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On Semiotic Means with Infralogical Semantics

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Abstract

Semiotics can study not only the ways in which logical concepts are signified, but also the means of expressing various infralogical meanings including schemas of perception, recognition, or action. These studies form a special field beyond logocentric or linguocentric semiotics. They may inherit some of the achievements of aesthetics and psychology, but cannot be reduced to them and should form their own semiotic concepts capable of describing such infralogical semantics. This semiotics of infralogical meanings considers, in particular, various levels of shifted comprehension, when a felt object evokes not only thoughts, but also feelings of something else – shifted perceptions of pictures, shifted synesthetic images, etc. Its subject includes also specific semiotic systems – codes of different psycho-semiotic types, regulating the means used for communication and interpretation of infralogical meanings at various levels of psyche. Their description provides new insight into the study of art and an understanding of non-verbal thinking of painters, architects and other artists.

Key words: infralogical meanings, shifted comprehension, spatial codes, psycho-semiotic types

1. Historical introduction

An old tradition distinguishes the components of sign connection addressed to sensual reception from their conceivable meanings. Still ancient stoics are considered the sign (*sēmeîon*) as something that connects a perceptible object (*aisthēton*) with a thinkable object (*noētón*) (Jakobson 1983: 102). As a follower of stoics, Augustine (1995, 1.2.2, II.1.1) also believed that the sign is such a thing that affects feelings and can awaken thoughts about something else. This distinction between signifying and signified ideas was considered as a ground of any sign in XVII century by A. Arnauld and P. Nicole (1991: 46, 48). It was reproduced in the semiology of F. de Saussure, who defined the sign as a bilateral unit where the signifier refers to the senses and the signified – to a conceivable concept (1959: 65-67).

Within this tradition, it is natural that semiotics is primarily connected with logic. Already John Locke, who the very idea of the sign science had suggested, believed that the Greek word $\lambda \alpha \gamma \eta \eta$ is also a good name for this discipline (1985: 201). In a similar way, the founder of the contemporary semiotics Charles Peirce has stated that "Logic, in its general sense is <...> only another name for *semiotic* ($\sigma \eta \mu \epsilon i \omega \tau \eta \eta \eta$)" (1960: 134). At the same time, the Peircean semiotics introduced concepts such as *Indexes* and *Icons*, as well as the notion of *Interpretant*, which make it possible to explore from a semiotic perspective not only logical structures, but also schemas of feeling and actions, which go out of pure logic. Thereby, the theory of Peirce opens up the possibility of including various prelogical meanings and even affective ways of interpreting signs in the semiotic domain. In this respect, it is broader than, for example, the "Logic of signs (Semiotic)" by Edmund Husserl (1970), who places the prelogical (*vorlogische*) operations with signs outside this domain.

The extension of the subject of semiotics beyond logic also takes place in some other semiotic projects – using the term of A. Greimas, J. Courtes (1983: 527) – less obligatory than the term "semiotic theory". In particular, Ch. Ogden and I. Richards considered in their concept of the symbol both "referential" and "emotive" meanings (1964: 10, 149). Similarly, K. Buhler in "Theory of Language" takes the "expressive" function of a sign as one of its three initial properties – together with representative and prescriptive functions (1994: 34). Ch. Morris (1971) introduced the concept of "aesthetic signs", which can express emotions and serve as the

main carriers of meanings in art; on this basis, he believed that aesthetics can be included in semiotics as one of its sections.

This idea is an inversion of a thought that was suggested as early as the XVIII century in a semiotic project by Alexander Baumgarten. He, conversely, has considered "*scientia signorum*", or "*semiotica*" as a part of "*aesthetics*", which was conceived as a "science of sensory cognition" in arts (Baumgarten 1961). In traditions of G.W. Leibniz's philosophy, this "lower level" of mental activity was opposed to a "higher level" of mind – logical concepts connected with scientific knowledge.

For about three centuries, *aesthetics* has been studying and developing ideas dating back to antiquity about visible and audible signs and symbols, which are comprehended not so much by reason as by intuition (see, in particular, Pochat 1983). This idea was close to Benedetto Croce, who wrote a book with the telling title: *Aesthetic as a Science of expression and general linguistic* (1922). The word "semiotica" Croce related to natural-scientific knowledge, although both logical and linguistic versions of science on signs were already emerged in beginning of XX century.

