

ISSN: 0038-5751 (Print) (Online) Journal homepage: http://www.tandfonline.com/loi/mrpo19

# **Classification of Unconscious Phenomena and The Category of Activity**

A. G. Asmolov

To cite this article: A. G. Asmolov (1981) Classification of Unconscious Phenomena and The Category of Activity, Soviet Psychology, 19:3, 29-45

To link to this article: <u>http://dx.doi.org/10.2753/RPO1061-0405190329</u>



Published online: 19 Dec 2014.



Submit your article to this journal 🕑



View related articles

Full Terms & Conditions of access and use can be found at http://www.tandfonline.com/action/journalInformation?journalCode=mrpo19

#### A. G. Asmolov

# CLASSIFICATION OF UNCONSCIOUS PHENOMENA AND THE CATEGORY OF ACTIVITY

For many years, the subject of consciousness has been beyond the pale of American academic psychology. Every history of psychology tells us that Wundt's structuralism sought to study the "contents of consciousness" and that the failure of this effort resulted in Watsonian behaviorism (at least, within the American context). In recent years, however, there has been a reawakening of interest among cognitive psychologists in the phenomenon of conscious awareness.

Consciousness has always been an important concept within Soviet psychology (see, for example, the article by Vygotsky in <u>Soviet Psychology</u>, 1979, Vol. XVII, No. 4). The discussion that follows here is interesting for several reasons: (1) it comes after a well-publicized conference in Tbilisi at which psychologists from all over the world converged to consider the issue of conscious and unconscious psychological processes; (2) it treats consciousness in a way that makes it incorporate the world external to the subject as part of its definition (thus avoiding dualism, a cardinal sin within the Soviet system

Russian text © 1980 by "Pedagogika" Publishers.

Vop. Psikhol., 1980, No. 3, pp. 45-53.

The author is associated with the Department of Psychology at Moscow State University. of thinking); and (3) it forms links to modern research in cognitive psychology.

Another source of interest in this paper is most relevant to its publication in this journal. The central idea linking consciousness to social phenomena in Soviet reresearch is nicely stated by Luria in a recent publication, <u>Language and consciousness</u> (New York: Academic Press. In press):

> [Vygotsky's] basic position sounds paradoxical. It is as follows: In order to explain the highly complex forms of human consciousness one must go beyond the human organism. One must seek the origins of conscious activity and "categorical" behavior not in the recesses of the human brain or in the depths of the spirit, but in external conditions of life. Above all, this means that one must seek these origins in the external processes of social life, in the social and historical forms of human existence. (Translated by James V. Wertsch.)

> > Michael Cole, Editor

Can an analysis of the domain of the unconscious on the basis of such an important category of Soviet psychology as the category of activity further our knowledge of the nature of unconscious phenomena? Moreover, is it at all necessary to draw on this category to analyze the domain of the unconscious ?

To answer this question we shall attempt to perform a mental experiment and view it from the perspective of participants at the first symposium on the subject of the unconscious, recently held in Tbilisi. G. Munsterberg, T. Ribo, P. Janet, and B. Hart would certainly not have felt strangers at this symposium. As he did in Boston in 1910, Munsterberg would have divided all the participants into three groups — the general

public, physicians, and psychophysiologists. Representatives of the first group speak about the cosmic unconscious and supersensory methods of communicating knowledge. Doctors discuss the role of the unconscious in the pathology of personality, employing different variants of the notion of disassociation and splitting of the "ego." Physiologists would firmly declare that the unconscious was nothing but a product of the brain's activity. But the concepts of two theories would have been completely unfamiliar to Munsterberg: the theory of set of D. N. Uznadze, and the theory of activity of Vygotsky, Leont'ev, and Luria. The fundamental novelty here is the initial premise of these concepts: To study the world as mental phenomena it is necessary to go beyond the limits of those phenomena and find a unit of analysis of the mental that in itself would not belong to the domain of the mental.

