

## SIGN PERSPECTIVE

Incomplete transcript of T. Novikov's seminar  
with the students of the Leningrad Free University  
in spring 1989

In the early 1980s I was very impressed by the works of Boris Viktorovich Raushenbakh , namely by his book "Dimensional Constructions in Painting", which was published in the arts theory journal "Novost" as a collection of articles, and I have been developing the theory of sign perspective ever since.

Once I studied Raushenbakh I found out he was on the threshold of finding a truth. Later I followed up his works with my experiments and managed to discover this truth.

I will not go into the details of my research, but its outcome was that human conscience, human brain activity, can be subject to studying in the same fashion as is the main source of all graphic arts - human perception.

Let us make a simple model by imagining a human as a certain machine, where the eyes would be cameras, that transmit the signal to the head - our memory storage, our computer. Prof. Raushenbakh came to the conclusion that the process of handling this information changes with time. The process is unstable. Basing on his own experiments and the evidence of other scholars dating back to the 1930s and later in the 1940-1950s, Raushenbakh has established some very interesting facts. For instance, Amazonian aboriginals and tribes from the unreachable areas of Africa who never saw neither photography, pictures, nor television, or in other words, any medium of committing the three-dimension reality to two-dimension carriers, couldn't perceive those images as the analogues of the real objects. They don't see anything but chaotic blurred grey and white spots. They don't have the proper "input processing system" in place. Just like they don't have the notion of art in the modern European sense. This natural phenomenon is just as strange as the fact that the peoples of the so-called "civilized world" find some similarity between a two-dimensional photography or a movie and the three-dimensional world.

This simple experiment led Raushenbakh to the conclusion that each community tailors its own system of visual perception. And it sees thing in the way it has taught itself to. The Chinese, the Japanese and the European not only painted differently, but also saw things in an entirely different way. The world is a kaleidoscope of impressions, and they are brought to order, becoming de-fragmented by our conscience, mainly by its linguistic system. Thus the language and the sense analyzers combine with the genetic program of a particular individual, the artist who was born and grew up in certain conditions.

Some researchers used to claim that perception system is immediate sensing in a given time; it is, they say, a deciphering system of representing the environment on a surface. So Raushenbakh made a step towards developing new alternative systems of dimensional constructions for a new human being. Every citizen of the USSR is well aware of the program of developing a new human being: not so much with regard to the philosophic teaching of Friedrich Nietzsche, but only since it was part of the Comprehensive Program of Building Communism. And as a matter of fact it was implemented in a certain degree after the Soviet cosmonaut Leonov made the first ever space-walk.

The idea of creating a new human being has been of keen interest for centuries, but it became critical only in this century when an almost totally new civilization emerged. In a "machine civilization" that uses rockets, planes, telephones, faxes, televisions, computers and other pieces of equipment that were unthinkable before, the human race can't be content with an obsolete system of perception and systems of encoding the environment, although until this century those systems did fine. In the 1920s new perception systems were introduced in Russian painting and literature. I quote Eugeny Zamyatin's "New Russian Prose": "All realistic forms is projecting the surrounding objects onto the still, flat coordinates of Euclid's world. Nature doesn't have those coordinates, this world is an abstract, unreal thing based on conventionalities. Mathematics and art are both casualties of this erroneous practice. Projecting onto traveling curved surfaces would be immensely closer to the reality. If we try avoid vulgar realism ("realiora") we should see that realism is based on the principles of distortion, deviation, curving and bias".

In the 19th century the principles of traditional linear perspective in painting transformed to the same perspective in photography, and later in cinematography and television. This happened due to the peculiarity of the system of encoding the input: the apparatus was so designed that the lens couldn't catch the space from more than one point. In order to overcome the limitations of single-point viewing Mikhail Matyushkin introduced the term "enhanced looking", which he defined as "an act of deliberate controlling central and peripheral vision in an attempt to see". According to this theory the "enhanced looking" provides for "an integral feeling of any moving subject, caused by the particular sensitivity of the human eye's retina to movement".

