

THE STUDY OF HIGHER MENTAL FUNCTIONS AND THE CATEGORY OF THE UNCONSCIOUS^{1,2}

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In the early stages of the study of higher mental functions, with creative thinking being the most difficult function for analysis, using the category of the unconscious was an indispensable and perhaps the most important condition of discussing the nature of creativity. If the category of the unconscious were to be excluded from the discussion of works by F. Galton, Poincare, H. von Helmholtz and many others, there would be hardly anything left. The unconscious was ontologized and interpreted as a subjective space (the “vestibule of consciousness”), a place where images and thoughts adhere to each other, just as there is adhesion of atoms moving in space. The term “game” was often used (a game of images, a game of thoughts), and the most favourable conditions to play such a game are provided at altered states of consciousness, or when it is

played without arbitrary control and planning for success. The unconscious was seen as a source, a medium, even a focus of insights, discoveries, solutions, attitudes, motives, and so on. Deliberately or not but this interpretation of functions of the unconscious caused a depletion of the characteristics of higher mental functions. It was often the case that they received negative or meaningless characteristics, such as: “Insight occurs in short periods of time”; “an unconscious preparation of intuitive decisions is required”; “intuitive solutions are accompanied by a conscious feeling of complete confidence in the correctness of a result.” Such characteristics lead to conflicting advice on how to organize creative work: it would be good to reduce the external distractions (a solution may come in a dream); it would be good to arrange a prompt (a solution may come

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² This article is based on the report made at the International Symposium on the Problem of the Unconscious (Tbilisi, 1979). <...>. The article can be viewed as a continuation of the authors’ reflections on the related issues of philosophy and psychology of consciousness contained in another article (see Zinchenko & Mamardashvili, 1977). Some of the ideas expressed in the two articles have been developed in a recent article by V.P. Zinchenko dedicated to the memory of M.K. Mamardashvili (see Zinchenko, 1991).

in the most unexpected places, for example, in front of a cage with monkeys or in front of a burning fireplace).

In other words, the unconscious was taken quite naturalistically: there was a search for the most favourable conditions that would provide maturation or a kind of cultivation of the unconscious.

The apparent success of using the category of the unconscious to describe and interpret the creative process served as one of the grounds for further generalization of this category, and for using it to describe and interpret practically all the phenomena of the life of the psyche. It is noteworthy that despite the generally constructive nature of Freud's concept, he also largely retained the naturalistic interpretation of the unconscious. It served as a reasonable (and most often beyond awareness) basis for criticizing the concept. Moreover, Freud treated also consciousness naturalistically, for example, in processes of repression. The point is in understanding repression not as an automatic process (but this is the understanding the term provoked), but as a special activity of the psyche, even if unconscious. After all, repression is not a plunge of heavy contents into some deeper layers ("physical base"), but a special encryption of these contents, i.e. a special activity-related semiotic process. As a result of this process, in front of consciousness there are only encrypted "messages" within its phenomena, with the key to the messages to be found only in the course of psychoanalysis, because consciousness simply re-signifies a phenomenon so that it is not aware of its actual content.

But if (in the course of development of the theory and practice of psycho-

analysis) the categories of the unconscious and consciousness were made increasingly operationalized and "cultivated," they continued to be treated naturalistically in the context of studying cognitive processes, as, indeed, cognitive processes themselves. This contributed to the fact that the category of the unconscious was gradually displaced from the description of the creative process. It was replaced with other mental (and not only mental) functions and processes (such as imagination and intuition). The category of the unconscious in the description of higher mental functions was steadily decreased. The category of the unconscious started sharing the destiny of the category of consciousness. Reactology, reflexology, and behaviorism tried to oust these categories from scientific psychology together with the categories of the soul and the psyche. There have been attempts to substitute the psyche (conscious and unconscious) with the dynamics of nervous processes. The processes of decision making changed their address. They began to occur not in the space of the unconscious, but in the space of the brain or in the space of trial and error. This wave of antipsychologism was typical for psychology (especially with the advent of behaviorism and cybernetic (and more broadly speaking, technological) structures of the brain) at the turn of the 19th and 20th centuries. However, the category of the unconscious continued to exist, and not only in psychoanalysis. Despite the obvious now failure of the naturalistic interpretation of both the conscious and the unconscious (as well as the psyche in general), the category of the unconscious played (and continues to play) a

positive role in the development of psychology. Remaining *terra incognita*, existing in the subconscious of modern scientific psychology, it acted as an opposition to antipsychologism. For a long time it had supplied building material for constructing the building of psychological science. Moreover, the presence of the category and phenomena of the unconscious served and continues to serve as a reliable protection not only from the most extreme forms of reductionism in psychology, but also from its lightweight forms. The category of the unconscious is a barrier to any forms of reducing the mental. But it is not just about the “safety” features of the category of the unconscious.

