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## The Nature of Visual Thinking

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*Visual thinking is a type of non-verbal thinking, and it has been extensively studied by psychologists in recent years. Psychologists believe that the main function of visual thinking is its ability to coordinate different meanings of images into a complete, visible picture. Visual thinking also helps us to ontologize the results of abstract verbal thinking so that an abstract essence becomes intellectually visible. Using it to examine and analyze various works can yield new insights and a more complete understanding in fields ranging from scientific to artistic.*

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There is a traditional philosophical view, according to which human thinking exists only on the basis of linguistic material in forms of words and their combinations. This verbalistic approach is widely spread in philosophy till our days, it has a force of a prejudice in spite of the fact of existence of a developed branch of modern psychology named “*visual thinking*”. Many years ago Leo Vygotsky suggested a more broad notion of *thinking*, he described it as a mental process of operating upon representatives of external objects, i.e. upon signs and symbols of any nature. In his work “Thinking and Oration” (M., 1934) Vygotsky tried to prove that “verbal thinking does not cover neither all forms of thought, nor all forms of speech. There is a large part of thinking, which does not have direct attitude towards verbal thinking. Instrumental and technical thinking together with a whole realm of the so called *practical intellect* in general may be included into

this realm of non verbal thinking” (p. 95). A non-verbal kind of thinking is as real, as a verbal one.

If many years ago practical intellect was psychologically described as a preliminary and primitive stage of thinking’s development only, then today it is shown, that this kind of intellect has all properties of effective thinking in its literal form. Verbal and non-verbal thinkings do not exist separately but constitute two different cuts of any subjective reality – a cut still not verbalized and a cut verbalized already. A non-verbalized level of thinking can be verbalized in future. In the beginning of the 60s M. Gazzaniga and R. Sperry, American psycho-physiologists, investigated a functional asymmetry of a human head brain from a point of view of differences among verbal and non-verbal thinking. If to cut a bunion body, which unites two brain hemispheres, then two independent spheres of conscience emerge in the same brain. Intellectual processes by means of the

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left hemisphere are usually happen in a directly verbal form. The same processes but determined by the right hemisphere's activity are re-sulted often in rational images of ontologized spatial structures. Products of two brain hemispheres are combined by means of a bunion body into a whole knowledge of an object's class and sensual features of objects of this class.

Visual thinking is one of kinds of non-verbal thinking, it is studied by psychologists much better than other kinds of the last. Audial, tactil and snuff thinking are ob-jects of a very active interest within psychology in recent years. Some years ago there still was a strong habit to subdivide culture into two principal parts. The first part was called "*intellectual culture of a scientist*" and it was necessary associated with think-ing as itself. The second subdivision of human culture was associated with profes-sions to reflect upon values. Humanitarians, artists, composers of sound melodies and aromatic spirits were treated as possessors of sensual perceptions, feelings and im-pressions primarily. For instance, still now it is easy to notice in textbooks such usual general oppositions as *scientific thinking* and *artistic perceptions*, as if a scientist is primarily a rational creature but an artist has nothing to do with a sphere of essences and he is able to build professionally only sets of sensual images; it is a wrong opin-ion. Good artists, writers, composers of symphonies of sounds or spirits are able to penetrate deeply into invisible structures of different kinds of reality not less than sci-entists; a symphony is like a theory of a serious object. To compose spirits accord-ingly, for example, to a peculiar class of women is to cognize rationally some essen-tial and hidden character of these women. It is wiser to find difference among episte-mological properties of a classical natural scientist and a typical artist namely in pe-culiarities of their rationalities, but not through a prism of an opposition *rational-sensual*.

If the scientific rationality is based on operating upon words and mathematical symbols, which represent external objects (but this definition is not the whole truth), then rationality of an artist or engineer is based on iconical representatives of external or inner objects, i.e. on graphs, diagrams, spatial sign structures. For example, it is known that engineer's thinking usually consists of 60-80% of visual thinking and only 20-40% of it one can describe as verbal thinking. Within Ch. Pierce's classification of signs, an iconical kind of signs is seen as an effective instrument of valid thinking. Psychologists see the main function of visual thinking in its ability to coordinate dif-ferent meanings of images into the whole visible picture. Rudolf Arnheim, an Ameri-can aesthetician and psychologist, writes that one can not pass any information to an-other person directly before the object of this information is not represented in a structurally clear form.