But a human is never idle. Always on the move, we keep in our memory more information and process the images as we receive from different points the visual information on them. This natural perception lets a human grasp more of the space than an ordinary photograph can. The rift between the reality and the photograph should sooner or later become obvious. We are constantly aware of inadequacy between what we see in reality and what a picture or a photograph is capable of conveying. Artists tried to overcome these limitations by executing reliefs, sculptural compositions against a relief background, three-dimensional pictures (Pliny the Elder describes one such picture in his "Natural Science"), diorama, panorama, large compositions as in the Navy Museum, the Artillery Museum and the like. Daguerre, one of the creators of photography, was working concurrently on projects to enhance the impact of diorama with different light-effects. Similar projects interested Rozhdestvensky, Malevich's disciple. Then the kinetics started their experimenting in art... Another thing that comes to mind is modern installation. It is obvious that artists, taken generally, have always strived to penetrate the boundaries of a flat surface to work beyond, in another dimension. The artist Ilya Kabakov refers to installations as the "fourth dimension of the plastic art". As for 3D cinema, that hasn't become too popular because of its high cost, but it still exists - as a specific genre.

So, what other recent options do we have at our disposal? The post-war period can be called the time of computers. There appeared new systems of information processing, including dimensional ones. In the simplest computer games and applications program developers use the principle, which is similar to that of ancient Egyptians. In the art of ancient Egypt the size of a character was bound to its significance, the sign had an ideological meaning, and its size was extremely important. An ordinary linear perspective was unacceptable for that reason. Having conducted such observations I came to the conclusion that various elements of space in Japanese or ancient Russian art are closer to the computer way of thinking than the traditional linear perspective. So, I started to work on creating a new system of conveying space that could be

good enough for a modern viewer. I based this system on the perspective that Raushenbakh had described in his "Dimensional Constructions in Painting". He tagged this perspective "perceptive perspective". This "percep-tive, perceivable, scientific perspective" represented a more reliable 3D construction on a surface that took into consideration several particularities of a human's perception. The system of scientific perspective, according to Raushenbakh, is a system "that is created mathematically following only objective laws of the psychology of human vision". All other types of perspective, for instance, inverse perspective are just special cases of perceptive perspective. Perceptive perspective that he carefully calculated in his mathematical formulas in practice means that background and middle ground as well as the horizon line are perceived in the direct perspective, while everything at our feet are perceived in the inverse perspective. The space between rear scene and front objects is some kind of a space turned inside out existing by the laws of a very sophisticated mathematical system. Then I understood that it wasn't time to stop yet. The call of the times is that we should discover a new system of encoding the space. And mine was not perceptive, but a semantic system of constructing the space.



T. Novikov's exhibitions in RAAB Gallery. Berlin, 1991

I spent a lot of time on seashores, in fields... so, most naturally, since my childhood I have been painting landscapes that were divided by a horizontal line. Now I decided to find out why I have always wanted to do so. It turned out that an ordinary painter starts with dividing the sky from the earth, and draws the line of the horizon. But once I tried to split the canvas into three parts instead of the two, nothing would come out of it. Nothing! A human, just like a computer is used to working with a space which is split into two parts. After all drawing (or painting) is committing the 3D space to a 2D surface. Thus it is quite natural to limit the space to two surfaces only within any 2D system. The word and its genesis is described in a dual way. Two is the basis of binary antithesis. The real human world is dual in nature: man and woman, day and night. On the opposite, in an imaginary ideal world a triple system appears adequate for any transcendental system of world imaging. Take, for instance, the Trinity in Christianity, Trimurti in Hinduism theogony, tri-spherical world model in shamanism, Tridevyatoye Kingdom in Russian folk tradition. The number two epitomizes harmony in a human's life. Our brain is used to working in a binary code system. So, there is no need for us to make any special calculations: we are innately equipped to produce harmonic creative ideas.

The mechanism of free construction of the space is enacted by inducing a natural signal sign. This sign determines the nature of the substance of a certain color. If it is green, then it is a field. On the other side a field may well be yellow. And the sky, too, may be yellow: then the space characteristic is designated by imperatively inserting over that color a sign that indicates what this space represents. If we place such sign as a symbol of a bird, or a plane, or an angel, then in spite of the color it will be perceived as the sky. That's semantic perspective.

This perspective theory became the basis, so to say, the "levkas" (first drafts) of my work, and with them the picture was almost finished. Then I started to develop the details. With this semantic perspective I was able to widen and to reduce the space by placing the same sign closer or further from the horizon. Thus I evolved into the author of the works that I have been doing in the 1980s, for the last four years. In these years I have been testing the impact of a sign on a human. Depending on where in the space we place it we refer to a certain scale. The scale of the space is determined by where the artist sets the sign and by how big it is.

