizes verse. As Roman Jakobson demonstrated, in verse the indexical component is elevated as well: such indexical signs as “I” and “You” are extremely important in verse text, especially in lyrics (Jakobson 1981). Verse is characterized by emphasized symbolicity as well. Here, there is not as much symbolism but rather an artistic movement (what Peirce calls symbols need not be symbols for Verlaine or Baudelaire, but all symbols in poetry are also symbolic signs in the Peircean sense), but also the fact that in verse, nouns have a preferred status as compared to prose and daily speech (Wells 1960; Lotman 1982: 25–31).

For researchers who are close to the Tartu-Moscow school, verse is a specific semiotic system which differs from natural language in principle. Verse

not only uses the already pre-existing signs (no matter from where these derive – language, culture, earlier literary texts, and so on), but creates them as well. Moreover, the function of sign generation prevails in poetry: even when signs can be borrowed from elsewhere in a poetic text, they are transformed in it so that not only does their associative area change (this happens virtually every time when we are dealing with quoted sign or text), but also the structure of the sign itself, the connection which links the signifier with the signified.

According to the standpoint of the Tartu-Moscow semiotic school, already literary prose differs in principle from the natural language in which it is written, since here, in addition to natural language, several other codes are realized, such as, for example, narrative. Therefore, fiction is treated as a secondary modelling system. Here, the primary modelling system is called natural language, since language is not a passive reflector of reality, but participates actively in the creation of its signified. In this sense, grammatical categories of language have a particular importance. From the standpoint of referential semantics, these have almost no meaning, they are used only for syntactic purposes. However, they actually participate actively in creating the world-view of language and from this aspect it is of great importance which nouns are masculine or feminine in Russian or German, or which words are animate or inanimate in Russian. They express what Wilhelm von Humboldt called an internal form reflecting the spirit of language. According to Humboldt, this spirit of language reveals itself, first of all, not in common language, but in folklore and poetry.

For example, Heine's poem "*Ein Fichtenbaum steht einsam*" [A Pine-tree Stands Alone] is about two trees, a pine and a palm. Nothing on the level of referential semantics indicates we are dealing with erotic tension and love poetry. The latter is expressed not with lexical, but grammatical means: in German *Fichtenbaum* ('fir') is masculine, *Palme* ('palm') is feminine (cf. Part 9).

2. Secondary modelling system

An understanding of poetry as a secondary modelling system evolved in the framework of the Tartu-Moscow semiotic school. This conception, or rather the term itself, came under critique of several scholars (see, for instance, Sebeok 1989: 33–34, Deely 2007 et al., cf. also Chang 2003), the main thesis of which was how natural language itself is not a primary modelling system. We could agree with the claim, but the conception of secondary modelling systems

the way it was formulated, for instance, in Juri Lotman's works, had something else in focus. Differently from Peirce, for whom primarity and secondary are entities which are absolute and *a priori*, the treatment of primary and secondary sign systems in the Tartu-Moscow semiotic school is purely relative: a primary sign system is primary only in respect of a given secondary system, and a secondary sign system is secondary only in respect of a given primary system. The fact that poetry is a secondary sign system to natural language does not mean that natural language cannot be secondary to some other system. To focus on secondary modelling systems meant that in the centre of attention were complicated systems consisting of several subsystems.

Nevertheless, treating poetry as secondary system to natural language is in accordance with common sense. Still, from the theoretical point of view, it is questionable, as Juri Lotman himself noted that a culture which does not know one or another poetical form does not exist, or has at least never been sighted (while there are many cultures that do not know artistic prose; Lotman 1964: 40 ff.). Moreover, it can be shown that the existence of poetry is not just culturological, but a linguistic fact: language needs poetry in order to fully exist (Jakobson 1960, Lotman 2011). Every actual culture of language is characterized by tension between utilitarian and poetic speech, whereas these speech practices are not isolated, but mutually influencing one another. This does not eliminate the problem of specificity of verse speech and does not mean that verse can be reduced to common speech, emotional speech, and so on.

The aim of this paper is to redefine the notions of primary and secondary modelling systems and to bring forth the most important semiotic mechanisms of verse.

Points of departure

Language often figures as a synonym for the semiotic system. The aim of this paper is to separate these notions – language is just one component in every semiotic system. The other mandatory component is field. Thus, the semiotic system (S) is defined as the pair 'language and field': $S = \{L, F\}$.

Language will further mean the pair 'lexicon and grammar': $L = \{A, G\}$, in which L is language, A is lexicon and G is grammar. Lexicon (alphabet) consists of its basic elements for language $A = \{a_1, a_2, \dots, a_n\}$, and grammar rules

$G = \{r_1, r_2, \dots, r_m\}$. Constructions which are made by the means of rules for basic elements constitute the set of *sentences* of a given language¹.

Text is the realization of one or several sentences

- a) in a particular substance – we will call the materialized sentence an *utterance*; and
- b) on a particular *field* (background).

In Saussure's terms we could say that texts form the speech of a given language. For instance, sentences of natural language can be realized in sounds, but this realization can become text only if there is a certain acoustical background, where the sounds are discernible, or by the means of letters, but it is essential that their colour would be different from the colour of the background. Field – differently from utterance – cannot be derived from language, although they are bound by a mutual dependence; in different semiotic systems the connections between language and field are different. A field is not just a particular material phenomenon; just like in language, in field both abstract and material levels can be distinguished.

Both semiotics and theory of formal grammar have not paid enough attention to field. In contemporary semiotics the notion of language originates from *Course in General Linguistics* by Ferdinand de Saussure. Although Saussure himself does not speak of field, the examples offered by him almost demand it. To illustrate the principles of language, Saussure constantly refers to chess, and rightly points out that the material qualities of chess pieces are not important – these can be made of wood, ivory, and so on, but are also purely virtual when the game is played blindfolded. Chess pieces are the lexicon of this sign system, rules of chess are realized in moves. Still, such an approach is clearly unsatisfactory. In order to play chess one needs a board – a field on which a game is played. This field can be material and made of different substances, but it can also be a virtual one. What is important is that it has to consist of particular spots – “black” and “white” squares or spots are distinguishable and in their right places. Thus, the description of the syntactics of a semiotic system has to comprise both the definition of language and field. Moreover, field itself can be described as an utterance in a language; for instance, a field of chess is an utterance in a language the lexicon of which has two elements (a black and a white square), but the rules also govern their

¹ Differently from the common approach, not just chains (that is, utterances in a unidimensional space), but various regular constructions, for instance, graphs, networks, etc. (utterances in spaces with two or more dimensions) will be regarded as sentences.

placement. The field and pieces of chess are connected to each other, but this connection is not symmetrical. Chess can be played only on a chess board (either material or virtual), but this board can be a field not only for chess, but also, for example, for English draughts and Russian checkers, etc.

A creator of the theory of formal grammar is considered to be Noam Chomsky, who did not use the notion of field; however, it was employed by his predecessor Alan Turing. The most general type in Chomsky's hierarchy of languages is the Turing machine, which – when we leave aside the technical details such as the reading and writing head – consists of three main components: alphabet, rules and an infinite segmented tape, while to each segment only one symbol can be placed. Tape is a mandatory part of this system. If field is a complex formation, we will name its elements spots; the tape of the Turing machine is field in our terminology, the segments of tape (squares) are spots, the chess board is field, its squares are spots, and so on².