There is no doubt that psychological ideas of Freudianism and neo-Freudianism impacted on the development of research into higher mental functions. We do not set ourselves the task of an overall evaluation of these ideas, but we shall mention only a few of the provisions in aspects that interest us. And they lie in the fact that Freud, in an attempt to explain the behaviour and activities of the individual as something integral, came to the thesis of a three-tier structure of the psyche. Hence, in particular, it was indicated that the activity and the psyche cannot be represented linearly, in the same plane. In accordance with the idea of a complex, tiered structure of the psyche in the Freudian tradition, a universal unit of study was rejected and it was proposed to build a certain taxonomy of such units so that a unit type corresponded to each of the levels.

These ideas are more or less completely presented in any modern research development of higher mental functions. But finding them there is no

easy task. To solve it, it is necessary to conduct a kind of psychoanalytic course (or an experiment) on psychological science itself, during which these repressed (or rather, encrypted) ideas may be deciphered. The results of such activity-related semiotic study of the problem will be much better if specialists in both studies of higher mental functions and of the field of the unconscious take part in this course.

A very important archetype of psychological thought manifested in the Freudian distinction between the conscious and the unconscious, according to which the psyche had a tier structure. Despite the fact that for the first time this archetype had already been clearly articulated by Aristotle, its primarily Freudian conceptual content affected the development of the whole of psychology.

Traces of the dichotomy of “conscious – unconscious” are found in oppositions widely used in modern psychology (“outer – inner”, “involuntary – arbitrary”, “non-reflexive – reflexive”). The idea of interiorization (as well as currently common hierarchical models of cognitive processes) is associated with Freudian ideas about the tiered structure of the life of the psyche. Of course, the substantive content and the conceptual content of these conceptual schemes differ. However, these differences are not absolute, and the similarities (which will be discussed below) are not limited to formal features.

Contemporary conceptions of mental activity, its nature, its general tiered structure, and operating content have become richer and fuller since Freud’s times. Nevertheless, the attitude of not only early but modern studies of higher

mental functions to the problem of the unconscious could be defined as an urge to actively repress it. It is not appropriate to mention the unconscious in the respectable society of psychophysicists and psychophysiologists, as well as those psychologists who are mathematically, physiologically and linguistically oriented. Experts in cognitive psychology also use the term "unconscious" only in the historical and theoretical context. But the issue of the unconscious (as the unconscious itself) is tenacious and vindictive. The bashful silence about it either causes antipsychologism (and, correspondingly, diverse forms of reductionism) or brings us back to earlier attempts of ontologization and naturalistic interpretation of the unconscious (with the terms being certainly appropriately encrypted). The latter is found in modern cognitive psychology, with the structure of higher mental functions being described in terms of block models. While it concerned the analysis and the work of potential (functional) blocks, cognitive psychology did not face serious difficulties that appeared when it became necessary to explain the mechanism of their synthesis. The fact is that the time scale of their operation is such that the mind cannot cope with the task of coordinating them. But one could not go back to the category of the unconscious. So demons and homunculi came to help (D. Norman, F. Attneave et al.) or, at the opposite pole, did physico-chemical (and genetic-code) structures of the brain (a reduction to which seems a desirable and distant dream for J. Piaget's genetic epistemology and even for the cultural anthropology such as Levi Strauss's). But the latest attempt of description

cannot, paradoxically, be limited to the assumption of the same demons or Ampere's 'little men' floating in the channels of the structures synthesis.

The question arises: would it be better to replace the tactics of removing the problem or its encrypted expressions with a *strategy* of its explication, and then of solving it? In order to fully learn from the fact that it is the resistance of the unconscious that most clearly reveals the irreducibility of the field of consciousness and the psyche in general, it is necessary to overcome the unconscious in scientific research. We think that for that purpose a sufficient arsenal of means has been accumulated in modern psychological science: if not to solve the problem of the unconscious, then to set this task correctly. Naturally, though, perhaps surprisingly, it is consciousness (not the unconscious) that will constitute here the problem *par excellence*.

