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Lecture 14. The Structure of Consciousness

Sensory Fabric, Meaning, Personal Sense

Even a superficial analysis of consciousness reveals a very complex structure. First, it is axiomatic that man's self-reported picture of the world, that is the picture that appears to him, involves as its necessary moment sensory impressions, sensory images—I prefer to say sensory fabric.

This fabric forms the sensory composition of specific images of reality—currently perceived or arising in memory, relating to the future, or even merely imagined.

We will note from the outset that the sensory fabric is an essential but not decisive “moment” (or formative) of consciousness. This is obvious from the fact that a sensory fabric can seriously change without affecting, however, the main thing—the picture of the world. Therefore, a human consciousness with a normal perception of color is unlikely to be essentially different from the consciousness of a person who is completely colorblind, that is, a person who sees the world as a black-and-white

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Translated by Nora Favorov.

photograph. Even if a person is completely deprived of sight, the sensory fabric of consciousness will be woven from tactile, auditory, and other sensations. Nevertheless, despite the sharp dissimilarity in the perception of a blind person from the perception of a person with normal sight in terms of sensory composition, the consciousness of the blind person is equal to and of equal value to the consciousness of a person with sight. Even in rare cases of the deaf blind, their consciousness, given certain conditions, can attain a high level of development, despite an extremely meager sensory fabric. It should be enough to recall the famous deaf blind mute O. Skorokhodova, Candidate of Science [Ph.D.], and author of two or three books. Examples demonstrate that given extreme changes in the sensory fabric, human consciousness does not fundamentally suffer any essential changes. In this impoverished sensory fabric there are vibrations, olfaction, and kinetic sensations. It is also important to understand that if we "cut out" or "remove" these sensory components, consciousness becomes completely impossible since the sensory component of consciousness fulfills a function that may appear trivial, but is extraordinarily important in the reflection of the true picture of the world, and it cannot be replaced.

The special function of conscious sensory images is that they lend a sense of reality to the conscious picture of the world that appears before the subject. To put it another way, it is specifically because of the sensory content of consciousness that the world appears to the subject as something that exists not in consciousness, but outside his consciousness—as an objective "field" and an object of his activity. This function of the sensory fabric, the function of the immediate connection between consciousness and reality instantly reveals itself whenever an abnormality or distortion in the reception of external input emerges.

During World War II, while working in an experimental military hospital, I had occasion to observe a very striking manifestation of the consequences of the functional loss of the real world images, which then became unreal. In this hospital, we were working on restoring movement after a wound afflicted both central nervous system and the peripheral areas. The most typical wounds were those of mine disarms. Such wounds, especially typical for those disarming mines, occurred as a result of an explosion that tore off their hands, and because of the burst of flame, their sight was completely lost at the same time. Wounded mine disarms received reconstructive restorative surgical operations for the massive displacement of soft tissue of the forearm, resulting in the fact

that they lost the ability of tactile perception of objects their hands had once provided. After this operation, a seeing person could usually use a two-fingered hand made from the forearm, and was able to adapt to the conditions of life very well. For instance, a sighted patient who underwent such an operation learned to use his two-fingered limb with a degree of virtuosity that enabled him to sprinkle tobacco to roll a cigarette—in other words, to take care of himself in his daily life. Such patients even learned to write, that is, some period of time after the displacement of the soft tissue of the forearm; in sighted patients the sensitivity of these tissues was restored, and was usually restored centrally. What does this mean? What was happening was that after such an operation, the ability to accurately localize the point of stimulation was lost, and stimulation initially returned, so to speak, to the previous locations; the brain was mistaken about which segment of the skin was being stimulated. A typical example of this phenomenon is phantom pain, when after the amputation a severed nerve begins to hurt in the stump, and the patient localizes the pain not where the true point of stimulation is, but where the receptors are located, along the path where the stimulation occurred. With “phantom” pain, a person is mistaken since the signal coming to the brain is perceived as coming from the missing organ. If the patient still has sight, his brain, after some time and with the control of sight, can correct the mistakes in the nerve localization of the point of stimulation, rebuilding the “old” connections, and the person again begins to accurately localize the point of stimulation and govern his movements.