2. On semiotics of infralogical meanings

Today there are reasons to refer the means of expression of prelogical meanings to the subject of semiotics, understood quite broadly. Such semiotics is not limited by pure logical content (as, for example, in Carnap 1946: 13–14) and by analogies with verbal language (as it was in the early stages of semiotic research in the humanities). The semiotics, which goes beyond the limits of logocentric or linguocentric studies (cf. Derrida 2000: 173) may deal with systems that do not obey both the Saussurean principles of language – the arbitrariness of signs in their semantics and the linearity of their order in syntax (see Saussure 1959: 67-70; cf. also Carnap 1946: 5). The plane of content in these semiotic systems can concern not only the higher levels of mental activity with logical concepts and verbalized ideas, but also its lower levels, which were conceived as subject of aesthetics in the Baumgarten's project.

Such area of semiotic studies can be called *semiotics of infralogical meanings*, involving a term used in the psychological school of Jean Piaget. He considered the class of *infralogical operations* with schemas of perception and of behavior. Unlike logical concepts, these schemas

of sense-motor intellect regulate not the genus-species relationships, but the spatial and temporal relations between parts and whole; these infralogical, or practical, concepts form mental models of the subject's movement in space (see: Piaget, Inhelder 1963, Piaget 1994). Whereas the logical concepts and their relations to denoted objects belong to the field of *logical semantics*, the cognitive, projective or affective schemas mediating intra-subject mental activity and inter-subject communication can rightly be referred to the field of *infralogical semantics*.

Semiotics of infralogical meanings considers mainly not arbitrary signs, but signals and indexes, which can be determined by some external conditions and have not only a purely cultural origins, but also natural roots. Such semiotics is able to describe as the special meanings the schemas of visual and auditory images that are formed at lower cognitive levels of imagination, perception, and even sensation. Its subject matter also includes projective images – models of the subject's own behavior, which are created at different levels of planning his movements and actions. The means of expressing affective images – emotions of various kinds – also belong to this infralogical sphere.

The infralogical semiotics considers the means, which can mediate subject-object and inter-subject relations and participate in intra-subject processes of mental activity. Unlike all antipsychologically oriented conceptions of logicians (as G. Frege, E. Husserl, R. Carnap, etc.) or linguists (as L. Hjelmslev and other), the infralogical semiotics does not reject any psychological content from the subject of its researches. On the contrary, it develops its own concepts taking into account the psychological specificity of the content conveyed by the signal-indexical means under study. In this way, it opens up means of expression inaccessible to linguistically and logically oriented semiotics. Because of this, it is able to distinguish the infralogical meanings developed on different levels of cognitive and projective mental activity.

3. Diversity of infralogical meanings

Although cognitive, projective and affective processes have natural roots, their infralogical schemata are culturally influenced and develop not only in the mental ontogeny of individuals but also in the cultural phylogeny of society. This is clear, for example, in the case of motor schemas that regulate purposeful actions with hand tools of various kinds – be it a hammer, scissors or a teaspoon. Each such instrument is a product of material culture; it has a particular

form and meaning to the extent that the relevant patterns of recognition and use have been developed in the culture and mastered by individuals. Therefore, the visible spatial forms of these artifacts become in the culture signs denoting their functions (cf. Barthes 2000: 267; Eco 1998: 205-207). Due to this systematic connection between the spatial forms of objects and schemas of operations with them, these projective schemas not only participate in each instrumental action of subjects with transformed objects, but become also *common meanings* mediating the inter-subject connections in communicative processes. In this respect, they turn out to be similar to the verbal "tools" described in the "Organon model" of language by K. Bühler (1934). The Bühler model is inverted in this case, and the semiotic functions of words turn out to be inherent also in the world of culturally produced artefacts. Even more, similarly external verbal speech is interiorized and becomes the basis of verbalized thinking (see Vygotsky 1982), so mental schemata of operations with external objects participate in infralogical thinking processes that regulate the projective activity of subject (see Piaget 1994).