Visual thinking helps us to ontologize results of abstract-verbal thinking; by means of it an abstract essence becomes intellectually visible. It is necessary to stress, that visual thinking is a contentive product of synthesis of previous sensual experi-ences and abstract-verbal thinking; by means of it an abstract essence becomes intel-lectually visible. Visual thinking is a constructive product of synthesis of previous sensual experiences and abstract-verbal activity. So a sensual component of an image of visual thinking is not just the same as some direct sense-data. This component is radically changed within a visual-rational image; it reflects those objective structure, which are not given in a direct perception. An image of visual thinking is able to foresee future events, to draw future worlds in forms of designer's projects.

Thus, within structure of human cognition, an image of visual thinking is a me-dium among abstract-logical thinking and a future practical activity. This image does compose the main

content of an aim of practice. Often it is possible to crystallize in it the principle content of this or that achieved knowledge. Probably, it is an image of visual thinking, but not pure conceptual construction, which is a basic building element of scientific pictures of the world. When we are asking to imagine a modern picture of the world, which exists in science, we at once can remember associations of incandescent stars' balls and cool planets around them, atom's model of Reserford, pictures of electron's and ion's xchange among atoms and molecules, of chromo-some's chains of Watson and Kriek's model and so on. But usually we (if we are not narrow specialists in Physics, Chemistry, Biology) do not remember mathematical and conceptional sides of those scientific theories, within which the mentioned vis-ual-rational images were born.

So, an image of visual thinking of a proper level of generality helps to transport main conclusions of different theories throughout science at whole and outside, it helps to popularize general scientific results in society. By means of it an invisible structure of atoms or genes becomes mentally visible for scientists and ordinary people. Visual thinking is a cognitive bridge between verbal thinking and external practical activity, between words and business. That is why it is very important to teach culture of visual thinking to begin from early childhood, to graft this culture in pupils, students, scientists, engineers. It is a pity that our pedagogical system was (and still is) based on an illegible philosophical idea of cognitive process. According to this idea, formulated by sensualists (see V. Lenin's 'Philosophical copy-books'), a cognitive process has the following structure: from direct sensual contemplation of an object through abstract thinking to practice. Of course Lenin could not foresee that this sensualistic formula would be blindly copied in the Soviet pedagogical practice.

For example, future Russian engineers are good prepared at polytechnical universities from the point of view of abstract science; a general level of researches in Physics, Mathematics, etc. in Russia still is one of the highest in the world. But these future engineers are not taught to traverse from an abstract level to a real creative practice through a stage of a good and conscious visual thinking. Teachers naively believe that necessary skills and habits of technical creativity must emerge automatically, without a preliminary hard education. As far as we know, there is another pedagogical practice in western education, which was strongly influenced by British visual culture, philosophical and scientific courses of musical and artistic education are usual at British and American schools, polytechnical colleges and universities. It is true, these courses are not merely an idle dissipation of money. Besides a widening of an outlook of pupils and students, they are forming cognitional abilities to design new artificial objects. One of us has been to see the high school in Evanston—along with other achievements a general culture of visual thinking is carefully and systematically cultivated there.

Thus, visual thinking is a human activity, which results with new images, new visual forms. These forms make visible the meanings of abstract concepts. While mediating verbal thinking and practice, images of visual thinking are comparatively free in correspondence to objects of perception. They have an ability to reflect in themselves practically any categorial relations of reality – spatial, temporal, attributive, causal, teleological, existential and so on. But they reflect these relations not by means of word's expression, but through expression of them in spatial-temporal structures, in transformations and dynamics of sensual images. Epistemological function of visual thinking includes (beside the mentioned above property to be a bridge between verbal and practical activity) an ability to find

information about structure-spatial and temporal characteristics of possible worlds by means of imaginative transformations of schematic pictures of objects and modes of acting upon these objects. Ontological function of visual thinking is an ability to ontologize products of verbal thinking, to give them existential properties, a feeling of reality. This happens because of a sensual component of synthetic images of visual thinking. Of course such images may be not only true but false also, nevertheless there is a stamp of reality on them subjectively.