Juli Schreider is one of the few who have tried to bring similar understandings to semiotics. However, Schreider's system seems incomplete. He defines texts through the lexicon and the set of spots, while grammar rules govern not the lexicon, but the spots (Schreider 2010: 52–53). An utterance is formed when symbols are placed in the right spots. Let us imagine a description of a chess game as a board with certain restrictions, and that chess pieces just meet the rules of the board. Although such an approach is possible, it seems extravagant, and certainly more complicated than the customary one, where the rules restrict the pieces, but not the spots on the board: the rules of spots would be redefined after every move. Notwithstanding whether the activity is imputed to pieces, i.e. elements which choose their spots on their field, or to spots choosing suitable elements, a semiotic approach has to consider both field and lexicon. Yet in a more general approach we have to distinguish between rules which govern sentences and rules which govern fields.

It has to be emphasized that field and pieces are purely relative notions, and pieces can be fields for some other language, while spots can be pieces on some

² The later theory of algorithm differently from Turing (and Post) abandons the notion of field and achieves the equivalent results with other methods (in our terms, operating just with the notions of lexicon and grammar); our approach to the systems of versification can be as well presented without the notion of field (see Lotman, Shakhverdov 1973; Lotman 1974, 1998). Nevertheless, the model presented in the current paper seems simpler and intuitively more justified.

other field. Moreover, the rules of at least some (board) games can be rewritten in a way that spots function as pieces, while pieces serve as spots. For chess, Lev Blumenfeld offers this solution:

“Imagine [...] the following game, let us call it ssech. The board consists of 32 squares, each of which has a picture of a traditional chess piece, black and white: two white rooks, two black rooks, two white knights, and so forth. The “movable” pieces in ssech are an unlimited set of small wooden cubes. Each cube is inscribed either with one of the the letters a through h, or with a number between 1 and 8. The game starts with each square bearing a number cube and a letter cube: the square with the white queen, for example, has the cubes “d” and “1” on it; the black queen has “d” and “8”; all the the white pawns have the cubes “2” and letter cubes ranging across all the letters.

Players familiar with chess can easily imagine the rules of ssech. For example, no two squares may have the exact same set of cubes. A move consists of changing the cubes on one of the squares, and possibly removing the cubes from a square (equivalent to taking a piece in chess).

There are rules about what constitutes a move. Here are some sample (sub)rules:

a) Only one of the two cubes on a rook can be changed, but not both at the same time.

b) Bishops may only change their two cubes by the same distance (e.g. shifting the letters and numbers both by 3 steps).

Some of the rules might be somewhat complicated, but perhaps that's a false impression for players who are too used to chess. Children who have been taught ssech from an early age might find it perfectly natural.

Now, clearly ssech and chess are the same game, or, as mathematicians would put it, notational variants of the same game. They are isomorphic, and therefore (it seems reasonable to say) represent the same semiotic system.

But my intuition tells me that while the board is the field in chess, the “pieces” (rooks, knights, pawns) are the field in ssech” (Personal correspondence, May 23, 2012).

In addition to language and field, *author* is also mandatory for text. A text can have one author (monologue) or several authors (dialogue). Every author has his/her own purposes in creating texts and strategies in achieving them. The speech act theory is the first step in formalizing this sphere. As for dialogue, its authors can have both cooperative and antagonistic purposes.

Let us give some examples not from the realm of art, but from a simpler arena – sports (it is not a completely random choice, however, since there is much in common in the semiotic mechanisms of game and art).

1. In chess we distinguish between pieces (which form the lexicon for chess), rules of moves (the grammar of chess), chess board (field), which consists of spots arranged to field in accordance with certain rules. A chess game (text) comes about as a dialogue between two authors, while their purposes are antagonistic.

2. In football the lexicon is formed by players and ball, grammar is football rules, field is a football ground marked according to certain rules. Here too, text is the result of the antagonistic dialogue between two rivals.

There are clear differences between these two examples. First, from the standpoint of chess, all the sets of chess contain equal pieces (you cannot obtain a particularly strong queen or a knight which can forge extremely far ahead in order to surprise your opponent); second, pieces cannot move by themselves, they cannot have a poor game, and so on; and third, in chess a controller of the regularity of a text is not present on the game board.

The most important difference, however, is that chess can be played on a virtual field with virtual pieces, while football (for now) requires actual players and an actual field.³

3. During the football game, players of a team create their text or replicas in a dialogue cooperatively. Whether a football game is described as a result of the creation of two authors (teams) or 22 authors (position players) depends on the purposes of a description or the perspective of a describer.

The examples already given demonstrate how language and its field are mutually dependent and that they evolve in parallel. In more complicated semiotic systems, the relationship between language and field is even more complex, but regrettably, not enough attention has been paid to the connection between them. One of the few exceptions is Meyer Schapiro, who in his research in the semiotics of art always addressed the relationship between the artwork (text) and background (cf. Schapiro 1969).

Language can be realized not just in material substance (sounds, visual tangible objects), but in other languages too. That means, one language is a field for another, and forms the spots on this field where elements of another language can place themselves. There are languages which can only be realized

³ There is also a game (called Chapayev) played on a chess board with draughts pieces, which requires actual pieces and an actual field.

by the medium of other languages. We will call the languages which do not need other languages in order to be realized *autonomous*. They can be realized by the medium of other languages (that is, using other languages as their fields), but they can also occur independently. Languages which can be realized only when using another language as a field are *non-autonomous*.

Non-autonomous language, for instance, is plot (*fabula* in the terminology of Russian formalists), which can be realized through a verbal language, but also with kinetic means (ballet, pantomime), in a series of drawings or in a combined version (for instance, a comic strip). A similar matter is with verse metre, which can be realized visually as an ornament, acoustically as rhythmical beats, kinetically in dance and at last, verbally as poetry. Both narrative and verse metre are languages in the semiotic sense of the word. They have their own alphabet and rules and it is important to note that these are not primitive languages. In Chomsky's terms, these are at least context-sensitive languages, while in the case of both surface and deep structures can be distinguished. In the case of narrative, a deep structure is *fabula*, a surface structure of which is story (*sujet* in the terminology of Russian formalists); in the case of verse, the surface structure of metre is rhythm (cf. Zhirmunsky 1966), and so on.

3. Semiotic systems: one important taxonomy

Semiotic systems can be classified according to their language, and the field they are using to realize it. Lexicon consists of at least one element, but their number can be open and even not countable (when we are dealing with a system using non-discrete signs, like, for instance, painting). Also, the number of rules can vary to a great extent. Nevertheless, it may not be expedient to allow a sign system with an infinite rule set, but this question needs an additional discussion. As for field, it can consist of just one spot, but the number of spots can potentially be infinite (the infinite tape of the Turing machine is unidimensional, but there are systems which require two-dimensional as well as three-dimensional fields). Every spot in its turn can be treated as a field which consists of spots, that is, in a field both syntagmatic and hierarchical relations can be defined. Let us imagine a chess board, where some fields, in their turn, are smaller chess boards, and so on.

Thus, sign systems differ from one another with respect to the characteristics and number of their elements, as well as their rule set and field. A

universal typology of sign systems has to be set up according to these principles.

We will not present here even the main features of such typology; to proceed we need to distinguish between sign systems of three kinds⁴:

S1. A sign system with the number of elements limited to the utmost. That is, there is just one element (such a system can be called a system with a degenerated lexicon and grammar). A unidimensional field is countably infinite. There are only two rules: 1) only one element can be placed to a spot; and, 2) a spot can be empty. As a result we get an infinite number of texts, such as a, aa, aaa, aaaa, ...