Like projective schemas of subject's actions, schemas of cognition of objects at different levels become units not only of individual psyche, but also of collective consciousness and can serve as common meanings in the processes of inter-subject communication. In particular, recognition schemas contain features of certain objects sufficient to identify them. Such schemas are shared by people who can recognize a depicted object from its minimal picture – for example, a pictogram. The last can have some complex meanings (Interpretants, in Peircean terms), but its primary meaning is always the recognition schema of the object, which is showed by the pictogram. For example, although the pictogram © can be connected with more or less complex senses, its primary meaning is the smiled face recognized by minimal indexes. Thus, recognition schemas can equally be considered both as "internal tools" of individual cognitive activity and as "common tools" of collective communication in a particular visual culture that uses such pictograms as semiotic means.

Not only minimal recognition schemas but also developed perceptual images may be involved in communicative processes. All the practice of pictorial arts demonstrates a possibility, on the one hand, of expressing certain perceptual images through their exteriorization by the artist when he or she applies a few lines and colour patches to a surface, and, on the other hand, of reproducing these images in the minds of the viewers. In this communicative process, the created picture connects the communicating subjects as a mediator, like words and other semiotic means. However, unlike words, the picture evokes not only thoughts on the represented objects, but also their perception; it is capable not only to mention, but also to show them. Thus, not only the recognition schema, but also the developed perception is the result of the first step of interpreting the picture – which does not prevent, of course, deeper interpretations and is only a condition for them (see Panofsky 1939).

Images of an even lower – sensory level of cognition – can also be considered in infralogical semantics as synesthetic meanings of visible objects. For example, visual images are capable of evoking tactile, thermal, aural or gustatory sensations. In particular, visible colours may seem "warm" or "cold", "ringing" or "muffled", "sweet" or "poisonous", etc. (see Kandinsky 1911). These are all cases of synesthesia, where sensations of one modality evoke quasi-sensorial images of other modalities. Being the results of a certain interpretation of sensations, these images also have reasons to be considered as their infralogical meanings, which can be not only parts of individual cognitive processes, but also participate in the processes of interpretation. For example, a painter putting red spots on the canvas can not only exteriorize the results of reflexing his perceptual image, but also express his feeling of "warmth" connected with the red colour and translate this quasi-sensorial image to viewers.

4. Shifted comprehension and its variety

All the cases of infralogical meanings described above belong to the class of mental constructs, which are formed as a result of the interpreting felt objects that stand for anything else. The view of Augustine on the sign as a perceived thing which evokes thoughts about something else can be extended to the field of infralogical meanings. It is possible, if not only logical concepts but also other results of mental activity are considered as interpretants of representamens, in Peircean sense. Then, the expression and evocation of thoughts at the logical level by means of arbitrary signs belong to one case of what might be called *shifted comprehension*.

Comprehension here is understood as any incorporation of some external information into the systems of knowledge, values or skills that the subject already possesses. In contrast to the *direct* comprehension of a presented object itself, its *shifted* comprehension is referred to some other objects represented by the sensed thing as a semiotic tool. These semiotic means can be to varying degrees "transparent" for their meanings, and the objects represented can "shine through

them" more or less clearly. In particular, the pictures or architectural constructions can be even more "transparent" for their meanings, than words and other conventional signs, because their meanings take the form of perceptual images or schemas of movements.

So the sign interpretation of sensually given things at the level of logical concepts is a special case of shifted comprehension, which can be called *shifted understanding*. Similarly, one can speak of *shifted recognition*, if the perceived object evokes a recognition schema for another object – as, for example, a pictogram is interpreted as a smiling face, although it can also be perceived as a circle on a plane or directly recognized as a "pictogram". A directly visible object can be even more "transparent" for infralogical meanings in case of detailed pictures – professionally made drawings, paintings, photographs, etc. In this case, the direct perception of lines and paints on a flat surface may even be absent, giving way to a developed *shifted perception*. In a similar way, feeling of the same colour paints as "warm" or "cold" may be an example of the *shifted sensation*, which evokes quasi-sensory images of other modalities. (For more details on shifted comprehension and its species see Tchertov 2018).