We mentioned some more functions of this kind of thinking before – prognostic, methodological and communicative. The last, communicative function is very important. When a verbal communication among people is not sufficient or even impossible, visual thinking gives an opportunity to transport information among subjects, for instance, in a graphical form. Especially it is effective in arts, engineer projects, design. The existence of visual thinking falsifies some radical consequences of Sepire-Worf's theory of linguistic relativity – for instance, its thesis, that grammar itself forms human thoughts as a program of an individual's mental activity and as a means of analysis and synthesis of our impressions. It seems that visual thinking is a necessary condition of finishing of a theory's construction. Due to its images of visible essences a scientist can interpret empirical data of partly or completely invisible objective and subjective processes. Pictures of theoretically investigated objects are built upon a conceptual system and accordingly to this system. By means of such pictures a scientist is able to correspond his theory to external reality, to check it or to materialize his ideas in artificial objects. From the point-of-view of a conceptual content of a theory, a theory is a knowledge of its abstract objects directly, but not a direct knowledge of external objective reality as itself. Epistemological functions of visual

thinking help to transform theoretical knowledge about abstract objects into a kind of practical knowledge of non-theoretical objects.

An example with three models of a helical structure of nuclear acid DNA, constructed by Watson and Crick, is very typical to show the importance of visual thinking in theoretical sciences. Today we can see directly by means of an electron microscope a piece of DNA's molecule, its two threads, which helically entwine each other. But in the beginning of the 50-th this was impossible to do. There were facts about a chemical composition of nuclear acids, diffraction of x-rays (a rentgenogram of DNA's fibres) and about some correlations among guanin and tizozin, adenin and tymin, etc. There was a strong need in a good theory in order to make an objective structure of DNA visible and to explain empirical facts. In such cases a theory plays a role of an intellectual instrument by means of which some general and abstract idea can be transformed into visible and verificative conclusions. J.D. Watson and F.H. Crick decided to use L. K. Pauling's method to build molecular models. When they described a set of abstract objects of their genetic theory and tied conceptual correlations, a need in visualization of the theory have appeared. Watson writes in his book 'A Double Helic' (M. 1963): "While entering my laboratory I began to cling pieces of copper wire to models of atoms of carbon. So I made out of them more large atom of phosphor. Though it was only one and a half dozen of these atoms, they often fall out of inconvenient clamps, which were thought to hold them on a proper distance towards each other. In order to make even simplest atoms of phosphor our mechanic had to work at least three days <...> The last hours of this day I spent to cut purin and pyrimidin foundations from a thick leaf of pasteboard." (Pp. 64, 67, 120, 131).

All these strange material objects have been seen as representative of invisible micro-world.

Two first models were not successful, but the third one turned to be a great discovery in 1953. The decisive experiment in 1957 in Californian technological institute proved Watson and Crick's model. The sketched, by means of visual thinking, picture of DNA was just the same as a photo of a real DNA. It is very wonderful what precisely predictable visual thinking in science can be! Of course this is an ideal example. In other cases of theoretical cognition a role of visual thinking may be not so decisive and important. But still epistemology must pay attention to it. There is no place to discuss psychological and physiological details of mechanisms of visual thinking, as well as philosophical arguments and counter arguments. Here we want to say simply that if the principle of unity among sensual and rational sides of a cognitive process is true, then visual thinking (as a kind of synthetic non-verbal thinking) does exist with a logical necessity. Several American philosophers study successfully its nature and properties and among them some philosophers from Northwestern University. We also have published three monographs about visual thinking.

A general theory of visual thinking is to be extrapolated on arts. A. Baumgarten, the father of Aesthetics, classically defined this branch of philosophy as a theory of sensual cognition. This definition is right in general if to understand *cognition* in its categorical meaning. Some philosophers described aesthetical cognition as the lowest level of human cognition, but some of them, on the contrary (Shelling, for example), have seen in Aesthetics the top of human knowledge. *Cognition* is cognition, it is a process of penetrating into roots, essences, nature of things. If to explain an aesthetical attitude towards a world not only as plain sensations and presentations (as sense-data), but as visual thinking, then an aesthetical image may be briefly defined as *Visible Essence*.