If this requirement is not met, we shall be back to the situation at the Boston symposium. Attempting to understand the nature of unconscious phenomena either on their own terms or on the basis of an analysis of the physiological mechanisms or subjective phenomena of consciousness is the same as attempting to understand the nature of value on the basis of an analysis of monetary signs [1]. Various dynamic forces and impulses motivating behavior can be found, of course, in the nature of the individual. But as all experience in the development of the general psychological theory of activity has shown, only an analysis of the system of various forms of activity in which the individual engages in his life in society can lead us to a discovery of the substantive characteristics of the many levels of mental phenomena. A. N. Leont'ev expressed this thought clearly enough. He wrote: "The integral involvement of living organisms, the systems of processes, their organs, and their brain into an objective world of discrete objects creates a situation in which the system of these processes is invested with a content distinct from their own content, a content that belongs to this world of objects.

"This investiture is also the subject of psychological science" [22. P. 13].

An analysis of the domain of the unconscious within the context of a general psychological theory of activity opens the way to considering the substantive characterization of qualitatively distinct classes of unconscious phenomena, discovering the function of these phenomena in the regulation of activity, and tracing their genesis.

To distinguish the foundations of a classification of unconscious phenomena, let us consider two principles of the theory of activity: the principle of objectness,\* and the principle of the dependence of mental reflection on the place of the reflected object in the structure of activity.

The principle of objectness, in the apt expression of V. V. Davydov [14], is the nucleus of the theory of activity. This principle and the associated phenomena of objectness, which are closely related to it, enable us to draw a distinct line of demarcation between the activity approach, as it is called, and the various behaviorist approaches based on the "stimulus – response" paradigm, or any of its many variations. The essence of the principle of objectness is that the "activity of the subject, regulated by an image, itself becomes a 'latent property' of its objective product. In this objectification it is transformed into an ideal suprasensory aspect of the things producing it" [14. P. 31].

In experimental psychology, especially in the studies of K. Lewin and K. Dunker, data have been gathered that graphically illustrate the existence of what we here call the phenomena of objectness. We are thinking of the phenomena described by Lewin and Dunker as "the character of a need" and the "functional fixedness" of objects. The "character of a need," like "functional fixedness," belongs to that class of properties an object acquires only after it enters into an integrated system, into some phenomenal field. A group of psychologists working under the direction of A. N. Leont'ev in Khar'kov in

<sup>\*</sup>Objectness — the presence of objective content in something, a connection with the world of objects, as in "the objectness of art." — Ed.

the early '30s (L. I. Bozhovich, P. Ya. Gal'perin, A. V. Zaporozhets, P. I. Zinchenko, and others) obtained similar data in their study of practical intelligence. In these studies, an especially interesting one of which is Gal'perin's study entitled "Psychological study of human tools and auxiliary agents in animals and its importance" (1935), it was persuasively demonstrated that only after the meaning fixed in a social object, a tool, is de-objectified can the child move from a logic of "manual operations" to the logic of "tool operations."

A. N. Leont'ev and his colleagues made an experimental study of meanings fixed in tools, dealing with the same reality as Lewin and Dunker. But in contrast to the latter, Leont'ev and his associates were able to discover the object-based origin of this reality, the ''systematic qualities'' of an object [20], and to perceive behind it the activity ''left behind'' on the objects of man's world. This discovery, which later led to singling out of objectness as the constituent characteristic of activity, is of prime significance for an understanding of one class of unconscious phenomena, namely, the class of supraindividual, supraconscious phenomena.

With regard to the principle of dependence of mental reflection on the role of the reflected object in the structure of activity: it is necessary to establish the units forming the structure of activity in order to make claims about its content. A subject's activity is structured in a hierarchy of different levels. This structure includes such distinct units as a special activity activated by a motive (the object of the need), an action directed toward a conscious, foreseeable goal, operations (means of implementing action) correlated with the conditions of the given situation, and psychophysiological mechanisms that implement actions and operations (A. N. Leont'ev). In the regulation of activity, the function and the nature of the reflection of any object depend on the place of that object in the structure of the activity. For example, it has been shown that the nature of remembering depends on what components of activity (motives, goals, or conditions for realizing that activity) are associated with the object to be remembered [16. P. 28]. If, taking our bearings from the psychological structure of activity, we attempt to classify various unconscious phenomena, we find that they fall into two groups: the group of unconscious motives and semantic sets that motivate and stabilize activity as a whole (see [3]), and the group of unconscious forms of reflection that occur as integrated and operational sets regulating the course of such low-level units of activity as operations.