The ways of shifted comprehension depend on the psychical levels involved in the interpretation process. This dependence on the *interpreting subject* distinguishes the corresponding semiotic means from the members of famous Peircean triad: Icon, Index and Symbol, based on diverse relations of the representamen to the *represented objects* (see Peirce, 1960: 143). These members can be combined with the ways of shifted comprehension variously. Indexes participate in creation of the shifted sensations in cases of synesthesia; they stimulate shifted perceptions of depicted objects as well; they mediate also shifted recognition of sculptures as human figures and shifted understanding of verbal constructions as logical sentences. In a similar way, Icons take place not only in the shifted perceptions and recognition related to various pieces of figurative arts, but also in the shifted understanding of diagrams or even algebraic formulas at the conceptual level of mental activity (cf. Ibid.: 157-158).

Shifted comprehension with infralogical meanings of diverse levels can be found in the sphere of meaningful sounds. Even in the domain of verbal language, where sounds are usually interpreted at the level of shifted understanding, they can also be interpreted synesthetically – as the means that evoke certain colour or tactile shifted sensations ("light" or "dark", "hard" or "soft", etc.).

A fortiori, such non-verbal and infralogical ways of interpretation are important for the sounds of music, where their meanings are more varied. What is often called the "language of music" contains elements of different semiotic nature, various origins and mental levels. Synesthetic connections of musical tones with spatial images of greater or lesser "height" have other grounds, than connections of rhythm with human movements, although both are still based on natural psycho-physiological mechanisms, and both belong to the same level of shifted sensations. These means of expression differ from the connections of melodic intonations with human emotions, which already have a cultural origin. At the same time, such intonation expressive means remain at the signal-index level and are not identical to the arbitrary sign connections of musical motifs. The latter can evoke shifted recognition, when they are connected with certain meanings – as happens, for example, in operas of Richard Wagner, where leitmotifs serve as signs-nominators for recognizing certain characters. More one separate complex of expressive and even imitative means is formed by all kinds of sound imitation, such as the cries of a cuckoo and the clatter of hooves; these means reproduce some indexes of natural or civilization processes evoking not only their shifted recognition, but also shifted perception.

The diversity of communicative means with infralogical meanings based on various ways of shifted comprehension is especially clear in the case of spatial semiosis. Among them there are *ideograms*, which are treated here as arbitrary and completely conventional signs that connect visible graphemes with logically defined and verbally expressed concepts – as H_2O , +, ∞ , π , etc.



There are also *pictograms* – some reduced pictures with a minimal set of features that are enough for recognition of represented objects, for example – emoji of different ways. Unlike them, a detailed picture gives a possibility to create a *perceptogram* as a semiotic means that can evoke a developed perceptual image of the represented object (see Figure 1a). Compared to a pictogram like \odot , a perceptogram contains more or less additional features, which are not necessary for simple recognition of the represented object, but useful for creating its perceptual image. Figure 1. a. An example of the developed perceptogram: Rembrandt van Rijn. *Self-portrait*. Etching. 1629; b. An example of the sensogram: Wassily Kandinsky. The drawing from the book *Point and Line to Plane*. 1926. Tab.17.



At last, *sensograms* are such communicative means, which can be interpreted at the quasi-sensorial level – as synesthetic indexes of certain sensations of other modalities – auditory, thermal, tactile, etc. For example, the wavy lines at the Figure 1b can be felt as "gentle" – in contrast to broken lines felt as "prickly", the diagonals – as "flying up", the horizontal stripe – as "static", etc.

5. Codes with infralogical semantics of diverse mental levels

The diverse forms of shifted comprehension are regulated by corresponding *codes* – systems of norms, which specify the selection and structuring of semiotic means, as well as rules of their interpretation. Therefore, each code organizes formation of certain meaningful elements and structures in the *expression plane* and their connection with ways of interpretation in the *content plane*. Both of these planes can be formed on diverse levels of mental activity. At the same time, their organization belongs to semiotic form of codes – the rules, which regulate the structuring of content and expression in their "physical and psychical substance" (cf. Hjelmslev, 1961). In particular, some codes connected with the visual-spatial channel of communication contain such features as the incomplete arbitrariness of the signifiers in semantics and their non-linearity in syntax – which takes them beyond both the above-mentioned principles of the Saussurean semiology, and obviously touches not only the substance, but also the semiotic form of the codes.