S2. This sign system has an unlimited number of elements. As to grammar rules, they are either absent or there are so many and they are so complicated that they cannot be presented formally. Field consists of only one, two-dimensional spot (such system can be called a system with a degenerated field).

S3. Both lexicon and grammar are limited, but not degenerated. Field is finite or countably infinite.

Heretofore we have not studied semiotic systems from the aspect of semantics. Proceeding from Frege, and the tradition of semantics subsequent to him, we will distinguish between two types of semantics. The first – internal – semantics evolves if the elements of a system are signs. That is, meaning lies within them. The other, external or interpretative semantics evolves when an element of the system is associated with a phenomenon or object outside the system. In this case the phenomenon or object is a referent of the corresponding element in language. If the elements of the system are signs, two meanings can characterize them: the one inside them and the one indicated by them.

The type of semiotic system and its semantic parameters are related to each other, while the semantics of a sign system cannot be reduced to the meaning of signs. What also matters, is the rule set. In terms of the hypothesis of linguistic relativity we could say that a rule set creates the world-view of a given system.


⁴ The first version of the following typology was designed for a still unpublished text written together with Suren Zolyan in the 1970s (cf. Zolyan, Lotman 1978).

The world-view of S1 is at the same time elementary and unlimited, it is a singularity potentially expanded to infinity, for example: ornament, verse metre, and so on. No element has an independent value, its value is its similarity (that is, reference) with other elements. Using Peirce's terminology with some concessions, we could say that semantics in S1 is based on indexicality.

The idea of S2 is quite opposite to S1: infinity is focused into one point. This point is a field, consisting of only one spot. While S1 opens perceptively to infinity, S2 condenses infinity into limited framework. An example of it is (first of all, non-figurative) visual arts. Using with some concessions Peirce's terminology, we could say that the basis of it is iconicity.

Complexity is the basis of S3: a complex structure is formed from simpler components. In the centre of this worldview there is logic of construction. For example, all artificial languages as well as nuclei of natural languages are also systems belonging to this type. Using Peirce's terminology with some concessions, we could say that the basis of it is symbolicity.

S1, as well as S2 and S3 can be independent systems based on autonomic languages, but they can also be a component of a complex sign system, whereas they can be in both roles: to use another sign system as their field or to function as fields for another sign system.

For instance, a picture, such as  (an utterance in S2) can play a part of an element in S1, resulting in an ornament:

aaa... → 

This part can also be taken by a word, for instance, *schweigen* (an utterance in S3):

aaa... → schweigen schweigen schweigen (see Part 4).

In both cases, the visual as well as verbal signs lose part of their (both internal and external⁵) meaning, but acquire an additional meaning specific to S1. The semantic effects of S1 are mostly related to the transformation of other semiotic systems. It has been long recognized how a recurrent pattern (ornament on wallpapers, and so on) stimulates and organizes thinking. A similar effect has been associated with the rumble of train wheels. In both cases we are dealing with the perception of infinity. Yet rhythm can also have a

⁵ We find circumstantial evidence of this from cultures which have strict restrictions in using figurative art (for instance, some Islamic countries). They often develop an advanced culture of ornaments, while it is allowed to use figurative elements as components in ornaments – in ornaments they at least partially lose their iconic meaning.

different effect: rhythmic sounds can elevate the spirits of masses, make them more aggressive, and so on.

Let us observe some different examples below.

4. Natural language as a semiotic system; the problem of syllable

One of the most complicated and at the same time most ordinary semiotic systems is natural language. Natural language is a system of systems, while one of its parts consists of signs (morphemes, words, sentences), the other of elements without internal semantics (phonemes, syllables). It is a widespread understanding (Trubetzkoy 1939, Martinet 1960, etc.), that such double structure is an idiosyncrasy of human language. Phonemes themselves are not signs; their function is to differentiate signs of language. But on this background, the existence and function of syllables in language seems completely enigmatic – they have no meaning, nor do they distinguish between meanings. Therefore, an understanding exists that syllables are not even elements of language, but only its realization, that is, speech. Their existence is not evoked by the structure of speech, but human anatomy and physiology: the rhythm of breathing and the work of the apparatus of articulation. Let us briefly dwell on the possibilities of modelling a syllable.

The phonemic structure of natural language can be described as a language the elements of which have phonological (distinctive) features. This designation is unsuccessful and directly misleading, since these are not features, but components. Already in the Prague Linguistic Circle an understanding of phoneme as a complex of characteristics evolved; later, Jakobson and Halle presented it as a matrix. Therefore, it would be more justified to use terms such as ‘phonological quantum’. Let us stick to the traditional terminology, but emphasize its conventionality. Thus, phonematic lexicon consists of such features which are joined in accordance with the phonological rules of a given language. For instance, +nasal can join with +consonantal or +sonorant, but it cannot join with +strident. The specifics of the given language lie in that phonematic features/quantums are joined with one another on one spot (to use more traditional terminology, phoneme is a simultaneous complex of features).

The phonemes of language are lexicons in their turn, in formation of phonological chains. While, for instance, the rules of phonotactics of Polynesian languages are very strict, not admitting consonant clusters in their simplified pattern (for instance, Hawaiian allows only syllable structures, where V stands for vowel and C for consonant, with V or CV), then in the Kota language even such chains as VCCCCCCCCC occur (Shevoroshkin 1969: 66). In any case, every human language has certain restrictions (rules) in arranging phonemes. Where the range of phonotactic restrictions ends, there the boundary of syllable⁶ occurs. From the standpoint of phonology, a syllable consists of a nucleus (usually a vowel or a diphthong, but in some language also a sonant and even a nasal) and a periphery formed by consonants.

Let us give an example⁷. The lexicon of a language consists of phonemes, which are divided into four classes: vowels (V), sonants (S), fricatives (F) and plosives (P). The syllabic structure is: (P)(F)(S)V, that is, syllables with the following structure are possible: V, SV, FV, PV, FSV, PSV, PFV and PFSV. This is called the law of rising sonority: every next phoneme in a syllable is more sonorous than the previous one. The disappearance of the restriction marks the syllabic boundary and the next syllable can start again with an optional phoneme. The phonotactical restrictions inside syllables are usually lost by syllabic boundaries in “real” languages as well⁸. While a phoneme is a

⁶ Syllable is “a sequence of such phonemes where all phonemes have characteristics related to one another, that is, the characteristics of the first phoneme predict at least one of the characteristics of the subsequent phoneme, and so on” (Lekomtseva 1968: 50). See also Ivanov 2004: 17–28. What has been said does not mean that the syllable formation rules are restricted to just sonority. According to Lev Blumenfeld (personal correspondence), phonological syllable is a domain that is necessary for the operation of some phonological rules.

⁷ The following model can be regarded as a simplified description of the syllabic structure of the Old Church Slavonic language before the fall of the reduced vowels. In order to avoid discussing the problematic aspects, let us imagine that this example is artificial (for more detailed description of the Old Church Slavonic syllable see Lekomtseva 1968: 118–119).

⁸ It would be more correct to say that the syllabic boundary loses *most* of the restrictions. There are languages, where part of the restrictions characterizes elements of syllable and word, the so-called feet (see, for instance, Vydrin 2008: 108 ff.). A language with the sound harmony (synharmonism of word) is characterized with certain constraints in the entire word: such are, for instance, some Finno-Ugric and Turkic languages. In addition to sound harmony there are other transsyllabic phenomena and processes.

simultaneous complex of phonological features, the field of syllables is linear and the number of spots accords with the number of phonemes in the syllable.

