

Ideas of constructivism in philosophy of education: from ontology to phenomenology

Sergey Valentinovich Borisov

Chelyabinsk State Pedagogical University, Lenin Avenue, 69, Chelyabinsk, 454080, Russia

Abstract. On the basis of education we understand, we interpret the world, but we don't feel education, itself getting used to follow the standards and rules which have no sufficient proof. Education is not that the person knows, but something that really influences his behavior. Education is a dynamic system of interaction between designs of consciousness and environment. Education "designs" the person.

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Introduction

What is the main distinctive feature of constructivist philosophizing? Possibly, constructivism considers reality as an open dynamic system. Therefore, it is the subject, not only the objects. Certainly, any system can be object of research, not from a position of third-party supervision, but from a position of forming relations with system in the course of interaction. The person is an activity source; in this case knowledge is a process of creation reality projects, experience projects of a person, instead of reflection of the "external" world. The knowledge represents process of the relations of designs of consciousness with the world.

The consciousness has an ontological status in constructivism which is both "first", and the "last" basis. However, cognitive designs inherent in consciousness can be found and investigated only indirectly. Interaction of the subject and object is a system of those cognitive designs. The most known among them are: aprioristic forms of consciousness (I. Kant), archetypes collective unconscious (K.G. Jung), long term informative habits (D. Hume), scientific paradigms (T. Kuhn), cultural installations – "prejudices" (M. Heidegger, H.-G. Gadamer), language structures (F. de Saussure), cultural signs, symbols, texts (structuralisms), etc.

Cognitive designs provide adaptation and an organism survival. Therefore from the constructivist point of view knowledge have to be viable. Cognitive designs give chance of future predictions. They provide stable life experience of the person, and therefore, a stable picture of the world.

There are many theories which can be considered as constructivism. It is difficult to classify these theories because they unite many scientific disciplines. In our opinion, existing classifications are not satisfactory: either they are deprived of the uniform basis or they are not full [1]. However in all variety of constructivist theories of each of them

corresponds to those principles about which we spoke above.

What is the subject of philosophy of education? The philosophy of education considers intellectual and moral development of the person in culture and as how it can be promoted by "education system". At discussion of problems about education it is necessary to address to fundamental philosophical questions. We completely share S.I. Hessen's position which in the "Fundamentals of pedagogic", defines education as culture of the individual, and considers that fight of various pedagogical theories between itself is only reflection of deeper philosophical contradictions which are their cornerstone [2].

There is such a statement: education is what remains when almost everything studied before is forgotten. If we consider education as system of models of the world with its subsystems – knowledge, abilities, skills – the whole structure, is more important, than separate elements, even the loss, of a large number of knowledge won't bring damage to education. In the early childhood education is usually driven by personal interest of a person. Spontaneity always is present in education as it is interaction of open dynamic systems: person, group, society. If in natural development of a person a large role plays a case, within "education system" the organization the order plays a large role too, but mankind still hasn't learn to keep balance between these aspects of education. To construct educational system which will satisfy all is probably impossible.

But it is possible to assume that any interaction of the person with the world is training, but has impact, only that is necessary for person. We see it on the example of assimilation by the person of the native language. The sense of any language expression is understood in a culture context, language implicitly expresses such understanding of the world. Development of the native language happens in unconsciousness. The structure of the

native language defines a way of perception of the world and cognitive features. Actually, it is a question of aprioristic forms of consciousness as basic designs on which all further cognitive experience of the person is constructed.

So, designing of reality happens by the help of aprioristic forms of sensual experience and mind (I. Kant). The person learns the world, proceeding from aprioristic structures of consciousness. Aprioristic forms of consciousness can be considered in quality of “hereditary working hypotheses” (G. Vollmer) [3] which passed evolutionary natural selection (adaptation). Adaptive congenital structures correspond to reality so as far as provide an organism survival. Adaptation is an ability to reveal regularities of the world and on the basis of it to predict the future (E. von Glasersfeld) [4]. The live system possesses a certain set of operations (H. Maturana, F. Varela) [5] therefore cognitive processes are already predetermined by feature of the organization and system functioning.

Congenital mechanisms (“the closed programs”), are structures for organism adaptation. They are necessary for perception and process information necessary for a survival. They precede experience and are prerequisites of knowledge of the world. For example, “archetypes” (K.G. Jung) are unconsciousness structures; “universal structures of consciousness” (K. Lévi-Strauss) define behavior of the person. The person is so biologically arranged.