Of course, among the codes intended to the visual-spatial channel, there are also those formed by completely arbitrary signs with meanings developed at the level of *logical concepts*. This is inherent in codes that determine the formation and interpretation of ideograms – as mathematical characters, special signs of logic, physics, chemistry and other sciences. Each of them uses its own *ideographic codes* as sets of conventional signs adapted to express specific conceptual content.

Unlike the systems of ideography, codes of lower cognitive levels have in their content plane not logical concepts, but *infralogical meanings* of various types. Their content plane is related to cognitive images, projective thinking or affective impressions. These semiotic systems mediate the communication of perceptual and sensory images or schemas of behavior, and their expressive means are no longer independent of content.

All these codes make it possible to convey the infralogical content of non-verbal images that arise as a result of shifted comprehension at different mental levels. In particular, *recognition codes* regulate not only direct, but also shifted recognition at the *apperceptual level*. For example, a sculpture can be recognized as a human figure, rather than as a marble piece, if a pertinent code will be involved for their shifted recognition. In a similar way, various systems of *pictography* mediate shifted recognition of a depicted object; an emoji above is usually interpreted as a face, rather than as a drawn circle with dots inside it.

The infralogical meanings belonging to the *perceptual level* are mediated also by special semiotic means. These means of *shifted perception* are usually understood as similarity with the depicted object, which is a distinctive property of the iconic sign, by Ch. Peirce. However, this relationship of the picture to the represented object is not enough for explanation of its capability to evoke its perception by the viewer. Many special means using to create a detailed perceptual image of depicted object are not approximations to its properties, but systematic deviations from them. In particular, an artist using the rules of linear perspective should depict parallel lines as converging, equal distances – as different, circles – as ovals; cubes and similar rectangular volumes, he must represent on the plane as configurations with acute or obtuse angles, etc. Why is he doing this, if a "degree of iconicity" (in Ch. Morris' terms) decreases in all these cases?

An explanation for such meaningful deviations can be found, if they are sought in the relations of the picture not to the *represented objects*, but to *perceiving subjects*. In these relations, all such deviations from similarity turn out to be important semiotic means, which

determine the creation of a developed perceptual image by the viewer. Instead of iconicity with the depicted objects, the deviations become *indexes* of spatial relations between them and *signals* evoking certain modes of interpretation in the subject. In order for the colour spots on the surface of a painting can be seem like depicted objects, they must act on the subject as a specially organized optical stimulus capable of causing a certain reaction – the visual perception of these objects.

Such indexes are regulated by the *perceptographic codes*, which use, on the one hand, the natural cognitive mechanisms of the seeing and, on the other hand, depend on culturally elaborated "forms of vision" (in terms of Wölfflin 1921), including means chosen by artists, such as linear and aerial perspective, methods of chiaroscuro, and so on (see Tchertov 2005). The participation of this code helps to explain the known paradoxical duality of every picture, which can be perceived in two ways – as spots on a surface and as represented objects in the depicted space (cf. Gregory 1970). Both depicting and depicted spaces are related to each other, in principle, like the signifier and signified in bilateral sign of Saussure (1959) – with such an essential difference that both of these spaces are open for the viewer's perception, which can be "direct" and "shifted" there. The shifted perception can be even doubled and multiplied, if the paints on the surface stimulate diverse and alternative ways of shifted perception – as shown in the Figure 2a. A picture can also contain mutually exclusive features, which are capable to evoke perceptual images of "impossible objects" – as shown in the Figure 2b.

More one complex of *synesthetic codes* regulates diverse ways of *shifted sensations* at the *sensory level*, where quasi-sensorial images of various modalities are involuntary formed as far as some external stimuli evoke this effect. Indeed, the phenomenon of synesthesia can be considered in semiotic terms, as a special type of signal-indexical codes with sensations of certain modality in the expression plane and with quasi-sensorial images of other modalities in the plane of content.