Simply speaking, a world around us may be divided on two parts. One part is directly visible, it is a surface of phenomenons. We can see it, touch it, smell it, etc. But the second part is invisible.

Philosophers use to call it 'essence' of objects of our perceptions. If 'essence' is not known it seems to be dangerous and hostile towards a man. So it is necessary to understand 'essence', to express it via sensual images. We suppose that *aesthetical attitude* is nothing else but an expression of rationally cognized essences in structures of transformed perceptions and presentations, i.e. in forms of images of visual thinking. Aesthetical attitude is universal, one can find it in every kind of human activity and knowledge – in everyday life, spheres of arts, science, technique. For instance, a mathematical graphic curve aesthetically expresses a definite equation, though such an expression happens to be some mode of aesthetical quality – beautiful or un-seemly, elevated or low, tragic or comical. Aesthetical attitude is a human ability to express essences ideally, i.e. via ontologized and sensual representatives of these essences. That is why, while aesthetically expressing some deep essences, men subjectively make them known and not so dangerous; such a kind of visual thinking is accompanied with a feeling of pleasure, admiration, relief, reliability and so on positive emotions.

An artistic attitude towards a world is a special kind of aesthetical survival. Artistic objects are produced artificially with a purpose not simply to express essences in visual forms, but to express, openly and intently, human personal attitudes toward important essences and to derive useful educative lessons. Arts do keep positive social life activity and lift an individual on a social meaningful point of view by means of soft and noncompulsive methods. Therefore it is not surprising that arts are always in a focus of ideological and political attention everywhere. All

different theories of arts arise out of two closely tied philosophical ideas, we believe. The first idea is the idea of essence, which is artificially expressed by means of sensual and ontologized images. The second idea is the idea of importance or unimportance for human life of the sensually revealed essence. Tied together and differently interpreted these two ideas determine the historical logic of development of arts' conceptions and general artistic methods.

Followers of Plato and Hegel do understand *essence* as something very different from a sphere of sensual phenomenons, which manifests itself towards a perceiving man indirectly; nevertheless a man is able to cognize essence. This philosophical position determines a set of peculiar theories of arts and notions of realism in arts. Within them, realism is a true description of *essence* (not natural phenomenons of life) in terms of revised and transformed presentations. Essence is truly reflected in art works when ordinary presentations are changed due to a rational scheme, which a talented artist has found and hidden in his work. From this point of view, surrealism and similar artistic methods are true and realistic. Followers of Kant or other agnostic doctrines think that *essence* is out of our perceptual reflection, it can be artificially expressed in sensual forms only allegorically.

Religious arts (icons, church architecture, etc.) are clear examples of this mode of thinking. If one believes that a pure geometrical visual form only is good to express essence, but not accidental phenomenons' shapes, then cubism, suprematism and other artistic methods are corresponding to this conception. If another artist thinks (as nominalists), that essence or *doe* does not exist at all or it is manifested, directly and fully, in sensual phenomenons, then he believes in a kind of a surface realism, photo-graphical arts.' And so on. Another base for principal differences among conceptions of arts is a question of what definite

sensual material is good to express essence – visual, audio, etc.? If you understand essence as a struggle of inner contradictions, you receive a special notion of a 'good' art also. If essence is something else for you ('oneness', 'undividable, etc.), then you disagree with the previous point of view; accordingly, interpretations of aesthetical categories of harmony, taste, beauty and so on would be alternative.

The second idea – the idea of arts' importance for our social life – provides another angle of view on nature of arts. If one believes that a human being is a product of nature, then to know natural essences means to know man's essence. So, from this point of view, it is very important to express nature artistically for a benefit of society. On the contrary, if somebody thinks that a man is a mistake of nature or nature is principally unknown, then it is not important to express natural essences artistically, but better to make picture of social life. Knowledge of essence (natural or social) can teach or can't teach people – a basic alternative for artistic discussions also. We would not continue further on this topic; you see already the revealed logic of history of arts and historical dialogues among distinguished artists. It is very important to give freedom for all principal artistic tendencies. Only then arts, taken totally, are developing normally and effectively. Suppression of any principal artistic program leads to a disharmony in artistic creativity.