We have already said that with the problem of explaining the mechanisms of synthesizing, for example, block models (or even machine-modulated technological structures of thought), we are dealing with the categories (of time, space, level, hierarchy of levels, the whole etc.), the dimensionality of which does not coincide with the dimensions of the act of conscious coordination of the relevant processes and block models (the former either greatly exceeds the latter, or, in its microscopic characteristics, remains below the threshold of its distinctions). For example, in the opinion of specialists in the causes of aviation accidents, in difficult flight conditions man and machine appear as if out of time, and this is what gives a chance for salvation (we mean the time of consciously con-

trolled decisions and actions), but where is this salvation happening? Or in such cases we should assume at least a dual countdown: of the real, situational (physical) time and of the time that flows in the space of activity (not objects). It could be called supra-situational. And the both axes of time must be precisely coordinated — but by whom? Does this act of coordination have a subject? Here the loss of self-control of the subject is a visible condition (withdrawing of the self from the situation, and, therefore, not only of the time of objects, but also of the time of subjects). Thus, we find ourselves here in front of a free action or a free phenomenon. And as the ancient people said, a free man does not make mistakes. At the same time, only here we are for the first time in the field of very special events as part of the cosmos, namely, of actually psychological phenomena, which are acts but not facts (in this case, the very concept of “fact” should be reconsidered in psychological science). Otherwise, the assumption of these phenomena would be superfluous, redundant in the total physical organization of the cosmos. And no one would think of describing such acts in terms of a controlled act (that is also being constructed by the conscious presence of the individual subject and his or her will). The terms “blocks”, “operation”, “functional organs”, “organs of individuality”, “installation units” (and as the ultimate representation — a “spiritual body”) and the categories of “space”, “time”, “whole” and “life” cannot be used here.

It means a simple and yet terribly difficult thing to digest. Just as we have a hard time when mastering the idea of relativity in physics, it is difficult, due

to the phantasms of our everyday I-centered language and to habits of our psychologized culture, to learn, to pull out into the daylight and justify the idea that we actually operate with distinguishing within consciousness itself of two kinds of phenomena: 1) phenomena that are controlled and deployed by consciousness and will (and in this sense they are ideal-constructive), and 2) phenomena and relationships that operate in consciousness but are implicit in relation to it and are uncontrollable by it (and in this sense they cannot be controlled by the subject and generally speaking are subjectless). We shall point out that we are talking of the distinction within consciousness, rather than of objects affecting it from the external world or the physical and chemical processes occurring in the brain (which, in the phenomenological sense, too, is an object of the external world to consciousness). The idea is that something *in consciousness too* has existential (and amenable to objective analysis) features in relation to consciousness in the sense of an individual psychological reality. The degree and extent of manifestation (or, if you will, action) of existence in consciousness is inversely proportional to the degree and extent of its reflection of its own, sealed by the I, act of activity and its objects in the world. It is clear that the concepts of “physical action”, “objective” (independent from consciousness), “outer”, “pseudo-law”, “spatial”, etc. should be reviewed (and enlarged) in this concern.

In the study of human reality, and in the development of its conceptual apparatus it should be especially borne in mind that man is not a fact, like existing facts of nature, but it is an

action. We insist on the concept of the act also because in modern psychology, as well as in modern psychoanalysis, such categories as “communication” and the “word” are put forward as an opposition to the categories of “activity” and “instrument”, with the focus on tracing in one’s own life some self-existent reality that is not separable by means of physical examination (external supervision) from seeing the conscious life and meaning. One might recall the old debate about what was in the beginning: the Word or the Deed? But the solution of this dispute can be also sought in the distinction between the instrument, on the one hand, and the word (sign), on the other. According to M. Bakhtin, the instrument, unlike the sign, has an assignment but not a signification. In other words, with regard to “word – reality” we are talking about assigning the category of symbol as a thing that is different from the sign. And, apparently, both the nature of the sign and the polysemy of language are associated with the potential multifunctionality of symbols-instruments that construct reality in various forms of activity-related acts.

Returning to the specific (technical) meaning of the term “unconscious” as used by Freud, we can say that the experience of psychoanalysis is important because it introduced (based on the particular case of the age “libidinal” phenomena) into a range of scientific objective examination of phenomena of the psyche of the kind that we have just discussed, the quasi-physical objects and relations in consciousness that form latent and uncontrolled mechanisms and processes that are not random-conscious in the classic sense of the word.

The greatness of Freud was in his interpreting the unconscious as timeless and metapsychic that in many ways (at the level of the method and specific plastics of the analyzed examples) neutralized his own naturalistic prejudices of a positive scientist of the 19th century. Ontologization of the unconscious, treating it as some kind of a really existing profound layer of the psyche, a kind of “Pandora’s Box” happened much later as a product of the vulgarization of psychoanalysis.