These codes differ from semiotic systems composed of conditional signs. For example, musical notation is mainly not a synesthetic code, although its organization involves synesthetic connotations of spatial relations "higher – lower". Unlike it, quasi-sensorial images of colours evoked by musical tones, as well as feeling of sounds evoked by colours, are mediated by the synesthetic codes.

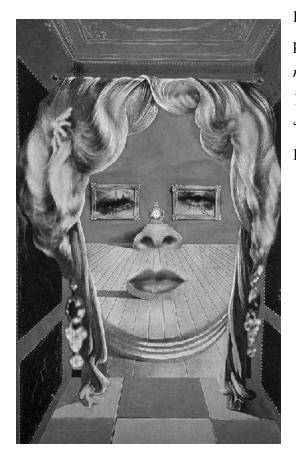


Figure 2. a. An example of the double shifted perception: Salvador Dali. *Mae West's face which may be used as a surrealist apartment*. Painting. 1935; b. An example of the shifted perception of "an impossible object": Maurits Escher. *Belvedere*. Lithograph. 1958.



It is already clear from this that synesthetic codes differ also from each other, because, on the one hand, diverse modalities of sensations are registered in the expression planes, and on the other hand, various modalities of quasi-sensory images are evoked in their content planes. In particular, within the visual modality of sensations alone, the *morphic* and *chromatic* synesthetic codes may be distinguished, depending on what elements of the visual image constitute their plane of expression – visible forms or colours. Even more, each of these types may be divided depending on modalities of quasi-sensorial images in their content plane. So, the colour-auditory, colour-taste, colour-thermal and other chromatic codes can be distinguished, because diverse synesthetic images are the infralogical meanings in them (see Tchertov 2019: 229).

Certainly, such means of sensography are more dependent on individual features and are less common than means of perceptography or ideography. Nevertheless, some of them are so widespread that they can participate not only in the intra-subject processes of vision, but also in the inter-subject processes of communication. For instance, the thermal interpretation of yellow colours as "warm" and blue colours – as "cold" is quite common for communication of these quasi-sensorial meanings by the means of paintings. In a similar way, the connections between visual and tactile sensations can be so convincing that an art researcher even believed that "the most essential thing in the art of painting <...> is the ability to excite our sense of touch in a certain way" (Berenson 1965: 62).

6. Diverse psycho-semiotic types of spatial codes with infralogical contents

Thus, the ideography, pictography, perceptography and sensography can be distinguished as types of graphic codes connected with the visual-spatial channel of information and differing in the levels of logical or infralogical meanings that they are intended to convey. The distinctions of their semiotic means can be seen at the Table 1.

Levels of	Types of graphic means	Types of	Codes with
shifted	forming the expression	meanings	content plane
comprehensi	plane	in the content	of diverse
on		plane	levels
Shifted	Ideograms as	Logical concepts	Ideographic
understandin	completely conventional		codes
g	signs		
Shifted	Pictograms as not	Schemas of	Pictographic
recognition	completely conventional	recognition	codes
	signs		
Shifted	Perceptograms as	Perceptual	Perceptograp
perception	combinations of iconic	images	hic codes
	models and chosen		
	indexes of perceptible		
	objects		

Shifted	Sensograms as signals	Quasi-sensorial	Synesthetic
sensation	evoking phenomena of	images	(sensographic
	other sensory modalities) codes

Table 1. Levels of shifted comprehension and diversity of semiotic means in the ideography, pictography, perceptography and sensography

The codes that differ in this table demonstrate a variety of ways to interpret graphic means, but they do not exhaust the plurality of codes focused on the transmission of infralogical meanings. Along with codes capable communicate *cognitive* images of diverse levels, there are *projective* codes that mediate transmission of behaviour plans. The meanings in their content planes are formed by motoric schemas, which also can belong to various levels of movement planning (see Bernstein 1967). In particular, *architectonic codes* connecting the visible spatial forms with kinesthetic feelings of mechanical forces, and *object-functional* codes that relate such forms to schemas of instrumental actions with them, contain the infralogical meanings of different levels (see Tchertov 1997). Although the dynamic meanings of these codes are not arbitrary to the spatial objects being interpreted, they depend on cultural norms of interpretation and do not depend on how real the represented forces or actions are.