The suppressed artistic program will survive in future with an 'iron necessity,' because arts must always wonder people with new decisions, touch their feelings, shocking them. But the suppressed doctrine may appear in future in a very noisy and fashionable form; even if you dislike some artistic approaches and methods, it would be philosophically wise not to abandon them at all. Ideologists and politicians often do not know this dialectics and do not want to know it because of their special pragmatic purposes. But we are to

know it and to popularize it among people even if you like Picasso and dislike Rubens.

Now we want to reflect upon visual thinking in arts via structure of an art work. We shall take painting as an example for this purpose, though results of this research may be extrapolated on other kinds of arts. Images, expressed by works of pictorial art, are not merely perceptual copies of external objects. They are literary *Visual Essences*, lighted through a prism of human relation towards them. Several aspects of this relation are described in E. Bullough's conception of 'Psychical Distance', J. Stollnitz's theory of 'Disinterested Relation', V. Aldrich's notion 'Seeing as'. Much may be said about historical discussion between two alternative sets of theories of art – among a theory of *imitation* and a theory of *expression*, which were developed in modern aesthetics by Clive Bell, Susanna Langer, R.W. Collingwood, Morris Weitz, Monroe Beardsley and others. A good critical analysis of these theories one may find in a very interesting monograph of George Dickey (Aesthetics. An introduction. Pegasus, 1971. -200 p.). But if Dickey analyze imitationism and expressionism as simply different alternative theories, we want to unite them dialectically as descriptions of polar sides of the same pictorial process.

There are two sides of a work of pictorial art, mutually tied. The first side we call *naturalistic tendency*, the second – *symbolistic tendency*. Proportions of these tendencies are very different in various art works. According to his philosophical and artistic program a painter may prefer one tendency more than another, consequently one painter may be called, in general, *naturalist*, another – *symbolist*. Still two aspects of a picture, naturalistic and symbolistic, are its attributes. In order to communicate with a painter, a spectator must recognize, more or less, natural-geometric forms and shapes of a painted artistic object. So the first plan of an art work (its surface)

is a naturalistic (imitationistic) key, by means of which one can enter into an author's intention, conception. Some historical and conditional details are helpful for this purpose, especially when a spectator has a good artistic experience and taste. But a real work of art has some other levels, situated within its inner plans. The more profound an artist is, the more number of these levels one can find in his picture. These levels express symbolically author's artistic conception of a human relationship towards the world, towards different aspects of reality. Author's and spectator's visual thinking starts on these levels.

Many inexperienced people do not know about such a complex structure of serious artistic works. Their glances are slipping along a surface of a masterpiece, though even in this case primitive feelings of aesthetical pleasure do appear. It is true that there are many professional art critics who, also, are able to describe the first surface plan of an art work only; much is to be done to educate aesthetically those people, especially those critics, who assure public, that an artist usually does not know what he creates, that an artist creates mostly unconsciously or subconsciously. It is true that often an artist is not able to retell painted contents by means of words. But it happens, we believe, not because of his non-rationality or irrationality. A real painter creates by means of visual thinking primarily, but not with the help of verbal thinking. A verbal name of his picture is only a prompting, not necessarily a true one, how to enter to the bottom of his divisionally rational construction.

When an artist starts his work he, may be, does not know his final rational result. But if he finishes his work successfully and does not want to deceive spectators, he mostly consciously knows this result. Of course, it does not mean that an artwork is a closed system. This system is open for a private spectator's imagination, and sometimes one can discover even those deep levels of a

talented art work, which its painter did not realize. Thus, art develops in different directions as a result of mutual penetration, balance and unbalance of naturalistic and symbolistic tendencies. Masterpieces are historical landmarks of this dialectical process. We think, that a real pictorial masterpiece is a pure balance and harmony of naturalistic and symbolistic sides of a picture, so some deep essence is expressed geometrically and colourfully in a very naturalistic-realistic manner.