Thus, on the basis of the principles of objectness and of the dependence of reflection on the place of the reflected object in the structure of activity, it is possible to distinguish different groups of unconscious phenomena: the group of supraindividual, supraconscious phenomena; the group of unconscious motive factors of activity (unconscious motives and semantic sets); and the group of unconscious regulators of actions and operations.

Later we shall attempt to distinguish the directions study of these groups of unconscious phenomena have taken and to give a brief description of the chief characteristics of each.

## 1. Supraindividual, Supraconscious Phenomena (1)

Let us begin with a description of supraindividual, supraconscious phenomena since, first, these phenomena have always been enshrouded in the fog of the occult and have served as the basis of the most bizarre mythological constructions and, second, with these phenomena as an example, the social origins of the unconscious as a whole can be brought into relief.

From our viewpoint, a class of supraconscious, supraindividual phenomena exists in various forms in all studies of the transmission of human experience from one generation to another, or the intersecting problem of the discreteness or discontinuity of consciousness (see [26]).

In dealing with this fundamental problem, thinkers have drawn on concepts such as "innate ideas" (Descartes), the "archetypes of the collective unconscious" (Jung), "the cosmic unconscious" (Zudzuki), "cosmic consciousness" (Erich Fromm), "the unconscious as the speech of the Other" (Lacan), "collective ideas" (Durkheim, Lévy-Bruhl), and "unconscious structures" (Lévy-Strauss, Foucault).

But how can we get access to all these supraindividual, supracognitive structures? What is their origin? In most cases the answer to these questions is very much like the solution offered to them in the tale "The Bluebird," by Maurice Maeterlinck. In this fairy tale, the good fairy gives a magic diamond to the children; they need only rotate this diamond and people begin to see the hidden soul of things.

Like any other genuine fable, this one contains a good deal of truth. The objects of human culture surrounding people really do have a "soul"; and the "soul" is nothing more than a field of meanings existing in the form of schemata of action, reified in the practice of activity with the tools of labor, in the form of roles, concepts, rituals, ceremonies, and various social symbols and norms. A child becomes a personality only if, with adult aid, he enters into the stream of activities (not the stream of consciousness!) and assimilates the meanings reified in the human world by means of the system of activities. Activity is the diamond that, as a rule, the child rotates together with other people, totally unconscious of what he is doing, in order to see the "souls" of objects and acquire his own "soul."

In other words, in the surrounding human world there is a unique, specific standard that exists objectively, created by the aggregate activity of mankind, namely, the field of meanings [18]. This field of meanings, as Leont'ev notes, is "encountered by the individual as something that exists outside himself, something that he perceives and assimilates, and hence something that enters into his image of the world" [22. P. 6].

By organizing their activity in accordance with the field of meanings, people constantly confirm the reality of the existence of this field. To understand the process of accumulation of meanings, Soviet psychology usually employs the ideas of Vygotsky concerning internalization [12] and the transition from the interpsychic to the intrapsychic. These notions require further development, which could provide a more precise definition of the mechanisms of internalization and of those transformations undergone by the assimilated forms of the meaning. But Vygotsky's main idea (which dates back to 1925) is that the origin of what is individual lies in the social. This idea is a guiding thread in the analysis of the development of the personality and consciousness [13].

Thus, the idea of the flow of consciousness, the archetype of the collective unconscious, etc., has a quite earthly foundation. Underlying all these ideas is the reality of the existence of a supraindividual, supraconscious domain, with a clearly delimitable social origin, in the form of a field of meanings generated by the aggregate activity of mankind.

# 2. <u>The Unconscious Motives of Activity</u> (Unconscious Motives and Semantic Sets of the Personality)

The unconscious stimuli of an individual's activity have always been a central topic of study in traditional psychoanalysis. They participate in the regulation of activity, in the form of semantic sets. There is no need here to enumerate the ideas we have developed concerning the hierarchical levels of sets as mechanisms for the stabilization and cementing of individual activity; let us simply recall that, in accordance with the fundamental structural units of activity, the levels of semantic, purposeful, and operational sets, respectively, have been distinguished, along with the level of psychophysiological mechanisms of set [3].

