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OAJI (USA) = 0.350

SOI: [1.1/TAS](#) DOI: [10.15863/TAS](#)

## International Scientific Journal Theoretical & Applied Science

p-ISSN: 2308-4944 (print) e-ISSN: 2409-0085 (online)

Year: 2020 Issue: 03 Volume: 83

Published: 05.03.2020 <http://T-Science.org>

QR – Issue



QR – Article



**Oleg Naumenko**  
NUST MISIS  
PhD in Philosophy  
Moscow, Russian Federation  
[naumenko06@mail.ru](mailto:naumenko06@mail.ru)

## COGNITIVE ASPECTS OF ECOLOGICAL CONSCIOUSNESS

**Abstract:** In given article some cognitive aspects of ecological consciousness are considered. Some retrospective analysis of these aspects is shown that any ecological constructs had many alternative psychological theories which, of course, unique, individual and had possibility to appear in interrelationship between external world and human.

**Key words:** cognitive science, psychology, environmental studies, ecological consciousness, ecological and psychological constructs.

**Language:** English

**Citation:** Naumenko, O. (2020). Cognitive aspects of ecological consciousness. *ISJ Theoretical & Applied Science*, 03 (83), 7-10.

**Soi:** <http://s-o-i.org/1.1/TAS-03-83-2> **Doi:**  <https://dx.doi.org/10.15863/TAS.2020.03.83.2>

**Scopus ASCC:** 1211.

### Introduction

Thinking role in formation of ecological consciousness in the process of its functioning, i.e. corrective amendments which are brought by knowledge process in perception, influence and understanding of the nature is extraordinarily high.

The importance of thinking for ecological consciousness follows from definition according to which the ecological consciousness is our representation about world around and the relation to it.

There is no necessity to prove, that the knowledge is an obligatory element of image construction, model of the world which includes also behavior of the person in the real objective world. Certainly, cognitive processes along with knowledge of the world and the laws existing in the world, define also a place of the person in this structure, together with in the possible virtual parallel structures created by imagination of the person. The last is very important as allows the person to carry out that distinguishes the Homo Sapiens from all other biological world, - to plan the activity, "playing" possible variants and realising what has for whatever reasons seemed to the optimum.

The consciousness of the modern person necessarily includes three basic logic sections: logic of knowledge, logic of essence and logic of being.

Learnt always objectively, it does not depend on opinions, approaches and is equally used in the process of thinking by all carriers of consciousness, distinctions can be only in the relation to this learnt, in the place of learnt in the K.Lewin's psychological field [1].

Cognitive psychology was based on a number of representations of J.Piaget [2] and the theory personal конструкта, G.Kelly [3] developed in works.

The personal construct theory assumes, that the person, receiving data on an external world and from an external world, the assumption of essence of the received data, its communications with other phenomena and objects of an external world forms in consciousness. Such guesses also are constructs, i.e. base elements on which basis the general design of the world is under construction. Concept "External" in the G.Kelly [3] theory means external in relation to consciousness.

The concept of construct is close to concept of "knowledge unit" used in pedagogics, i.e. any data in aggregate with all characteristic communications for it and uses areas. Distinctions between them not terminological, but intrinsic – the construct theory tries to find the mechanism and laws of formation of these constructive guesses.

Constructs can be two kinds: rigid and flexible, or closed and opened.

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The rigid, closed construct as though is accepted as a truth in last instance, not subject to doubt. The part of such constructs consists of the common truths checked up by personal experience or received in the training process, but a part of rigid constructs are positions which are base for the further constructions, further guesses. Very often we meet with conditionally rigid construct which existence is limited by narrow spatial and time frameworks, i.e. constructs for example «we will admit that...». But the basic part closed, rigid constructs are those of which firmness the person is firmly convinced. Very powerful stream contradicting information to construct is necessary to loosen for the at least, if not to deny it. Construct closeness degree is influenced by many factors.

Opened, flexible constructs can be easily transformed on the basis of again received information. On openness-closeness construct degree very big influence is rendered by the subjective importance of the received information on which basis construct is under construction or the importance generated in construct consciousness.

Position about constructs, generated by G.Kelly [3] and then developed in works of other scientists, close adjoins, in our opinion, with K.Lewin's substantive provision about a psychological field as the phenomenological world defined by presence of intense systems [1].

Construct occurrence, formation of its characteristics and that is very important, construct position in consciousness structure are in many respects defined by presence in consciousness already generated constructs. These constructs create favorable circumstances for new constructions, they form an expectation condition.

Expectation, apparently, is one more construct line, especially characteristic for opened, flexible constructs. Its sense consists that formed in the process of thinking construct as knowledge unit, co-operating with others constructs has an opportunity establishment of new communications and having received the additional information, aspires to enter as a component in new construct. It defines boundless possibilities of consciousness.

In sphere of knowledge irrespective of object (whether the knowledge external in relation to consciousness of the phenomenon, process, object or knowledge by consciousness itself) an expectation role is played by the theory, i.e. the opened law assuming obligatory presence of any else unknown processes or the phenomena.

The contribution to cognitive processes knowledge brought J.Piaget, consists that being based on ability of consciousness to change a touch input according to any scheme which is already available in consciousness, the last can itself by rules and the laws provided by this scheme, to change not only features of an input, but also an initial set corrected the

functioning and behavior [2].

Initial “adjustment” of system is connected with the available concept “Me” which interprets the information caused by a touch input.