The second condition of a masterpiece is a visual expression of some deep philosophical idea, which is out of age, eternal and international humanistic. Such masterpieces survive via centuries and are open always for new modern interpretations. We think that a good public artistic education is to be based on a written history of such masterpieces, around which other historical one-sided attempts to develop various mode of naturalism and symbolism may be centralized. This is an idea of a new short and condensed course of history of arts with a causal explanation of arts' process.

Now we want to illustrate and to prove just a little this sketched conception of visual thinking in arts. We have no place now to deepen into a description of a nature of a childish picture. We would say only, that little children have to solve an extremely hard problem, when they try to understand adults' notions. Children see ordinary things (tables, chairs, animals, etc.) approximately as we adults do. But adults use words to designate classes of things, i.e. essences, and little children do not understand, why, for example, a word 'table' may express in one case a four-legged table, in other case – a table with one leg only and so on? A child has to build rational images of sensually perceived things himself. And this is a real personal creativity.

Accordingly to the psychological theory of interiorization, a child must firstly exteriorize his

conjecture about invisible essence and materialize it in a visible geometry. A childish picture is an example of this exteriorization. It is wonderful that pictures of all children in the world are similar, there is just the same geometrical alphabet in those pictures, it is amazing how little children of different nationalities can read and understand pictures of each other easily, but many adults do not understand them. Adults falsely see in that pictures sensual naturalistic copies of external individual things, but not *Visible Essence*, sketches of notions. Adults are mistaken when they try to correct childish pictures in order to make them similar to ordinary physical things. The symbolical side is the main parameter of such a picture.

When a child has solved his conceptual problem he usually stops his further painting, does not want to improve it. Some of more eldest children continue to draw, and their pictures become more naturalistic. It is very significant that great artists sometimes want to return back to a childish manner of drawing to express essences very geometrically-economically. Picasso was among them. You can see, below, several examples of a childish drawing of essences. A child draws his *notion* as a logical circle in the middle of a list of paper, and a background is meaningful for him as *all others things around*. Do not insist, that a child simply waste paper. He concretize the logical circle while drawing some details which, he believes, are essential. For instance, 'a cat' is a circle with several short lines within it and with schematic nails (see fig.1). It is because of cat's woolly soft hair and dangerous scratching nails a child has firstly a notion (essence) of each cat.

Look at the second picture (fig. 2). How economically a childish understanding of a notion 'door-keeper' is symbolically expressed in it! You see a one-handed 'head-legger' with a spade. The third picture clearly expresses a personal childish attitude towards such a life-meaningful



object for a child as his parents' behaviour (fig.3). You see the author in the corner, he has no hands to give them to his parents, who have also no hands for the author and who love only author's brother (or sister). Thus, the symbolical side of visual thinking in arts one may trace to begin from childish at-tempts to draw essences. And this side determinates the other, naturalistic one. In adult's art these sides can change their force, periodically overweighing each other during Art history.

Now let us offer you explanations of several great art masterpieces from the point of view of two correlated tendencies, naturalistic and symbolistic. 'Diskoflinger' of ancient Greek sculpturer Miron is well known (fig. 4). But a few people can see in this sculpture not simply a sportsman, but a visible essence of Apollo – the god of peace and war. Miron expressed geometrically in his work the harmonical theory of Heraclitus, the philosophy of symmetry of peace and war forces, which are in a mutual struggle eternally. Natural lines of a human figure are subordinated to the main idea of antique dialectics. Lines of hands, shoulders and so on are the mental key to recognize a bow and an arrow in a battle position. Just the same lines with additional of a head and some other body lines are embodied an ancient Greek lyre, a musical instrument of a silver-bow god Appolo.

Contemporaries of Heraclitus and Miron did understand this visual rational image because they were accustomed to a mythological kind of thinking and highly experienced in arts. But modern people mostly see in this sculpture only a physical body, and art critics notice in it many mistakes from the point of view of anatomy of a human body. Miron's 'Diskoflinger' is an eternal masterpiece, which visually expressed a great idea in a very laconical and perfect geometrical form. Who can prove that Miron did not know what he creates, consciously!

Look at the two pictures of V.T. Surikov – on 'Countess Mororova' and 'Stepan Razin'.