A similar but more recent product is, by the way, the vulgarization of the theory of attitude and set by Uznadze that made the latter almost unrecognizable and certainly disparate to psychoanalysis, although (only) in the metapsychic approach to the phenomena of the life of the psyche there is something in common between them (and not in referring to the selection and content of psychological phenomena studied in the context of these theories). In fact, guided by deep philosophical motives, Uznadze was interested primarily in a special category of events: acts of adequate behaviour that is not an appropriate adaptation to the situation (or to the “medium”) and is unparsed in terms of goal-setting, choice of means of rational organization of their relationship, etc. He applied analytical concepts of the “whole”, “set”, “personal unity”, “central modification of personality”, etc. to facts of achieving this kind of adequacy regarding them as manifestations of a deep existential or ontological rather than psychological level. Therefore, the “set” could not be a mental phenomenon for him or, even more, a manifestation of the “mentally unconscious.” To him the mental quality could be attributed only

to the material, which could be used to experimentally record invasions or “emergencies” of this existential and ontological level, and he believed (and saw in this a discovery of his) that he had found such empirical, experimentally observed phenomena of the life of the psyche with which by an experimentally controlled manner real results of the activity could be traced, the latter being neither psychological nor mental. He seemed to aim at “catching” metaphysics using physics (in the sense of its quite real consequences for human beings and, above all, for the higher forms of their conduct, or higher mental functions).

Getting back to the free action, we shall now use the term “consciousness” for these timeless states of being dissolved in the subject (not objective) topologically meaningful reality, thus understanding consciousness as not a phenomenon represented in the inner psychological, I-shielded reality. Only in this way we can monitor and record really higher mental functions and states i.e. self-existent manifestations of life (or, as they used to say before, of the “Invisible”, or “Superior”), non-constructible sequences in a continuously traced action. In the historical experience known to mankind such things were revealed and observed in various forms of meditation, in psychotechnically arranged re-awarenesses or changes of consciousness. We would like to complete the argument with the circumstance that all these “emergencies” and “actual geneses” of free phenomena are always associated with matter and symbolic constructions, with installations of things. For further development of research in the field of higher mental functions it is from this

point of view that achievements of psychoanalysis in studying the particular case of the life of this kind of items are important (the example being completely real, somatically organized phantasms, significant physical phenomena, organs of desires, etc.). This is quite comparable to the interpretation of movements, attitudes, images, ideas as functional organs of individuality developed in modern experimental psychology, where each act performed by a relevant organ is unique, i.e. creative. Only in the case of the unconscious, which is the subject of psychoanalysis, are we dealing with unfortunate “machines” of this kind that leave stagnant traces of their failed adhesions in mental life, the traces re-signified by the empirical consciousness and therefore pathogenic. Conversely, the psychoanalytic cure is in the work within the communication between a patient and a doctor (and only within this communion!) on restructuring of such mechanisms, on bringing them in motion and collision, the collision being capable of freeing frozen, re-signified, digressed, not-experienced and unrealized potentialities.

We shall point out that when describing organs of individuation modern experimental psychology has long been really faced with the inversion of phenomena of causality (retarded, anticipatory, full), with heterogeneity of units of analyzing phenomena of the life of the psyche and with polyphonicity and heterarchy (rather than hierarchy) of its organization. We shall not talk about these phenomena in modern physics that learned from the experience of psychoanalysis, apparently, before experimental psychology.

The timelessness of the “unconscious” in situations critical for man is

similar to the timelessness of creativity, insights and discoveries that have the dissolution of the subject in the “phenomenon of freedom” as an essential condition for them to happen, that is, in the renouncing of his own empirical subjectivity and the suspension in himself of spontaneous action of cultural and symbolic authentication of psychism. If we are not mistaken, P. Florensky spoke of how important the intense spiritual experience of love is for creativity. Within true love it is typical to reject oneself for the sake of the state of love because only through this state some other reality and a true infinity of conscious experience can be revealed. In this sense, such organs of individuality as desire, love, etc. are in a way unnatural, or rather, strictly human. This is even more true in regard to the state of mind that, first and foremost, should be seen as a manifestation of the existential power (energy) of Consciousness.

But this implies (especially in terms of confronting psychoanalysis and the problem of creativity), a different understanding of the sense and meaning of what happens in the act of psychoanalysis: not in relation to any alleged subject of research (called the “unconscious”), but as empirically occurring (or not occurring) acts of the study or research itself.