Consequently, a syllable is an element of language, not just speech. The problem is that such an approach to syllables correlates poorly with the intuitive understanding of syllables – for an ordinary speaker syllabic boundary associates not with the disappearance of phonological restrictions, but a (potential) pause for breathing. The thing is that syllable is an ambivalent formation: phonological on the one hand, prosodical on the other.

Now we will distinguish between phonological syllables (_{ph}syllables) and prosodical syllables (_{pr}syllables). The logic of formation of _{pr}syllables is similar to that of _{ph}syllables, only the lexicon and rules are different. Let us take as an example a language with a simple prosodic structure which knows neither syllabic quantity nor melodic accent. In languages like Russian, the lexicon of prosodic features consists of two elements: delimiter (#) and culminator (k), while the rule of formation is very simple: a culminator lies between two delimiters: #k#. As well as a phonological syllable, a prosodic syllable is realized as a simultaneous complex in one spot. The ambivalence of a syllable follows from the circumstance that a prosodic syllable is a spot for a phonological syllable: _{ph}syllable → _{pr}syllable. The boundaries of a phonological syllable coincide now with delimiters, the syllabic nucleus is on the culminator, while the periphery has no prosodic significance⁹. The syllable is a complex phenomenon, where in one spot phonemic and prosodic structures amalgamate and, as a result, the syllable connects the abstract system of language with the anatomical-physiological qualities of a speaker.

5. Verse

Verse is a secondary modeling system that uses natural language as its field. To be more precise, verse is the particular subsystem of language which is usually (but not always: cf. Lotman 1974, 1998) a prosodic subsystem. Thus, the

⁹ What has been said, applies only to languages with so simple prosodic system as Russian (and even there if we do not consider the qualitative reduction). In languages with quantitative contrast of syllables, the periphery of a syllable can become an important prosodic factor, which in some languages lengthens the syllable (compare, for instance, 'mana' vs 'manna' in Estonian), but in other languages shortens it (for instance, German 'Bahn' vs 'Bann').

simplest verse is formed when a prosodic element (_{pr}syllable or _{pr}word) carries metrical information, and is a spot for an element of verse metre. Let us give a brief survey of the theory of metre.

Verse metre is a sentence in languages of type S1 (from now on, we will call this language a metrical system (MS)). Verse metre is an abstract discrete structure, which is organized according to the principles of translational symmetry. The ideal form of a discrete symmetrical structure is:

aaa... ,

whereas every element ‘a’ in its turn can be a sentence in some language. In the case of metre, ‘a’ is either elementary or also a sentence in a language of type S1. For instance, a common notation of iambic pentameter is:

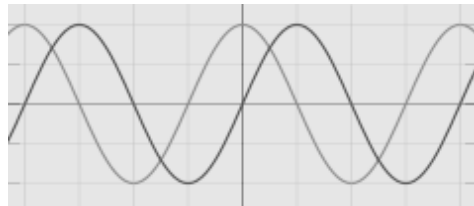
— ∪ — ∪ — ∪ — ∪ — ∪

When we designate the sequence ‘— ∪’ with the symbol ‘a’, the scheme of the pentameter would be: aaaaa; we will call the elementary period of metre verse foot. aaa... is the ideal form of verse, depending on the angle, we could present verse foot, half verse, verse line, stanza or hyperstanza as ‘a’ (Lotman 1995).

Verse metre is first, an abstract structure; second, the structure is a chain of discrete elements; and third, the chain is of translational symmetry.

As an abstract structure, it is opposed to particular structures as, for instance, sequences of stressed and unstressed or light and heavy syllables. As a symmetrical system, metre is opposed, for instance, to the model of Morris Halle (1970: 67) where metre is just an underlying structure.

As a sequence of discrete elements it is opposed to continuous structures, where elements are separated (I will call these separators delimiters). Compare an example of continuous translational symmetry:



As translational symmetry it is opposed to other symmetrical structures, first of all, to the mirror symmetry. Usually, translational symmetry represents a model of time and is the basis for temporal arts (music, poetry), while mirror symmetry is the basis for spatial arts (architecture, painting, and so on). Mirror symmetry occurs also in poetry (rhyme schemes, compositions, and so on), but the basis for verse metre is always the translational symmetry.

Metrical structures are chains of abstract elements, represented by their models, one and the same verse metre can be presented with different models, same models can be presented with different notations. See, for instance, six different representations of one and the same metrical model:

—○○—○○—○○...

SWWSWWSWW...

⋈⋈⋈⋈⋈⋈⋈⋈...

♥♣♥♣♥♣♥♣...

□○○□○○□○○...

...

ABBABBABB...

We can choose any of them according to our preferences, it is completely arbitrary. We will use the last one, since first, it is the simplest; and second, it does not contain implicit connotations, like, for instance, strength and weakness in S and W, which is common in generative metrics, or associations with playing cards or geometrical figures. Associations with shortness and length are similarly misleading. All such features are not the qualities of the metrical structure, but evolve as a result of its interpretation.

Two things are important in the case of A and B: first, they are distinctive from one another, second, they are distinguishable. A is not B, and conversely. All the rest are not the issues of metrical structure, but its interpretation.

Depending on how many types of elements are used to form a verse foot, the corresponding metres belong to metrical systems of 1, 2, ..., n degree (further MS^1 , MS^2 , ..., MS^n); MS^1 and MS^2 are of more practical importance.

MS^1 consists of the number of chains, the alphabet of which is made up of one symbol ('A'), while the delimiters of chains will be marked as &. In accordance with how the composition of chains is regulated we will distinguish between:

(A) homometrical metres:

&A&A&A& ... 1-foot
 &AA&AA&AA& ... 2-foot
 ...

$$\underbrace{\&A\dots A&}_n \underbrace{A\dots A&}_n \underbrace{A\dots A&}_n \dots$$
 n-foot

(B) heterometrical metres, which are regulated by positions:

&AAA&AA&AAA&AA&... 32-foot

$$\underbrace{\&A\dots A&}_m \underbrace{A\dots A&}_n \underbrace{A\dots A&}_m \underbrace{A\dots A&}_n \underbrace{A\dots A&}_m \underbrace{A\dots A&}_n \dots$$
 mn-foot

$$\underbrace{\&A\dots A&}_k \underbrace{A\dots A&}_k \underbrace{A\dots A&}_l \underbrace{A\dots A&}_k \underbrace{A\dots A&}_k \underbrace{A\dots A&}_l \dots$$
 kkl-foot

etc.

(C) heterometrical unregulated metres

$$\underbrace{\&A\dots A&}_k \underbrace{A\dots A&}_l \underbrace{A\dots A&}_m \underbrace{A\dots A&}_n \underbrace{A\dots A&}_o \underbrace{A\dots A&}_p \dots$$
 irregular number of feet

MS² consists of the number of chains which have an alphabet of two symbols – accordingly, A and B. All that matters in symbols A and B is that they are different from each other. The substance of that difference becomes evident only after using correspondence rules.

Examples of feet in MS² are AB, ABB, ABA, AB³B, BBAB, ABBA, and so on. An important subgroup are feet, where one of the symbols appears only once (it will be marked as A further on). For example:

AB	ABB	ABBB	ABBBB
BA	BAB	BABB	BABBB
	BBA	BBAB	BBABB
		BBBA	BBBAB
			BBBBA

and so on.

As well as in MS¹, verse feet in MS² are also united into metrical sequences of a higher level, and can form isometrical and regulated or “free” non-isometric metres.