With regard to their function and place in the structure of activity, unconscious stimuli studied in psychoanalysis unquestionably are to be ranked among the motives of individual activity. Hence, in contrast to other phenomena of the unconscious, one of the prime characteristics of these phenomena is their <u>dynamism</u>, their dynamic nature. But dynamism is a purely functional (formal) characteristic of the stimuli of activity, and psychological analysis of these phenomena begins where the characteristics of their contents are revealed, i.e., where how they are represented in human consciousness is revealed. As A. N. Leont'ev writes: "Their function (i.e., the function of motives — A. A.), viewed from the perspective of consciousness, consists in the fact that they, so to speak, upset the real life significance of objective circumstances and the subject's own actions and impart to them a personal sense that does not directly coincide with their objective meaning" [21. P. 150]. These objective circumstances include the products of sociohistorical practice, idealized in meaning, i.e., modes of conduct typical of a particular culture, objective values, various roles, etc. They also include the acting subject, especially the level I. S. Kon calls the existential "ego."

According to Kon, the existential ego is a typical example of a deep semantic structure that can be studied only by going beyond it. The subject 'I'' itself can appear to be something internal. But in reality, it always occurs in the opposition 'I''-''Non-I,'' possesses sense and value, and contains a tendency toward self-realization, toward a suprasituational activity [19].

The existential ego has all the characteristic features of semantic structures. Like other semantic structures, it is embodied in such units of the dynamic patterns of activity as the stable disposition of the personality — semantic sets that represent the expression of personal sense\* in the form of a readiness for one sort of activity or another. Just as thought is consummated in the word (Vygotsky), personal sense is consummated in a semantic set, which determines the stability of an activity, and then, through this activity, is reified in various cultural phenomena [3, 4]. We have dwelt particularly on such a semantic structure as the existential "I" because it is being discussed increasingly frequently in various currents of contemporary psychoanalysis (see [8]).

Thus, the personal senses, "meanings for myself," of vari-

<sup>\*&#</sup>x27;Sense,'' in this context, refers to the complex of motives and ideas that represent the subject's current understanding of what he/she is doing. It is the largest set of alternatives from which speech conveying meaning is constructed. - Ed.

ous events of the world, including one's own ego, is the fundamental characteristic that constitutes, so to speak, the core of the above-described class of unconscious phenomena, the class of unconscious motives and semantic sets (see [3, 8, 36]).

This class of phenomena cannot be transformed under the influence of any unilateral verbal actions. This postulate, based on evidence from experimental studies [23, 29, 30], in turn leads us to the feature of semantic structures that determines the method used for their study. This feature consists in the fact that a change in semantic structures is always mediated by a change in the activity of the subject [3, 5]. By taking this extremely important feature of semantic structure (systems of personal senses and the semantic sets that express them in activity) into account we can shed light on certain metamorphoses in the development of psychoanalysis the explanation of which serves as a kind of confirmation of the classification we have proposed above.

First, the ineffectiveness of psychotherapy that is limited to purely verbal, one-sided actions, i.e., therapy Freud so venomously ridiculed in his essay "Vulgar psychoanalysis" [34], can actually be explained by the fact that by their very nature semantic structures are insensitive to verbal influences that are of a purely informative nature. We repeat that sense is changed only in the course of reorganizing activity, including the activity of communication, in which "speech work" occurs (Lacan). It is no coincidence that Lacan, whose slogan is "back to Freud," harks back to the founder of psychoanalysis on this point, observing: "The function of language is to provide not information, but stimulation. When I speak I am seeking the reply of another. My question establishes me as a subject" (Lacan, cited in [2. P. 420]). (2) In other words, only activity, including the activity of communication, which expresses various sense-constituting motives and serves as the foundation for an emotional identification with the Other [9]. can change the personal sense of a patient.

Second, in our opinion the ineffectiveness of the influence of

this kind of verbal action on the domain of sense, action that frequently replaces the dialogue between the psychoanalyst and the patient, is one of the reasons for the unmistakable shift from individual approaches to group approaches in psychotherapy — for example, to new methods such as psychodrama, the T-group, etc. — that in some way or other reconstruct an activity that ultimately leads to a change in personal senses and the semantic set expressing them in activity.