In cases where sight is damaged at the same time—when due to blindness visual control is not possible—this operation (using Krukenberg’s technique) does not have any practical effect. The patient remains helpless, and without a control as powerful as sight, his objective manual movement is not restored. I was struck by something else: in such patients we observed the consequences of the loss and disruption of the primary function of sensory images—the function of the immediate connection between the subject and reality. Several months after they were wounded the patients developed unusual complaints: despite their completely intact verbal communication and fully preserved mental processes, the external world was gradually “receding,” and had begun to “disappear” for them; although verbal concepts (the meaning of words) preserved their logical connections, they, nevertheless, gradually lost their

objective reference. There was insufficient immediate connection with the objective world. There emerged a truly tragic picture of the breakdown of the patient's sense of reality. "It is as if I read about everything, but haven't seen it. . . . Things are farther and farther away from me," is how one blind amputee described his state. He complained that when someone would greet him, "it is as if nobody is there."

Or, for instance, another patient informed us that when someone comes up and pats him on the shoulder, despite the soundness of that part of the body and the certain intent of the signalization, this pat is perceived as coming from some unknown source. The loss of a sense of reality was so difficult for patients to bear that there were even attempts at suicide. In the end, it was possible to find a way to restore this function of sensory images. For this it was necessary to "turn on" the active movement of the extremities. After all, the hand is not only an organ of action but also an organ of perception, and this must not be forgotten.

As a result of "turning on" the hands, the patients' sense of the reality of the world returned and the sense of illusion of the world disappeared. After this, the patients' mental state was restored.

In this connection, I can recall one very severely wounded patient for whom it was possible to restore a sense of the real world. He returned home to a remote Siberian town and we received a letter from him: he had begun working as bookkeeper for the collective farm (he was a bookkeeper by profession) and he had been successful in this field. He even became a full-time specialist consultant. Life returned to normal and there was absolutely no question of a lack of reality. This episode is described in the monograph about restoring movement.¹

Similar phenomena concerning a lost sense of reality are also observed in normal people under conditions of artificial inversion of visual impressions. At the end of the nineteenth century, G. Stratton, in his classic experiments with the long-term wearing of special glasses that turn retinal images "upside down," noted that this caused an experience of a lack of reality of the perceived world. He wore these glasses and observed all of this himself.

In analyzing consciousness purely on the basis of introspection, the false impression may emerge that a conscious world exists completely divorced from sensation. At the beginning of our century proponents of the Würzburg school, who were attempting through self-observation to penetrate a certain independent, separate world of "thinking conscious-

ness," put forward the proposition that images, sensory elements, do not play any role in thinking (not sensory, but thinking) consciousness. Such conclusions and propositions relate primarily to the fact that on the basis of self-observation it is impossible to discover or follow the movement of images. There exists, of course, a movement of thought that is not manifested in the movement of images, but here it is necessary to make the correct emphasis. In talking about sensory fabric, we are absolutely not engaging the question of whether or not images move in consciousness. This is not the point. We are interested in something else, specifically whether or not the movement of the most abstract thought in consciousness is possible outside the primary function that elements of the sensory fabric fulfill. No! Normal thought, the normal movement of consciousness without the sensory fabric is fundamentally impossible. And it is not only the examples introduced above that convince us of this. In descriptions of thinking work by scientists, we encounter constant references to the importance of sensory images in the thinking process. For instance, A. Einstein often remarked that sensory elements were always present in his abstract constructions.