MS³ consists of chains which have an alphabet of three symbols, and so on.

The described language can be realized in different substance and fields. Verse comes into being when it is realized in the field of natural language, while the most common case is when the fields of realizations are syllables (to be more precise, *pr*syllables), and the simplest, and at the same time the most widespread, versification system is syllabic: aaa...→ *pr*syllable, *pr*syllable, *pr*syllable...

Verse text is coded with the means of at least two sign systems: S1 (verse metre) and S3 (natural language). In addition, in a poem we can find a number of other codes as well: for instance, a ballad can be narrative (narrative is a sign system of the type S3), while there are different rhetorical structures, which mostly represent systems of type S2. The effects which arise between these codes form the main scope of problems of poetics.

6. Interim conclusions and future prospects

From the semiotic point of view, we could say that in poetical text there are three different types of codes. The first is natural language, which generally consists of conventional signs, symbols. In addition, it contains rhetorical structures which are based on iconicity (Danesi 1995; Redzimska 2008; cf. also Pietarinen 2008). Finally, there is verse metre which creates the rhythmicality of text. These three codes are not independent of each other: both verse metre and rhetorical structures are realized through natural language, natural language is a field for them – for verse metre, mostly through prosodics, for tropes, through semantics. The effects which arise between these codes form the main scope of problems of poetics.

The amount of configurations of different sign systems is unlimited, and a sign system which uses another as a field can function as a field for a third system in its turn. Some examples follow.

7. Poetic text and its visual structure

1. Although in the European poetical culture the visual side of a text is by no means as important as, for example, in China, in verse text its importance is considerably greater than in prose text. Poetry looks different from prose, its rhythmicity and system of equivalences (verse line is equivalent to verse line, stanza is equivalent to stanza, and so on) is directly reflected in the visual structure of text. Moreover, its graphic form often is the most important sign of verse (Hollander 1975). The external side of a text can be specifically connected with its meaning. In the European tradition there is a tendency to connect unambiguously, iconically the size of a verse with its importance, while the size is simultaneously expressed in two dimensions: as length and as width. Big, that is, long texts have important messages, and the other way around, in order to be expressed, great meanings require longer texts: an epic poem is in every way bigger than, for instance, an epigram. The width, that is, the length of a verse is also associated with the scale of meaning. More important texts are written in longer verses (hexameter, alexandrine). Therefore, even without having read the text, only by seeing its appearance several assumptions can be made about its meaning.

It should be mentioned that although such correlation between the external parameters of verse text and semantics seems to be almost self-evident for a European; in other cultural areas such connection is not mandatory. For instance, almost the whole scope of Japanese classical poetry is made up of combinations of penta- or heptasyllabic verses (from the standpoint of European poetry the heptasyllabic verse is short, the pentasyllabic is very short)¹⁰.

The visual structure of a verse text usually reflects a metrical partition of a verbal text, that is, S1 → S3. It, however, can also have an additional iconic meaning, that is, S2 → S3. Compare a famous concrete poem by Eugen Gomringer (the author himself prefers to call his creations not poems but constellations):

¹⁰ Actually, these are 5- and 7-moraic verses, but in the European tradition the Japanese verse is perceived as syllabic.

schweigen schweigen schweigen
 schweigen schweigen schweigen
 schweigen schweigen
 schweigen schweigen schweigen
 schweigen schweigen schweigen

The meaning of the poem is obvious, but its semiotic mechanisms are not that simple. Every written text is in opposition with the sounding poetry, that is, it is silent. But in this text, the silence is presented at least doubly – first, symbolically as the meaning of the word ‘*schweigen*’ (the author emphasizes the arbitrariness of this symbolism by publishing the text in parallel in German and Spanish), second, visually as an empty space in the middle of the rectangle. From here associative interpretations evolve, for instance, an empty space on the site of a concentration camp (Fry 1995, Gumpel 1976, and others).

2. Nevertheless, the verse relies on internal parameters: the length of verse is not measured in centimetres or the number of letters, but in syllables, verse feet or prosodic words – depending on the versification system. According to the classification developed in Russian versification, medium metres consist of 8–9 syllables (four-foot binary metre, three-foot ternary metres), long metres consist of more than 10 syllables, short metres have 7 or less syllables.

Medium verses are semantically neutral and their use is universal. In Russian classical poetry, the most common verse metre was iambic tetrameter (with eight or nine syllables and usually with three stresses). Long and short verses in one way or another carry signs of artificiality. The least “natural” is a short verse and the shorter the verse is, the more artificial it seems: the obligatory phrasing deforms above all the syntactic structure, but indirectly it affects derivational patterns, word-classes and grammatical categories as well.

Speaking of the meaning of verse form, it consists of three components:

- a) the synaesthetic influence of the material or construction (for instance, reactions to colours, timbre, and so on);
- b) the rhythmical-syntactical potential of verse metre;
- c) the traditional associations of the given verse metre.

The role of these factors is not equal and their mutual influence can cause conflicts. Thus, synaesthetic reaction may neutralize or even exceed semantic parameters of utterance, for example, when tender words are spoken in a rough voice and with a hostile intonation. In short verses components a) and b) play a more important role than in medium or long verses.

As it has been already said, synaesthetically greatness is associated with the length of verse: it can be the greatness or minuteness of the subject, the size of the object treated, and so on. Hence, in the Russian tradition the idea prevails that short verse is suitable only for easy, joyful, simple-minded poetry, including nursery rhymes, and long verse is, on the contrary, connected with serious, tragic, elevated and sad poetry. However, such an idea contradicts the syntactical and rhythmical parameters of short verse and no wonder that the real situation in Russian poetry is quite different. Syntax is deformed in short verse: among other things, this becomes apparent with recurrent syntactic members, and the abundance of parallel constructions. Such syntactic structure affects the semantic dynamics towards primitiveness of text: mostly, it is either the summing up of different characteristics to one integer; or, to the contrary, the differentiation and opposing different characteristics of one integer.

The basis of the semantic mechanism of verse is the identification of differences and the differentiation of identities (for instance, cf. rhyme; Lotman 1964: 66–77). Owing to this specifics of syntactical semantics in short verses, such mechanism is expressed to the maximum extent. Because of such semantic-syntactic structure short verses are especially suitable for declarative poetry, for example, hymns and anthems which are about “big” and “important” things, which contradicts their synaesthetic perception as “small” and “easy”. What has been said makes it possible to grasp the paradoxical ethos of short verse: most of the texts and most of the subjects treated in these texts indisputably belong to the sphere of serious and often also tragic semantics, but this does not influence the common opinion of short verse as something easy and joyful.

In a way, we come across a similar dissonance between common opinions and poetical practice in the case of long verses as well. These are perceived as majestic, important and serious, yet often easy poetry is realized in alexandrines (12-syllabic verse in the French tradition, 6-foot iamb in the German or the Russian ones). The length of verse allows the development of long and complicated syntactical structures. While short verse is declarative, then long verse, on the other hand, shows a clear tendency to argumentativeness, discussion and circumstantiality. So the paradoxical picture evolves that hymns and anthems, both religious and secular, are written in “light-minded” short verse, but, for instance, epigrams and fables are often written in iambic hexameter. In the case of dactylic hexameter, too, in addition to high epic poetry, quite an opposite tradition is known: namely, the bucolic tradition

which treats the details of the plain life of small, simple people, peasants and shepherds.