In summing up our views on the nature of the unconscious stimuli of activity, of their essential characteristics, we shall enumerate the basic features of semantic structures of personality:

(1) their derivation from a system of activities of the subject, from his social position;

(2) intentionality (the orientation of activity toward an object; sense is always addressed to someone or something, sense is always the sense of something);

(3) independence of consciousness (the subject can become conscious of personal sense, but this consciousness is not in itself sufficient to change personal sense);

(4) the impossibility of embodying semantic structures corresponding to senses in meanings (Vygotsky, Bakhtin) and its nonformulatability (F. V. Bassin);

(5) phenomenologically, sense is experienced as seemingly random, unmotivated "aberrations" in behavior from the norm for a given situation (for example, prolixities, superfluous movements, etc.) (see [5]).

### 3. Unconscious Regulators of Acts and Operations

Many psychologists of the pre-Freudian period concentrated their attention on this class of phenomena. For example, representatives of the psychology of consciousness devoted many pages to elegant descriptions of the range of states of consciousness from the focus of consciousness to its periphery (Wundt, James, Janet, and others).

Freud, who did not dwell especially on an analysis of the es-

sence of these phenomena, characterized them as preconscious [33].

Perhaps one of the first attempts to derive a general law governing unconscious phenomena of this sort was that of Claparède, who formulated a law of consciousness that essentiallly amounts to the following: The more we engage in some act, the less we are conscious of it; but if an obstacle appears in the path of a habitual act, a need for it to become conscious again arises, and this is why the act once more comes under the control of consciousness. However, Claparède's law describes only the phenomenological dynamics of this class of phenomena. To explain the origin of consciousness by referring to the appearance of a need for consciousness is the same as explaining the origin of a bird's wings by the emergence of the need to fly [12].

Soviet psychology has advanced a few steps in the development of ideas concerning the essence of unconscious regulators of activity. We need not here present the vast amount of experimental and theoretical evidence for this level of the unconscious; we shall just point out two directions in which this research has proceeded.

In its genetic aspect, the study of "the preconscious" has been inseparably linked with analysis of the problem of the development of voluntary regulation of higher forms of human activity. (3) "Voluntariness in the activity of any function is always the obverse side of a consciousness of that function," wrote one of the intellectual inspirers and founders of this line of thought, Vygotsky [12]. The problem of voluntariness – awareness of behavior – has been thoroughly studied in works on voluntary and involuntary regulation of activity [16. P. 28; 15. P. 24; 24].

At the <u>functional level</u>, study of unconscious regulators of activity fits directly into the problem of the automatization of various kinds of external and internal activity. Thus, Leont'ev analyzed the process of transformation, during the course of learning, of an act aimed at a conscious, foreseeable goal into an operation, whose conditions of existence are only "presented" to the subject.

Thus, at the basis of awareness lies a change in the place of an objective content in the structure of activity, this change being the consequence of a process of automatization and deautomatization of activity.

Leont'ev's proposed solution to this problem was developed in original studies on the unconscious regulation of thinking, for instance, the series of studies by Ya. A. Ponomarev and O. K. Tikhomirov. Ponomarev developed the concept of the mutual relation between the direct (conscious) and the ancillary (unconscious) product of an act, which sheds light on the mechanisms underlying the solution of creative problems and on the nature of intuitive solutions [27]. Tikhomirov and his colleagues concentrated especially on an analysis of the meaning and functions of verbalized (unconscious) components in the structure of a thought process [31].

The results of a study of habit by one of the direct successors of Uznadze – Khodzhav [35] – were used to demonstrate that optimized forms of behavior are based on a mechanism of unconscious sets, i.e., exactly those sets that stabilize and regulate the performance of operations [3].

With regard to a description of the type of physiological mechanisms responsible for the execution of acts and operations, in this area the classic works on the study of optimization of movements by the outstanding Soviet scientist Bernstein remain unexcelled; we have in mind in particular Bernstein's idea that conscious afferentation always occupies a leading role in the control of movement, whereas the afferentation of background, chaotic levels of control of movements is not conscious [11].