Here I would like to refer to the artistic tradition of ancient Russian icon, according to Father Pavel Florensky. In his "Iconostasis" he asserts: a Russian icon artist is free within the canon.

A man possessing a canon has more freedom than the one who doesn't have a canon. The latter doesn't know where to go: should he turn left or right? Only one that has the exact direction can move fast. With canon an artist gains immense freedom. Once the artist is free, he can change the colors of the sky and ground, giving them any condition, and bringing them into any correlation, since everything changes strikingly fast in nature. We can't keep sunny weather for two days running. The climate in St. Petersburg is damp, influenced by the sea. Throughout the year most of the time the days are cloudy, with rain or snow, and mild, scattered light. There are only 62 sunny days in a year. The night comes. Clouds gather. Lightning may strike. Something else happens. The landscape alters. Everything becomes green. Then grass and bushes fade, leaves on the trees go red and fall. It snows. This change of decorations, so natural for theatre, isn't that natural for painting. When the painter's brush became free, it lost the content that had been so important. My efforts to establish a canon didn't reach a result. Meanwhile children around the world have always drawn a horizon line, a house and the sun, and they easily used that elementary conventional language for communication. Many painters talk about it a lot, but they fail to remember that art is first and foremost a language, a means of expression. I arrived at the conclusion that this language shouldn't be too complicated, it should be easier, clearer, more neutral, something like what has happened internationally to the English language: it has become reduced to 30 words. There's a character in the satirical novel "12 Chairs" by I. Ilf and Ye. Petrov called Ellochka Lyudoyedka. She used only 30 words, and by changing intonation and placing her limited vocabulary in the right context she could explain herself. The theory of linguistic games by Ludwig Wittgenstein proves it.

This language, so primitive and yet universal and thus understandable all over the globe, led me to understanding that I'm on the right path. I was studying not the primary information processing, but already the secondary stage - information encoding. I was approaching the eternal, invariable layers of the art, its constants.

What wonders have I discovered?

As you may remember one of the laws of composition theory is completeness. Try to take a small piece out of an antique portico. What would happen? It will fall apart. Meanwhile I, using a small sign (the sign had to be small, as I had found out by gradually shrinking the sign), was acting as a spiritualistic medium trying to prevent the sign from controlling myself. I understood

that the sign gets smaller by itself and I understood that it is a natural process. I scrutinized this area of our perception and became convinced that we often look for very small objects around us: a lighter, matches, a cigarette, a spoon... If one should imagine the immense expanses of space all around us and a tiny teaspoon that we are looking for: it's a remarkably minuscule object! And still we meddle around with those small articles. We start thinking about large objects only when, for instance we have to notice a stool in order not to trip over it, in order to go around it. We practically "don't recognize" large objects or notice them differently (what we see is a number of tiny fragments put together). Our eye casts away everything superfluous searching for a point where it can stay, concentrate and focus. Our "indifference" to small objects, small signs made me think that the artist can make smaller the signal and the sign. Than it will be easier for our vision to read it and the space will become more natural. By leaving not more than one or two signs, making them easy to read, clearing the surface of any unimportant details I developed the picture structure that I would practice later for a long time.

The theory of sign perspective based on semantic perspective read: if the space that the artist created is ideal, than the old laws of composition don't apply to it. Later I made sure the signs are naturally arranged: i.e. it is a large surface and the signs are small; then this balanced composition allows for the miniscule sign to move about without confusing the general equilibrium. This is how this two-part horizontal composition became so liberalizing for me. I can move the boat that sails across the ocean to the left or to the right: the composition stays perfect, natural and harmonious. Not so long ago I made a short animated movie with a boat sailing and a plain flying across this space.

So, what is "re-compositioning" - an urge to reshuffle? Or understanding that changing the places of the items doesn't alter the sum?

Sign perspective is simple, it isn't a dogma, it's only a particular case, one of the possibilities in the artistic creation of space. It has been very convenient for me in the last several years, but you are welcome to come up with your own system of dimensional construction.



T. Novikov's exhibitions in the Museum of Natural History. 1992