Together with cognitive and projective meanings, the infralogical codes can have also *affective* content – emotions evoked by their communicative means. Such content is typical for the somatic codes, which mediate connections of certain feelings with various facial or body expressions or with spatial relations between bodies of different people. These are, in particular, kinesic codes of *gestures, facial expressions, oculesics, haptics, proxemics,* etc. (see Kreidlin 2002). The plane of expression is formed in them by both spatial and temporal relations and includes the movements of human bodies.

Not only the *content planes*, but also the *planes of expression* of the infralogical codes can be formed at diverse psychical levels. In particular, the synesthetic codes, which have quasi-sensory images in the content plane, presuppose also signal-indexical means of the expression plane on the same *sensorial level*. The cognitive and communicative means of this sensorial level become elements of expression plane in perceptographic codes, where the content plane is built normally at the *perceptual level* of the psyche. The same perceptual images, in turn, can be interpreted using a code of recognition, where they become the elements of *its* expression plane. At the same time, the content plane of this code is formed on the next *apperceptual level* with the help of

recognition schemas that are actualized by perceived signals and indexes. At last, the involvement of these recognition schemas is necessary for the use of ideograms as units of codes with the content plane, developing at the *conceptual level* of mental activity. Therefore, images of the same level can fulfil different semiotic functions and enter into the content plane of one code and into the expression plane of another.

The fact that the planes of expression and content in diverse codes can belong to different mental levels and may be differently combined makes it possible to distinguish various *psycho-semiotic* types of semiotic systems. Each of these types differs from others by a special combination of levels on which their planes of expression and content develop. The *synesthetic codes*, where both the plane of expression and the plane of content belong to the sensorial level, are related to another psycho-semiotic type, than *perceptographic codes*, where only expression plane remains on the same sensorial level, but the content plane moves to the next, perceptual, level. Similarly, the psycho-semiotic type of perceptographic codes differs from *pictographic* and *recognition codes* more generally, where perceptual images are in the plane of expression, while the plane of content is constructed by recognition schemas at the next, apperceptual, level. It is obvious that *ideographic codes* belong to one more psycho-semiotic type, as recognition schemas in them pass into the plane of expression, whereas their content plane is formed by logical concepts.

Since the units of diverse codes belong to different psychic levels, they are not translatable into each other and into verbal languages, although the latter can describe them. In the same time, these codes can function together interacting among themselves and with other semiotic systems of Lotman's semiosphere forming heterogeneous texts (see Lotman 2000).

7. Conclusion

Thus, the description of the lower cognitive levels of the psyche, along with projective and affective images of art and other spheres of human activity, is quite possible not only in psychology and aesthetics, but also in semiotic concepts. Semiotic systems with infralogical semantics are rightly the subject of the corresponding field of semiotics. This infralogical semiotics researches special ways of shifted comprehension of interpreted objects at the levels of recognition, perception and sensation. Using the Peircean concept, they can be considered as

Interpretants of diverse cognitive levels, which make it possible to represent considered objects in different ways. The various modes of projective and affective activity can also be described in similar semiotic terms. In this approach, meanings such as perceptual images, reproducible patterns of sensorimotor intelligence, emotions, etc., can be no less legitimate subjects of semiotic study than verbalized logical concepts.

The semiotic means participating in formation and communication of these infralogical meanings are different non-verbal codes. These codes belong to diverse psycho-semiotic types as far as their content planes are formed on various infralogical levels of mental activity. Such a variety of their expression planes further increases this distinction.

These codes in diverse combinations interact in the formation and interpretation of heterogeneous texts in different areas of culture, especially, in art. Mental operations with infralogical images of such codes are essential for the non-verbal thinking of painters, architects or musicians, although verbal poets' thinking is not without them either. From this point of view, the entire field of art can be seen as a sphere, where manifold combinations of infralogical codes are used and replace each other in the history of the creation and interpretation of art works.

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