In recent times it has become customary to speak about "visual thought." Here what is meant is not thought of the sort that transforms one sensory image into another, but more subtle things: the constant (indirect) participation of sensory images in the thinking processes as a condition of these processes. Because of the participation of visual images in thought, "simultanization" is possible, that is, the concurrent seeing of a problem and the reality related to the process of thinking appears to the subject not as a process, but as a concurrent, existing "presence." And this function is carried out by the sensory fabric.

So, the sensory fabric present in any form of consciousness is one of the moments (this term is better than "formative") of consciousness; I specifically emphasize, moments, and not elements, not bricks that are laid one upon the other.

However rich the sensory fabric might be, it is impossible to build on it a picture of the world understood by man. In man, sensory images take on a new quality, specifically, their own meaning. Meaning is the second most important "moment" of human consciousness.

As has been stated above, consciousness does not arise without the existence of language. Meanings refract the world in the human consciousness. Although the vehicle for meanings is language, language is

not the demiurge of meaning. Behind linguistic meanings are hidden socially developed means (operations) of action in the process of which people come to know and alter objective reality. To put it another way, what is presented in meanings is the ideal form of existence of the objective world, transformed and rolled up into the material of language, its properties, connections, and relations, revealed through the totality of social practice. Therefore, the meanings in and of themselves—abstracted from their functioning in individual consciousness—are just as “un-psychological” as the socially perceived reality that lies behind them.

Again, we will emphasize that the system of linguistic meanings reveals itself through an analysis of consciousness as one of its “formatives.” In order to illustrate the significance of this “formative” for psychological research, I will point out that it is the psychological study of consciousness that seriously advanced only after the concept of “meanings” was introduced as central. This was done a half century ago by L.S. Vygotsky, who proposed the very strong thesis that the unit of human consciousness is meaning. This step was extremely important, in particular because of its decisiveness. The connection between consciousness and word had been noted frequently before the works of Vygotsky, but only Vygotsky decisively pronounced that meaning is the cell of human consciousness.

Meaning is always the meaning of the sign, in this case, the word. Furthermore, the word itself, in the body of which resides meaning, is only relatively, conditionally tied to meaning. Thus, meanings of words in different languages can completely intersect with one another while the words themselves, through which this meaning is expressed, can have literally nothing in common in terms of auditory (phonetic) and orthographic makeup. Consequently, meanings are only relatively tied to their vehicle, the word.

Further, we come up against a problem that is a stumbling block for psychological analysis of consciousness. This is the problem of the unique features of the functioning of knowledge, concepts, cognitive models, and so on, on the one hand, within the system of relations of society, in social consciousness, and, on the other, in the activity of the individual, realizing his social connections in his consciousness.

In other words, meanings lead a dual life. Meaning, first of all, exists as the meaning of language. And what is language? An individual or a social product? Social. It exists as a certain system of objective phenomena in

the world, in the history of society. Does it depend on a particular individual? No. Language develops in accordance with its own objective laws as a system of social, objective phenomena, not tangible, but ideal, that is, carrying within itself something, a reflection of a certain reality, precise, or not so precise, sometimes even fantastic.

Thus, the movement of meanings reveals itself primarily as objective historical movement. And the history of meanings and the meanings themselves, removed from the internal relations of the system of activity and consciousness, is absolutely not the subject of psychology. This is the subject of other sciences, such as linguistics.

Speaking of the objectivity of meanings, we are primarily thinking of the fact that meaning as such is not created by an individual person. The individual only acquires, learns the meanings of language of his own day, of his own society, of his own surroundings—that which he encounters when he is born. But that, of course, does not change the fact that language is produced by individual people, and, consequently, every individual can introduce his modest contribution to the development of meanings. But that individual contribution is like one grain of sand thrown into the Sahara Desert. The most interesting thing is that when a person throws his grains of sand into the world of language, making his contribution to this world, he makes it in accordance with his own laws, the psychological laws of his own, individual life. After the grain of sand takes its place in the vastness of language, the laws governing its movement change. It begins to be governed not by the laws in accordance with which it was created and produced by an individual, but in accordance with the laws of movement of the language itself. So, if a person creates a neologism that the language, as an objective system, does not accept, then such a neologism will not gain currency, will not enter the language, and most likely will disappear together with its creator. Whether or not a neologism is accepted is dependent not on the laws used in creating it, but on the objective laws of the movement of the language (whether or not, for instance, it fills a certain “lacuna” in it).