Image of an external world which according to the stated concept initially cannot precisely reflect an objective reality, receive constant correction, on the one hand, as a result of sensual experience and, on the other hand, from representations of higher order formed in consciousness, and, first of all from the “Me” image.

“Me” image create and defines an object of an environment estimation on a number of parameters, for example utility, danger, a gratefulness, hyperbolized one and minimizing others. Important that it is not distortion of an image but the original adaptation of an image or representation to features of the person consciousness.

The great value for ecological consciousness has search selective attention at which there is a comparison of the image generated in operative memory, the standard, and a pattern to objects of an external world, the information about which arrives from a touch input. Usually such search attention does not operate with the full feature set, identifying object, but leans on any one or two characteristics maximum. If there is a coincidence under these characteristics, other signs become more active in consciousness. For example, the person collecting mushrooms or berries, well knows, that search is conducted on the basis of a mushroom or a berry in general (on the basis of a hat or rotundity), and, only having found out this sign, the mushroom picker starts it to identify to other signs defining whether white it's mushroom or toadstool. Thus, it is possible to accept position that the attention opens consciousness for the information arriving from a touch input and, in turn, changes its characteristics providing an input in consciousness of this or that an environment image.

All features of memory which are characteristic for consciousness in general keep value for ecological consciousness. Perhaps, some difference is a little raised value of figurative memory for formation of mutual relations with concrete objects of biosphere, though for the theory (according to G.Kelly [3]) the same interaction of evident-shaped and abstract-logic, associative memory, as well as for other displays of consciousness is characteristic. So, the concept “elephant” is always shown in the is evident-shaped form, as well as at more abstract concept “trunkings”, but in construct “elephant” the concept of a carving on an ivory appears already in the abstract-logic form is more often. Besides, feature of memory in ecological consciousness is that in it much brighter and for longer period the events having character of accident in the personal or global plan are embodied.

It is possible to specify in one feature of memory in ecological consciousness: embodied and reproduced images of the nature always have certain

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emotional coloring, as a rule, such that was generated during the first contact of the person to this object. It is interesting, that dexterous fortunetellers and interpreters of dreams use this property of memory in ecological consciousness, involving widespread stamps of associative memory.

For consciousness cognitive processes including ecological, control presence over actions and their results is characteristic, and also correction of the further steps and change of an initial estimation of a situation according to this control, i.e. the mechanism described by P.K.Anokhin [4] as an acceptor of action.

The control can be constants, but in ecological consciousness there is a control on the set deviation is more often, i.e. it joins when deviations from the made decision reach any usually intuitively defined size.

Decision strategy is realized in the program (scheme) defining an order of expansion of processes and actions, promoting achievement of the required purpose. The ecological consciousness transforms the purpose of maintenance of a constancy of the internal environment to the purpose consisting in search or designing of such environment in which it's possible to support necessary level of physiological constants and their parity without pressure that in ordinary understanding turns to a problem of maintenance of good state of health.

The second constant purpose is realization of metabolic processes thanks to which two primary goals of maintenance of a life dare: accumulation and clearing of the energy necessary for realization of processes of ability to live, and maintenance of course of plastic processes.

Both the first and the second purpose co-operate with each other and in this interaction define requirements of an organism, and proceeding from them requirements to environment as to satisfaction of these requirements source. Thus, in the activity providing achievement of these two purposes, the person acts as the consumer.

The following constant purpose consists in kind protection. Here it is possible to allocate three mainstreams of the activity providing achievement of the purpose: Geno fund preservation, reproduction and protection of own life.

The genetic constancy of an organism is one of the constants most protected by an organism, there are the special systems providing a genetic constancy. Centuries-old practice has revealed a number of the restrictions which have become by moral restrictions, the interdiction protecting genetic safety.

The self-preservation purpose sometimes is

allocated in the form of the especial purpose which have been not connected with protection of a kind, and formed as protection of an organism against harmful, pathogenic factors. Here it is possible to allocate two physiological systems of protection: system of a pain and system of immune protection.

Considering cognitive aspects of ecological consciousness, it is necessary to stop on such important concept as "subject value" in that its understanding which has been given by V.Zinchenko and B.Velichkovski [5] and is used by them for decoding of some problems of memory. Certainly, this term reflects anthropocentrism of consciousness, perception by it of world around and characterises object in its relation to the person considering experience of previous relations.

Still K.Lewin, summing up the military experience (he was the officer, the participant of the First World War), has shown, how the military landscape depending on circumstances varies. He has established that the perception of environment and the relation to it varies with change of situation sense. So, the hill at defense is perceived as protection, shelter, but the same hill at approach turns to an annoying hindrance. Differently, we as though attribute to the nature ourselves, and to ourselves the nature and the importance of a situation is defined by features of these mutual relations [1].

Comprehension of relations with an external world is usually adhered to spatial and time coordinates though it concerns only the subject world. American psychologist E.Tolmen [6] has come out with the assumption that spatial co-ordinates are reflected in consciousness in the form of certain "cognitive cards" which topography includes, on the one hand, experience of the person, experience of his visual and locko-motoric perceptions, and, on the other hand, provides a cognizance and object storing. Thus, the cognitive space card acquires in the beginning objects and their mutual position on which then the space metrics is imposed. It is probable, that there is same a cognitive time scale.

Extremely interesting definition of perception of environment taking into account a position of the person was given by known psychologist J.Gibson on which opinion "to perceive some subject is means to perceive, how to come nearer to it and what is possible to make with it" [7].

Certainly, it is difficult to ordinary, everyday ecological consciousness to accept and comprehend even simple philosophical concepts, therefore special value gets ecological education.

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