Naturalistically they are very different, but symbolically they are identical. Surikov was influenced too much by the widely spread (in Russian society in the very end of the 19-th) idea of a lonely strong hero, who knows that he will die and still goes against the modern life stream. To express this idea Surikov invented a special geometrical scheme, which determines a whole set of his brilliant pictures. This is a scheme of a triangle against element. The hero-triangle induces a turbulent movement within a laminary normal stream of life. An active diagonal line across Surikov's pictures is drawn in such a way that it expresses the inevitable defeat of the hero. Count-ess Morozova, one of the leaders of old Russian Orthodox Church, died in exile. Thus, under a surface of Surikov's different pictures you can find a more deep level of a geometrically expressed essence (fig. 5-a, 5-b).

A. A. Ivanov's masterpiece 'Christ's advent to people' (1837–1857) is well-known in each country. But even eminent art critics can not explain its main idea. They qualify it as a marvelous eclectic picture, they are unable to find its geometrical-meaningful centre, to name the main figure. Some of them think that Christ or John may be that figure. It is wrong. Ivanov as influenced by philosophy of Shelling and his main artistic idea was the idea of an artist who may be the only one human measure of truth and faith. And the very imperceptible figure on his picture is the central figure in a modern clothes and with a european hat (among others in ancient clothes). And this figure is Ivanov himself!

Usually God's space and man's earth are drawn in religious icons in a form of a numeral 'eight,' '8'. It is a sign of indefinity, which is standing vertically. God's Son, Christ, is the middle of this figure. Christ unites God's and man's worlds, Ivanov puts '8' horizontally. The painter himself now in the role of Christ, he unites and mediates two opposite worlds—the world

of faith and the world of truth (knowledge). In the first circle you see pupils of Christ, in the opposite circle—non-believers ('book-people' and pharisaioi). If the first are surrounded by green life's colour, the seconds are situated in a desert. Christ appears on the side of unbelievers because he is more important for them. But you also can see in the left corner of the picture a Jerusalem temple and a *yellow* twig of the green tree upon the temple. It means that Christ's doctrine ('twig') begins weakening, and Christ's apparition is necessarily for his pupils also.

All figures are very naturalistic (realistic), as if you see a photo of a real event. But the naturalistic side of the picture is totally subordinated to the author's conception of a true artist. The artist here is shown as the middle of a weighing machine, on which *faith* and *knowledge* are weighed. Christ is a light unbalanced force on the side of *knowledge*, and yellow twig is a counter force. So the balance is restored again, and the picture seems to be highly harmonical. The more you deepen into Ivanov's picture, into bottom levels of its structure, the more you understand, by means of your visual thinking, the author's conception. You are able to understand that Ivanov found the golden medium among faith and knowledge, and different figures on his picture, young and old, delighted and skeptical, etc., are nothing else but images of Ivanov's personal biography. These figures are symbols of his own creative life way; the central figure is symbolized his found

meaning of life. Much is to be said about Ivanov's skill to harmonize oppositions on each part of his work.

The more general artistic idea, the more abstract may be its visual geometric expression. The top of this visual thinking in pictorial art was achieved, we suggest, by Kazimir Malevitch in his suprematism (in his art of pure forms). His 'Black Square' is the more abstract painting out of possible. As Malevitch himself wrote in his explanations, this work artistically expressed the Hegelian dialectics of pure existence and nothingness. At first a spectator's existence is situated on a white background of the canvas. Then a spectator is pulled in the blackness of the square, into its infinity; it is difficult to return back on the white surface of phenomenon. Such is a pulsation of life and death and a pulsation of a spectator's attention. Impressive people are better not to survive aesthetically 'Black Square'. Many artists and art critics hate this masterpiece. Even if they do not understand its idea, they nevertheless feel that Malevitch revealed in a naked form *absolute*, which is cold and dangerous for normal people. Two sides of each great artistic pictures—naturalistic and symbolistic—are perfectly identical in 'Black Square' accordingly to the top level of artistic material and abstraction. Thus every great master finds his own original form of visual thinking and materializes this form in an art masterpiece, eternally alive.