From what has been stated above it is obvious that there exist two different movements. One is the objective movement of meanings within language, the movement of the linguistic system. In this, its objective existence, the movement of meanings is subject to sociohistorical laws, and, concurrently, to the internal logic of their own development.

For all the inexhaustible riches, for all the variety of this life of

meanings (just think—all of the sciences deal with it), within it there remains another, completely hidden life, another movement of meanings: their functioning is in the processes of activity and consciousness of specific individuals, although they can only exist through these processes. This movement, in which the existence of meaning—objective, social by nature, and divorced from the individual person—transitions into an existence within the mind of an individual. And such a transition is not a simple concretization of meaning or a transformation from the general to the particular, but the beginning of that life of meanings, the only one in which they take on their psychological nature. It is as if meanings are enlivened with a new movement, with movement within the processes of activity and consciousness of a specific individual. Something amazing takes place within this new movement—the return of abstractions of meaning to the actual reality from which meaning was, at some point, divorced, split, and the beginning of its independent movement within the history of language, the history of society, culture, and science.

However, if we return to their existence within the processes of individual activity and consciousness, meanings do not move along a historical path, a path of descent from abstraction to increasing specificity, and finally, to the object that generated it. The objective world that generated the first meanings, most likely, no longer exists. It has passed away, changed, and been transformed, just as our distant ancestors, who produced the first meanings, have died, and just as people themselves have been transformed—not in the morphological sense, but in terms of their social relations. This is another path. This aspect of the movement of meanings within the consciousness of specific individuals constitutes their “return” to the objectivity of the world with the help of that sensory fabric discussed above.

Although in their abstraction, in their “super-individualness,” meanings are indifferent to the forms of sensibility through which the world is revealed to a specific subject (one could say that meanings in and of themselves are devoid of sensibility), their function in the realization of its actual vital connections by necessity presume their reference to sensory input. So, there is movement bringing together the abstract and sensory world in which I exist and which I reflect in their actual forms, through the existing possibilities that are essentially the psychophysiological possibilities.

Of course, the sensory-objective reference of meanings in the consciousness of a subject is not necessarily direct; it can take the shape of a chain of compressed cognitive operations of any level of complexity—especially when meanings reflect reality that appears only in its most distant, oblique forms. But normally, this reference always exists and disappears only in products of movement, in the exteriorized meanings.

The movement that brings together abstract meaning and the sensory world is one of the most essential movements of consciousness.² But in order to understand this movement as a formula of reflection generated by human activity in society it is necessary to introduce one more “moment.” After all, human activity is active in the sense that it is stimulated by something and something directs it as if toward itself. I will remind you that action, with all of its options, generating conscious reflection of reality in linguistic form, develops only when it has impetus. Usually this impetus is depicted in two forms: the first, especially emphasized in classical psychology, is that which impels from inside, a need or inclination of the subject. This is a thrust from within. But what interests us now is not so much the internal states themselves and their dynamics, that is, their cyclical nature, as their concretization. These internal states can determine the focus of activity only when they are concretized in a specific way. Otherwise, they are useless. What is the point of thirst, taken abstractly? Until this feeling is infused with the idea of an object, it does not stimulate action. It only begins to stimulate action when there arises an idea about what is needed. Only when a person can see or imagine a glass of water, then thirst “impels” him to the glass, that is, it is necessary for the need to be represented in an object, objectively. Unless the need is objectified, it is capable only of stimulating a random, searching behavior, to cause me to rush about, to examine the situation. The object that impels and targets activity toward itself is the motive for action. In other words, the object of activity is its true motive.