For example, the argument about the role of memory in the creative thinking processes can be carried out by contradiction. It is no doubt that the entire work of M. Proust was aimed at not finding some forgotten object (or meaning) but at creating it so that to remember it (or: for it to be remembered). Intuitively it is clear that the process of forgetting is opposite to the

process of restoring memory content (and also to creativity). For a long time forgetting was interpreted as the result of spontaneous extinction (disintegration) of memory traces. Then the point of view appeared according to which forgetting was the result of the memory traces interfering. Currently the evidence is being accumulated that forgetting occurs both under the influence of extinction and under the influence of interference. Packing lost time (by Proust) into real installations that are alien to its meaning is a clear case of interference. The emphasis on the role of the latter means introducing the element of activity into features of the process of forgetting. The analysis of the above mentioned process of repression as a form of forgetting plays an important role in understanding the mechanisms of forgetting (which, of course, implies not a naturalistic interpretation of the process of repression). As we have said, the main point is to understand repression not as an automatic process but as a special activity of the psyche aimed at semiotic re-signifying. And it is essential that the encrypted message yet affects the subject. It can be recovered by repeating the context, in case of super-motivation or in extreme conditions (which include, for example, the reduction of the familiar world in sensory isolation conditions), etc. Psychoanalysis is a special case of the recovery and decryption of repressed “messages”. Psychoanalysis demonstrates the ability of a reverse effect of repressed events on the conscious.

Therefore, forgetting (and especially repression) as being opposite to creativity should not be primitively understood: “I’ve forgotten it so I have nothing to say.” In certain situations

and conditions, for various reasons, apparently, most original productive ideas and images can, too, be repressed and are repressed. It is this assumption that lies in the basis of steady interest by various schools of psychoanalysis in the analysis of the creative process and of attempts to stimulate it by using psychoanalytic methods for extracting and decrypting repressed messages. However, an important fact is not taken into account here. The psychoanalytic session really helps realize a certain sphere of the unconscious and helps find a lost key to decrypt re-signified phenomena. But their (perhaps quite plausible) operation takes place in the form that is defined by therapeutic purposes, and turns out to be practical and prosaic. Moreover, the repressed and explicated, offered to the subject by a psychoanalyst, ruins his or her focus on the problem situation that is necessary for creativity. It acquires an impersonal and stereotyped form. This demonstrates the illegitimacy of psychoanalysis claiming to have disclosed mechanisms of creativity and to have developed methods of its stimulation. Psychoanalysis is therefore counter-indicative to creativity and is not so much a means of stimulating it, but a means of suppressing it by trite and prosaic interpretation of hidden intentions and motives for creativity and, finally, by the imposing on a subject an often imaginary certainty that is allegedly typical for his or her condition. This determines the necessity of the patient's faith in psychoanalysis. As a result of a skillfully conducted psychoanalytical session there is no "element of understatement" left, which is an inherent property of significant works of art and of significant scientific

discoveries. Apparently, it was not incidental that great artists were afraid to seek the help of psychoanalysts and tried to get out of crisis states of mind by themselves. They felt that psychoanalysis was a kind of surgical intervention into the soul, an intervention that, in terms of further creative life, may cost too much. Let alone the fact that the assimilation of creative activity to auto-psychoanalysis, or, as psychoanalysts put it, the "wild psychoanalysis" is too big a stretch.

Nevertheless, there are elements of resemblance between psychoanalysis and creativity, and it may be heuristically useful for psychological analysis of creative activity to discover them. Let us examine this in more detail.

In many descriptions of the creative process, there is evidence of the important role of external prompts that make it possible to find the desired image or idea. But by its very nature a prompt may also be internal, related to the previous experience of the subject. The contents of this process could be presented as opposite of what is observed in repression and forgetting. If as a result of repression there are only encrypted messages left in the human mind (the key to which is found only in the course of a special form of analysis), then, with the use of memories as prompts, the work of consciousness is aimed at establishing a possible connection between them and a problem model of the situation, as well as at deciphering its semantic content.

The difficulty of scientific analysis of this phenomenon consists in the fact that, just as in the case of repression, the process of deciphering a "message" is not always available to introspection. Even in cases where there is only a difference

in the form of representing a problematic model of the situation and a prompt, with a possibility, respectively, of making a decision by analogy, the act of identifying two methods of representation can cause serious problems. That is why the decision-making process remains hidden from introspection and

is characterized by the above mentioned external formal characteristics (instantaneous insight, etc.). On the surface there are the result and the belief in it being correct (cf. with the statement of Carl F. Gauss: "I have had my results for a long time; but I do not yet know how I am to arrive at them").

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