All these studies considerably advance the notion of the nature of unconscious forms of reflection regulating the performance of acts and operations.

In concluding, we should point out that our purpose has been primarily to outline a number of questions that arise in the study of the problem of the unconscious within the context of the general psychological theory of activity (A. N. Leont'ev) and to shed light on the explanatory potential of this theory on the basis of material from an analysis of a wide range of unconscious phenomena.

The basic premises of the theory of activity, namely, the principle of objectness and the principle of the dependence of mental reflection on the place of the reflected object in the structure of activity, have been used as a foundation for classifying unconscious phenomena. This has enabled us, first, to distinguish among the motley variety of these phenomena three qualitatively distinct classes (supraindividual supraconscious phenomena, unconscious motives with their associated semantic sets of the personality, and unconscious mechanisms of regulation of acts and operations) and to pinpoint the genesis and function of these different classes in the activity of the Second, we have charted those problems and cursubject. rents in the context of which the phenomena constituted by these classes have been studied (the transmission and assimilation of experience; the problem of the determination of activity; voluntary regulation of higher forms of behavior and automatization of different forms of external and internal activity).

The need for such a classification derives from the fact that frequent attempts to reduce all these various phenomena to one common denominator result in a loss of their specific features from view and considerably encumber progress on the arduous path of their study. Only by shedding light on the specific features of these "arcane" levels of consciousness (Vygotsky) will we be able to find appropriate methods for studying them, determine their function in the regulation of activity, and thus not only flesh out but also modify the existing panorama of ideas concerning activity, consciousness, and the personality.

#### Notes

1) Ideas of the supraconscious and its role in the creative activity of a scientist have been developed in a series of stud-

ies by Yaroshevskii (see for example [37]).

2) See, for example, "Man's very existence (internal and external) is in-depth communication. To be means to <u>communicate</u>. To be means to be for another and through that other for oneself. Man does not possess an internal sovereign territory; he is always and everywhere at the borderline. In looking within himself he is looking into the eyes of another and with the eyes of another" - writes M. M. Bakhtin [10. P. 212].

3) V. P. Zinchenko points out the relationship between voluntary and involuntary forms of behavior and unconscious sets [17].

#### References

1. Marx, K., & Engels, F. [Collected works]. Vol. 23, p. 93.

2. Avtonomova, N. S. [Some philosophical and methodological problems in the psychological views of Jacques Lacan]. In the team monograph: A. S. Prangishvili, A. O. Sheroziya, & F. V. Bassin (Eds.), [<u>The unconscious</u>]. Tbilisi, 1978. Vol. 1, pp. 418-25.

3. Asmolov, A. G. [Activity and set]. Moscow, 1979. 151 pp.

4. Asmolov, A. G., & Petrovskii, V. A. [The dynamic approach to the psychological analysis of activity]. <u>Vop. Psikhol.</u>, 1978, No. 1, pp. 70-80.

5. Asmolov, A. G., Bratus, B. S., Zeigarnik, B. V., Petrovskii, V. A., Subbotskii, E. V., Kharash, A. U., & Tsvetkova, L. S. [Some perspectives in the study of semantic structures of the personality]. Vop. Psikhol., 1979, No. 4, pp. 35-46.

6. Bassin, F. V. [The problem of the ''unconscious'']. Moscow, 1968. 469 pp.

7. Bassin, F. V. [The development of the problem of meaning and sense]. Vop. Psikhol., 1973, No. 6, pp. 13-14.

8. Bassin, F. V. [At the limits of the identifiable: The problem of the prespeech form of thinking]. In A. S. Prangishvili, A. O. Sheroziya, & F. V. Bassin (Eds.), Op. cit., 1979. Vol. 3, pp. 735-50. 9. Basina, E. Z., & Nasinovskaya, E. E. [The role of identification in the formation of altruistic sets of the personality]. Vestn. Mosk. Univ. Ser. 14, Psikhol., 1977, No. 4, pp. 33-41.