3. The next parameter which has also clear synaesthetic influences is the homometricity against the heterometricity of verse. There are two types of heterometricity: the regulated (for instance, the alternation of three- and four-stressed verses – such is the German balladic verse, the so-called balladic septenary; see Lotman 2011) and the unregulated heterometricity. The clearest opposition is between homometricity and unregulated heterometricity: the first is perceived as harmonic, balanced verse, the other is disharmonic. Such opinions influence the use of verse. In Russian poetry of the 18th century the unregulated heterometric iambic verse (sometimes called loose iamb) was used in fables or comedies – both genres functioned as low ones. In the 19th century, in connection with romanticist patterns, heterometricity was revalorized. It became to oppose homometricity as a less restricted form and it was used in elegies – a specific romantic genre. As for the regulated heterometricity, on the one hand, it was opposed to homometric verse as being complicated and unbalanced, while homometric verse was perceived as simple and balanced. On the other hand, it was opposed to unregulated heterometricity. Regulated heterometricity formed either complicated stanzas which to some extent reminded of ancient strophes or were used in balladic verse. It was in the latter form that heterometricity became most apparent, being an intense verse in which metrical imbalance is in accordance with the intensity and anxiety of plot.

Another important semantic parameter is connected with heterometric verse: it can be called the weight of verse. The matter is that heterometric verse – and that applies especially to unregulated heterometricity – is a paradoxical formation *per se*: as in any other verse form, also here the verse lines are equivalent to one other to a larger or smaller extent. At the same time, this equivalence is clearly violated, for example: in loose iamb the six-foot line can be clearly distinguished from the following four-foot line. Therefore, they are equivalent to each other the way one verse line is equivalent to another, but they are not equivalent to each other the way six-foot sequence cannot be equivalent with four-foot sequence. Now the question arises: how were the verses of different length used in a composition with no external regulators whatsoever? Here an interesting regularity occurs: short verse has more weight than a long one. It is the marked member of the opposition and is used in more important positions, for instance, at the end of the poem or a period, as well as

in semantically emphasized positions. For example, Krylov's fable "Two Barrels" has the following beginning:

Two barrels rolled along the road,
The first of them was almost full,
The other –
Empty.

In a prose retelling of this poem we would not be able to understand which one of these barrels is the main character of the fable: the one which is mentioned first or the second one. Yet there is no ambiguity about it in the poem's structure: the fact that the other one is metrically emphasized, appears to be more important than lexical semantics where it is mentioned only as the second one. In a way, we are dealing with the same semantic effect which was discussed in the case of homometric verses: small is important.

4. So far we have been discussing the length of verse, now we are going to dwell in the briefest way on its internal structure. In the 18th–20th centuries there were three important subsystems of Russian verse (I will name them in order of their importance): 1) syllabic-accentual binary meters (iamb and trochee); 2) syllabic-accentual ternary meters (dactyl, amphibrach, anapaest); and 3) non-syllabic-accentual verses among which accentual metres prevail. In the 18th–19th centuries the opposition between iamb and trochee was most important. Iamb was perceived as a neutral and literary metre, while trochee was associated with exotics and, on the other hand, with Russian folk song. The latter is extremely noteworthy: in Russian literature, Russian own people were associated with exotic nations, the national was foreign (we should remember that iamb was of German origin). In the second half of the 19th century the opposition between binary and ternary metres was more important. Binary metres were associated with past times, for instance, with the tradition of Pushkin, with aristocracy; ternary metres were associated with new realistic and democratic literature which was represented by Nekrassov. These were the ternary metres that were associated with nationalism, although it is extremely seldom that we can come across ternary meters in folk poetry. In the 20th century the most important opposition is formed with accentual-syllabic verse contrasting the new accentual verse and *verse libre*. The latter ones were associated with modern life, urban thematics and orientation towards the future. It is not an accident that the futurists advocated accentual verse.

5. There are several other aspects of verse structure which are directly connected with semantic mechanisms, but this would exceed the limits of this paper. We will now attempt to generalize what has been said. Verse metre is connected with different semantic mechanisms. First, every verse metre is in one or another way connected with verse tradition: it either proceeds from it or fully ignores it. The semantic mechanisms which are based on this relationship are conventional, symbolic in the Peircean sense. For instance, any Russian poem which is written in hexameter – no matter what its subject matter is – always evokes associations with classical antiquity, which sometimes has quite a curious effect. For example, there was a poet from Soviet Russia who, in the 1920s, wrote about rural Russian life in hexameters. The poet himself proceeded from the bucolic tradition of ancient hexameter, but in the first years of the Soviet system, when heroic pathos was characteristic of literature, his hexameters also had the effect of poetry glorifying the socialist building of the Russian village. Even this example illustrates the inadequacy of these verse semioticians who see only iconicity in poetry: the connection between the epic and bucolic hexameter is purely conventional, motivated not by the qualities of hexameter, but by cultural tradition. Hexameter is only a characteristic example of the general process, every verse metre which has a tradition refers to its former uses. Following John Hollander, we could speak here of the emblematic function of metre (Hollander 1975). However, a distinction has to be made between two aspects: meaning and reference. The latter is extremely strong not just in the case of impersonal tradition, but also with reference to a certain author or text. Here we should rather speak of an indexical mechanism. For example, when an outstanding Russian romanticist Zhukovsky wrote a jolly poem about mice burying a cat, the ancient sound of the poem with corresponding semantic associations is connected with the symbolism of the verse metre. We are dealing here with a concrete reference to the parodical epic *Batrachomyomachia* (The War between Frogs and Mice), and it is substantially indexical. And finally, such parameters of verse structure which are connected with intonation, the length of verse, and so on, are substantially iconic.

8. Verse and narrative

Narratives are sentences in the languages of type S3, which can be realized in different realms: kinetically in dance (ballet), pantomime; also in pictography, a series of caricatures or a sequence of medieval icons. However, their main

field is verbal (natural) language. There are also secondary combined forms: audiovisual, from comics to films. This is not a place for a more thorough treatment of narrative language, since, differently from metre, it is not specific to verse. Moreover, there is a certain conflict between verse and narrative, which does not exclude the existence of narrative poetry, but sets certain constraints upon it. Thus, what follows is just a brief survey.

The elements of narrative are characters, actions and circumstances. I will employ the notion of 'narrative potential', designating potential developments that one or another element can bring along. For instance, when a character acquires a magic carpet, it is highly probable that he will fly with it next. The narrative potential of characters, actions and circumstances is different, and the various narratological approaches focus on different factors. For instance, Aarne-Thompson's classification, and the narratological tradition based on it proceeds from the characters and circumstances. Vladimir Propp criticized such a static approach and focused on the narrative dynamics and its structures. His functions are action-centred. Yet we could say that all components are important, while their roles differ. Moreover, if we confine ourselves to folkloric and mythological material, we can clearly see how these elements are dependent on one another. When a hero faces an unsurpassable water obstacle (the motif of obstacle), it has a certain narrative function: to slow down the action. Yet after that a magic helper or a magic item appears, allowing to surpass this obstacle: the circumstances, characters and actions are inseparably connected. Moreover, every character can be described as a complex of qualities (just like a phoneme is a complex of characteristics) and in a traditional narrative these qualities determine the behaviour: if a character is brave, he does heroic deeds, if he is cowardly, he acts accordingly. This is not just a feature of a mythological narrative. Texts representing such an evolved narrative culture, as, for instance, Shakespeare's tragedies (not to speak of the comedies) follow the same logic (Ophelia has to go mad in order to change the patterns of her behaviour). When we study the list of characters, we can assume what could happen in a play. If we have two families at war and there are two young positive characters from the opposite sex, we do not have to be very perceptive to understand that the main conflict will be between love and children's duty to their parents. Later, a new genre, the *Bildungsroman* evolved, which brought about a new thinking regarding the plot: the features of a character can change in the course of the story.