It goes without saying that it can be either material or ideal, either perceived or existing only in the imagination, in thought. The most important thing is that it always comes with a need—it always meets some need or another.

How is the motive presented in consciousness? First, awareness of the motive is far from necessary for the subject. It is not necessary inasmuch as if you were to ask me why I am delivering a lecture, I would not be able to answer. If you were asked why you came to the lecture in this

awful weather, you would immediately come up with a motivation that may not answer the true motive. This is always a problem. Discovering the motive is always solving a special problem. Only certain motives are immediately recognized, but this is a rather narrow class of motives.

In order to answer the question of how a motive is represented in consciousness, it is necessary to view the other side of the movement of meanings. This other side consists in their special subjectiveness, which is expressed in the bias they assume. In and of itself, meaning is a thing, deeply indifferent to a person, whether it is a table, a chair, an abstraction—"N-dimensional space," or happiness, benefit, misfortune. In order not to be indifferent, the conscious, objective meaning must turn into meaning for the subject, it must acquire personal sense. Personal sense is the third "formative" of consciousness. In order to make the distinction between objective meaning and personal sense appreciable, let us look at a gloomy example that always comes to my mind: the word "death." Everyone understands what is meant when this word is pronounced, as the meaning is common to all people. Nonetheless, this word is understood by us in different ways when we discuss death in a lecture hall or when death is threatening someone close to us. The very same meaning is understood in different ways because it is involved in different relationships. Consequently, there is a distinction between "meaning-in-itself" [in the text of the oral lecture—"meaning-for-itself"] and "meaning-for-me. "Meaning-for-me," which I have called "sense," and then limited it to "personal sense"—is the third formative of consciousness. Meaning, therefore, lives yet another life—it is involved in the relation to a motive.

So it is unimportant whether a subject is aware or unaware of motives, whether they signal their presence in the form of a feeling of interest, desire, or passion. Their function, taken from the perspective of consciousness, is constituted in the fact that they, so to speak, "evaluate" for the subject the vital meaning of objective circumstances and his actions under these circumstances—they endow them with personal sense, which does not directly correspond with their understood, objective meaning. Unlike meanings, personal sense, just like the sensory fabric of consciousness, does not have its own "super-individualness," its un-psychological existence. If external sensibility brings together meanings and the reality of the objective world in the consciousness of the subject, then personal sense brings them together with the reality of

one's own life in this world and its motives. Sense creates the partiality of human consciousness.

Concerning internal experiences that emerge on the surface of the system of consciousness in the form of feelings of interest or boredom, impulse or pangs of conscience, they only seem to be internal forces that impel a subject's activity. These internal experiences, directly revealed to the subject from behind the motive once the need is realized, serve a unique function consisting merely in guiding the subject toward their true source. The actual function of these experiences is constituted in the fact that they signal personal sense of an occurrence taking place in the life of the subject and force him, so to speak, to halt the flow of his activity for a moment, to examine the important values taking shape in him, in order to find himself in them, or, perhaps, to reevaluate them.

I have used all my time. Consciousness appears before you as movement, bringing together the most complex moments: the reality of the world represented in sensory stuff, the experience of mankind reflected in meaning, and the partiality of my existence as a living being, consisting in the acquisition of "meaning-for-me," meaning for my life.

This is how the human consciousness develops—it is a surprising, exceptionally complex movement of man's reflection of the world around him, of his own activity in this world, and of himself.

Notes

1. A.N. Leont'ev [Leontiev] and A.V. Zaporozhets, *The Restoration of Movements* [Vosstanovlenie dvizhenii] (Moscow, 1945).

2. The movement bringing together sensory function and meaning is the reflection of the movement of human life itself. What I am doing is substituting the concept of "life" with the less general and more specialized concept of "activity."

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