10. Bakhtin, M. M. [The aesthetics of verbal creativity]. Moscow, 1979. 424 pp.

11. Bernshtein, N. A. [Essays on the physiology of movement and the physiology of activity]. Moscow, 1966. 252 pp.

12. Vygotsky, L. S. [Selected psychological works]. Moscow, 1966. 520 pp.

13. Vygotsky, L. S. [Consciousness as the problem of the psychology of behavior]. In [Psychology and Marxism]. Moscow, 1925. Pp. 175-98.

14. Davydov, V. V. [The category of activity and mental reflection in the theory of A. N. Leont'ev]. <u>Vestn. Mosk. Univ.</u> Ser. 14, Psikhol., 1979, No. 4, pp. 25-41.

15. Zaporozhets, A. V. [The development of voluntary movement]. Moscow, 1960. 200 pp.

16. Zinchenko, P. I. [Involuntary memory]. Moscow, 1961. 564 pp.

17. Zinchenko, V. P. [Activity and set: Is a paradigm necessary? In A.S. Prangishvili, A.O. Sheroziya, & F.V. Bassin (Eds.), Op. cit., 1978. Vol. 1, pp. 133-46.

18. Zinchenko, V. P., & Mamardashvili, M. K. [The problem of an objective method of psychology]. <u>Vop. Filosof.</u>, 1977, No. 7, pp. 109-125.

19. Kon, I. S. [The category of the ego in psychology]. In press.

20. Kuzmin, V. P. [The principle of 'systemness' in the theory and methodology of Marx]. Moscow, 1976. 231 pp.

21. Leont'ev, A. N. [Activity. Consciousness. Personality]. Moscow, 1975. 304 pp.

22. Leont'ev, A. N. [The psychology of an image]. <u>Vestn.</u> Mosk. Univ. Ser. 14, Psikhol., 1979, No. 2, pp. 3-13.

23. Leont'ev, A.N. & Zaporozhets, A. V. [Restoration of movements]. Moscow, 1945. 232 pp.

24. Luria, A. R. [The genesis of voluntary movement]. <u>Vop.</u> Psikhol, 1957, No. 6. 25. Losskii, P.O., & Radlov, E. L. (Eds.) [The unconscious. New ideas in philosophy]. 1914, No. 5. 144 pp.

26. Nalimov, V. V. [Continuity versus discreteness in language and thought]. In A. S. Prangishvili, A. O. Sheroziya, & F. V. Bassin (Eds.), Op. cit., 1979. Vol. 3, pp. 286-92.

27. Ponomarev, Ya. A. [The psychology of creativity]. Moscow, 1976. 304 pp.

28. Smirnov, A. A. [The problem of the psychology of memory]. Moscow, 1955. 350 pp.

29. Spivakovskaya, A. S. [The role of conscious and unconscious experiences in the formation of autistic sets]. In A. S. Prangishvili, A. O. Sheroziya, & F. V. Bassin (Eds.), Op. cit., 1978. Vol. 2, pp. 425-30.

30. Subbotskii, E. V. [A study of semantic structures in the child]. <u>Vestn. Mosk. Univ. Ser. 14, Psikhol.</u>, 1977, No. 1, pp. 62–72.

31. Tikhomirov, O. K. [The structure of intellectual activity in man]. Moscow, 1969. 304 pp.

32. Uznadze, D. N. [<u>Psychological studies</u>]. Moscow, 1966. 452 pp.

33. Freud, S. [The ego and the id]. Moscow, 1924.

34. Freud, S. [Vulgar psychoanalysis]. In [Sigmund Freud. Methods and techniques of psychoanalysis]. Moscow, 1923. Pp. 46-51.

35. Khodzhava, Z. I. [<u>The problem of habit in psychology</u>]. Tbilisi, 1960. 250 pp.

36. Sheroziya, A. E. [Consciousness, the unconscious mind, and a system of fundamental relations of the personality: Premises for a general theory]. In A. S. Prangishvili, A. O. Sheroziya, & F.V. Bassin(Eds.), Op. cit., 1979. Vol. 3, pp. 351-89.

37. Yaroshevskii, M. G. [The supraconscious in scientific creativity and the genesis of Freud's psychoanalysis]. In A. S. Prangishvili, A. O. Sheroziya, & F. V. Bassin (Eds.), Op. cit., 1979. Vol. 3, pp. 414-21.