The characters being in the states determined by the actions form the main element of narrative: situations. Narrative texts can be classified according to how developed their structure is, of how many situations they consist, and how these situations are related to one another. For instance, a short story can reflect just one situation. A novelette is a sequence of situations, but has only one line of action. A novel, on the other hand, can have several lines of action (in Russian tradition, there is an intermediary form between the novelette and novel, '*povest'*', which is longer and can contain two lines of plot, but no more than that).

And the last note. Narrative can appear in text not in its logical-chronological sequence. Russian formalists distinguished between *sujet* and *fabula*. The first is the order of events in a text, the second the order of events in the possible world portrayed in the text. There are genres, for instance, detective literature or the so-called mystery novel where the parting of *sujet* and *fabula* is mandatory.

The most preferred field of narrative is natural language, and the reasons are obvious. The main elements of narrative – characters, their qualities, actions and circumstances are isomorphous with the sentence structure, subject, predicate, adverbial and attribute. When we speak of narrative poetry (ballad, epics), we mean something in which two sign systems (narrative – S3) and verse metre (S1) are realized on the same field which is natural language. But as it has already been said, natural language itself is a system of systems, while narrative and metre belong to different subsystems. Thus, we could assume that they do not influence each other. Yet such an assumption would be erroneous, since the possibilities of the field of natural language are not unlimited and narrative and metre are systems with semantics that are different in principle: situations which form a narrative have to differ from one another, while the ideal of the elements of metre is identity. This conflict effectuates, first, that narrative structures in poetry are considerably simpler – even in epic works we usually do not come across several parallel lines of plot (indeed, in ancient epics we could sometimes distinguish between the human and divine lines of plot, but in comparison with novels these are not as detailed), the linearity of verse text is stricter in the sphere of its semantics as well. Second, the narrative of poetry is usually more abrupt and never quite achieves the smoothness of prose.

We have to notice that the narrativity of poetical text is in negative correlation with the length of verse. That is, narrative poetical texts are written

in longer (hexameter, alexandrine) or medium metres, while the short metres avoid narrativity and prefer declarativity (Lotman 1987: 131–132). In addition, we could note that longer verse lines are associated with quiet (“epical”) pace of narrative, while shorter and especially asymmetrical 4+3-lined verses are associated with ballads and more intense dynamics.

It is interesting to observe how narrative evolves in archaic poetry. For instance, in Finnic narrative songs, we can be dealing, on the one hand, with a rather dynamic plot (for example, a chase); on the other hand, the text itself can be static and consist of a sequence of states, as if the chase was depicted as a sequence of pictures.

9. Images, poetical text as an integer

As it has been mentioned above, some tropes (first of all, metaphors, but to a certain extent also epithets) are the result of transmitting visual information with verbal means. The word ‘image’ refers to this relation as well. But the imageology of a poem is not confined to just occasional tropes. A poem as a whole can bring forth a visual image or the sequence of these. Let us take a look at the already mentioned poem by Heine *Ein Fichtenbaum steht einsam*. The poem represents two visual images, but the text as a whole is an allegory. It has a simple narrative: two characters of the opposite sex are determinately separated in space (circumstances), while one of them, a male character, misses another (action). Whether there is actually another, that is, a female character, or whether she is just a figment of his imagination, remains unclear. This narrative finds its expression on a visual field, where the personages have been allegorically represented as trees, their opposition is marked with their qualities, masculine and feminine sex, as well as with the qualities of the circumstances: the northern blizzard and cold against the southern heat and burning. Similarity is also found in the circumstances: both are lonely and both are vertically highlighted. Furthermore, this narrative, which has been visually transmitted, realizes itself on the field of German language, where the characters have been presented with the corresponding constituents of a clause, while the sexual affiliation is expressed not by the means of lexicon, but grammar:

Ein Fichtenbaum steht einsam	xXxXxXx
Im Norden auf kahler Höh'.	xXxxXxX
Ihn schläfert; mit weißer Decke	xXxxXxXx
Umhüllen ihn Eis und Schnee.	xXxxXxX
Er träumt von einer Palme,	xXxXxXx
Die, fern im Morgenland,	xXxXxX
Einsam und schweigend trauert	XxxXxXx
Auf brennender Felsenwand.	xXxxXxX

Some Russian translators of this poem did not notice this; however, for example, such an outstanding poet as Mikhail Lermontov, who translated the characters literally as a pine and a palm. Hence, it became a philosophical poem about friendship and longing, since in Russian, both 'сосна' and 'пальма' are grammatically feminine:

На севере диком стоит одиноко
 На голой вершине сосна
 И дремлет качаясь, и снегом сыпучим
 Одета как ризой она.

И снится ей всё, что в пустыне далекой –
 В том крае, где солнца восход,
 Одна и грустна на утёсе горячем
 Прекрасная пальма растёт.
 1841

Therefore, the exact lexical counterpart significantly changes the narrative structure of the poem. Fyodor Tyutchev and Afanasy Fet, on the other hand, who also translated this poem, held it necessary to maintain the narrative structure and sacrificed its lexical accuracy: they both have cedar instead of pine (in Russian, 'кедр' is masculine). The question of which translation is to be preferred remains beyond the limits of this paper.

10. Conclusion

An attempt was made to explain the semiotic specifics of verse from different angles. The simplest approach seems to be syntactical: verse has certain constructive differences, like, for instance, verse metre, rhyme, and so on. Each

is important, but all of these features can also be absent, while verse still maintains its characteristics of verse. The opposite viewpoint is that verse does not have any “objective” special characteristics. Verse is just something that functions as verse, that is, the specifics of a verse derive only from the sphere of pragmatics. Here the main question is what triggers the given poetic functions, if there are no indications of this in the text. The pragmatic viewpoint is also very important, but it would be clearly insufficient to confine oneself to that. There have also been numerous attempts to approach poetry from the viewpoint of semantics.

It is a widely known fact that the message in a poetic text is different from the message of the same text transmitted to prose. Following from Osip Mandelstam’s observation: the fact that something can be retold, is a definite feature of the absence of poetry (“Conversation with Dante”). The more complicated question is what semantic mechanisms distinguish verse from prose, what the specifics of the meaning of verse are. Proceeding from the second triad of Peirce’s classification of signs: icons, indexes, symbols, verse text has often been characterized as iconic *par excellence*, and iconicity is certainly stronger and more total in verse as compared to prose: the placement of accents can bring forth different associations related to movement: walking, galloping, and so on (cf. Taranovsky’s claim that the entire Russian trochaic pentameter is connected with the rhythm of footsteps), combinations of sounds generate different onomatopoeic effects, which in prose would be likely to remain unnoticed. The sequence of words resonates with actions (Jakobson 1971: 350), etc.

At the same time, poetry and its purest, not to say the most extreme form, lyric, is also the most indexical genre of speech: the prevalent part of lyric regards the relationship between “me” and “you”. Lyrics are pronouncedly deictic also in the sphere of grammar (Jakobson 1981: 72–75). Already the fact that poetry is simultaneously characterized by maximum iconicity and maximum indexicality, brings up the question: how is it possible? But the matter is even more exciting. As compared to prose, in poetry the symbolic component clearly stands out as well. Although symbolism as a literary movement is not in any way related to Peirce’s terminology, it is clear that symbols used by symbolists are the very symbols in Peirce’s terminology. Yet we are not dealing with just one literary movement. As it was noticed by the theoreticians of symbolism themselves (for instance, Dmitry Merezhkovsky, Valery Bryussov, and others), symbolism in poetry is not just “the latest French

fashion”, but an everlasting ideal of poetry. And indeed, as compared to prose, verse speech is much more conventional and the orientation towards symbolism (here already in the Peircean sense) finds expression also in the fact that in poetry we constantly come across reflections on these themes, as well as reflections of iconicity and indexicality. Autometadescription is an important element of poetical culture. The semiotic difference from natural language is that it is a far more complicated construction of different sign systems. These sign systems have a different semiotic orientation and using natural language as their field, they stretch their resources, including the semantic resources, to the utmost.

In Russian daily speech there is a strong quantitative reduction of syllables: only stressed syllables are fully pronounced, while unstressed, especially post-tonic syllables can disappear in speech completely. The matter is different with syllabic and accentual-syllabic poetry, where every syllable is a spot for a metrical element and as such is equal to other syllables: the prosody of verse is a transformed prosody of natural language. At the same time, it is verse where the prosodic features of language stand out most vividly: metre clarifies the prosody and phonology of language, just like narrative structures clarify its syntax and semantics.

11. Culturological addendum

The theory of the three semiotic systems (S1, S2 and S3) was developed by the author of the present paper and Suren Zolyan with regard to just the requirements of generative theory of verse, while at first the semantic qualities of the corresponding languages were not considered. The posterior analysis in the field of cultural semiotics showed, however, that the meaning of this distinction is much wider. These mechanisms are very important also from the viewpoint of cognitive science. These are the most important modes of receiving and processing information. The limited success of modelling artificial intellect is related to the fact that only one of the mentioned mechanisms (S3) is considered.

The distinction between S1, S2 and S3 has also a remarkable potential for typologizing cultures. Although the three types of sign systems can probably be seen in all human cultures, their proportion in various cultures is different. Moreover, the corresponding typology is in correlation with the geographical location of cultures. We are dealing here with two axes, which can conditionally

be called east-west and north-south. The West European culture tends clearly towards S3 and even its visual art is to a large extent a recoding of some verbal subject matter (mythological, historical, etc.). Furthermore, even such genres as landscape art, still life, etc., are to a certain extent oriented towards story and the possibility of retelling (cf. especially the landscapes of Chinese landscape paintings). Movement towards the East marks an increase in the proportion of S2, while movement towards South marks an increase in S1; the realizations of S1 in different substances can also be distinguished geographically. Conditionally speaking, while black Africa realizes it as rhythm in time, in the Islamic world spatial realization in ornaments prevails.

What has been said, cannot be understood in a simplified manner. First, these are no causal relations, but just a correlation. We can only assume what causes what. Second, under no circumstances are we dealing with a sphere which, in the vein of German romanticism, could be called the national spirit or even soul. These are no ethnopsychological qualities, but predominating models of culture, and areal relations are probably stronger here than genetic ones. And, third, the most significant circumstance: the prevalence of some type of sign systems in a culture does not mean that the other types are absent there – this is just a relationship and proportion.

When we focus on the type of European culture, we can see that its peculiarity is its constant logical reasoning, a tendency to explain everything with a sequence of clear formulations. On the one hand, it is opposed to the “oriental” ideal of integral knowledge, which is not to be partitioned or ranked, but appears as a simultaneous complex. At the same time it is opposed to infinite rhythmical variations in which small, almost undetectable modulations accentuate the background of tautological repetitions.

It is hard to say what the reason is here and what the consequence. Is the reason the type of culture which forces itself to be expressed in the systems belonging to type S3 (in logic, philosophy, rhetoric, law), or, to the contrary, the development of these spheres caused the evolution of the European mentality in the given direction? This question will remain unanswered. Similarly, analogical questions can be raised both of the integrity of the Far East (S2) and the rhythmicity of the Dark Continent (S1).¹¹

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Поэзия как семиотическая система

Поэзия представляет собой важную проблему для семиотики вообще и для Тартуско-Московской школы (ТМШ) в особенности. Выдвинутая ТМШ концепция поэзии как вторичной моделирующей системы представляющаяся в целом плодотворной, однако она должна быть уточнена и развита. В статье проводится разграничение нередко выступающих в качестве синонимов понятий ‘язык’ и ‘знаковая система’: знаковая система состоит из языка и поля, на котором она может быть реализована. Так, сосюровский пример с шахматными фигурами, воплощаемыми в различном

материале, должен быть дополнен столь же абстрактным понятием шахматной доски. При этом поле (например, шахматная доска) может, в свою очередь рассматриваться в качестве выражения на некотором языке и т.д., а знаковая система в целом может служить полем для другой знаковой системы. В таких случаях будем говорить о первичных и вторичных знаковых системах. Выделяются два типа знаковых систем: автономные не нуждаются для своей реализации в других системах (хотя и они также могут быть реализованы средствами других систем), зависимые могут быть реализованы только используя другую систему в качестве поля, такие знаковые системы являются всегда вторичными. Например, единицы метрической системы реализуются через элементы просодической подсистемы естественного языка (но могут быть реализованы и в виде орнамента и т.п.); нарративные единицы – через его семантическую подсистему (но могут быть реализованы и средствами графики и т.п.).

Värss kui semiootiline süsteem

Luule on oluline väljakutse semiootika ja eriti Tartu-Moskva semiootikakoolkonna jaoks, sest *Sign Systems Studies* esimeseks köiteks oli Juri Lotmani monograafia “Loenguid struktuuripoetikast” (1964). Sealt edasi arenes välja kontseptsioon luulest kui ühest sekundaarsetest modelleerivatest süsteemidest, kusjuures luule suhtes primaarseks modelleerivaks süsteemiks on loomulik keel. Antud töös on revideeritud semiootilise süsteemi mõistet ning oluliselt ümber vaadatud primaarsete ja sekundaarsete semiootiliste süsteemide käsitlust. Semiootilist süsteemi saab iseloomustada mitte üksnes selle sisemise struktuuriga ja teiste süsteemidega, millega ta on suhestatud, vaid ka taustaga, millel see end realiseerib. Viimane aspekt on jäänud tähelepanuta pea kõikides semiootikakäsitlustes. Märki realiseerimist mõistetakse Saussure’i ja Hjelmslevi vaimus kui abstraktse elemendi materiaalsest teostamisest (nt malenupp ratsu võib materialiseeruda puus või plastmassis, kuid võib jääda ka puhtvirtuaalseks). Kõigepealt eristatakse keelt ja märgisüsteemi. Iga märgisüsteem koosneb keelest ja väljast. Eristatakse kolme liiki välju: 1) lihtsalt taust: jalajäljed liival on märk liiva taustal; 2) materiaalne struktureeritud väli (jalgpalliväljak või malelaud nn Tšapajevi mängus) ning 3) abstraktne struktureeritud väli, mis koosneb omakorda väljadest (nt malelaud, mis koosneb 64 väljast). Erinevalt jalgpalliväljakust võib malelaud olla puhtvirtuaalne, millel liiguvad virtuaalsed nupud (nt pime- või kirimale). Väli võib omakorda olla keel ning üks keel võib kasutada teist keelt oma väljana. Sel juhul räägime me primaarsetest ja sekundaarsetest märgisüsteemidest. Nt keele prosodiline süsteem on väli värssimõõdu jaoks, keele semantiline süsteem aga väli narratiivi jaoks.