Ability of the person to get and accumulate information on the world (“the open program”), though it isn’t concluded in a genome, but is carried out on the basis of congenital cognitive structures. Knowledge from past experience – “action schemes” (J. Piaget) – designs new knowledge. Thanks to “cognitive balance” all contradictions with past experience are eliminated. It promotes training. Training happens to the help of two processes – assimilations and accommodations. Assimilation is an accession of new objects or new situations to cognitive schemes. Accommodation is an adaptation of cognitive schemes to new conditions. Accommodation finishes process of “cognitive balance” [6].

The belief in the facts on which any knowledge of the world is based, is based on any object from memory or perception, and on its habitual connection with any other object. Such belief with need arises when mind is put in similar conditions. All this is “natural instincts” which can’t be result of process of reasoning. L. Wittgenstein wrote: “What kind of grounds have I for trusting textbooks of experimental physics? I have no grounds for not trusting them.” [7]

M. Polanyi notes that though we clearly understand the volume and specifics of our knowledge, we hardly imagine it in details. Understanding of these details happens in case we seize all subject domains which they enter as part. This feeling by the nature is similar to not articulated knowledge, helping to find a way in a difficult situation; however it has wider sphere of application thanks to participation in it linguistic indexes. Their ability to adapt allows us to keep constantly in the field of vision the huge volume of skilled data and to keep confidence that these uncountable data if it is required, can be at our disposal [8]. Thus, education is a latent knowledge.

But why our knowledge is for us of such of great importance in spite of the fact that their bases remain obscure? Polanyi’s answer to this question is similar to the Hume’s answer: because we believe that rationality, congenital from them, is guarantee of compliance of reality. We recognize the knowledge power because we see in them instructions concerning reality, and it serves as a guarantee, of their use in the future. At the heart of this process our personal conviction that knowledge is connected with reality. Thus, we not simply establish for ourselves standards, we thus believe in the ability to learn objective reality and to make on it our influence. Only thanks to our education (on its basis) we understand the world though education remains hidden for us. We got used to follow norms or rules without sufficient basis.

From the constructivist point of view education plays a fundamental role in development of the individual – provides his survival, adaptation. It is cultural process, instead of biological. There is a transformation “the person natural” into “the person cultural”. Education purpose: is expansion from the sphere of consciousness to level of “Absolute thought”. This thought exists irrespective of environment, but environment stimulates its activity. The thought has its own laws, conducts its own life. Brain is the thought’s tool, his servant, but not the owner. The thought can be explained by means of the analysis of its creations. The teacher tries to induce his students’ thought by means of his own example. Its task: “to set in motion thought train”. The same we can say about a person responsibility which isn’t created in the person, but is waken in him. For the person the moral is a choice which provides for freedom. Therefore education is a formation of freedom, understanding by the individual of the freedom and opportunity to make the choice, a responsible act. All the other in education are means for achievement of this main goal. It is impossible to foreknow what becomes this or that person. It can’t be created artificially, the help is only possible. Steps

of education are described by G. Hegel in "Philosophy of spirit" as ways of activity of spirit [9].

At the level of the basic designs which are cornerstone of education it is impossible to divide that is congenital that is acquired: congenital programs will organize behavior only schematically, they need the subsequent completion. Completion of hereditary programs (according to K. Lorenz – "an imprinting") occurs when environment stimulates adequate behavior. "The imprinting" concretizes and specifies received information. If environment doesn't show necessary irritants, congenital programs die away. Sometimes the organism creates designs which are exaggeration of properties of normal objects because it can improve the adaptation to unforeseen circumstances. Positive or negative emotions give information on success or failure of activity. Striving for positive emotions and trying to avoid negative emotions, the organism improves the cognitive designs [10]. Thus in ontological understanding education is not that the person knows and remembers, but that really influences his behavior.

Transition from "natural suggestion" (E. Husserl) to knowledge of essence of phenomena ("a pure consciousness stream") which are true objects of knowledge as they are exempted from all empirical and psychological, is carried out at level of "the transcendental person". What does this design represent? There is only a transcendental consciousness and the world of phenomena. Thanks to consciousness intension the subject and object mutually supplement each other. Process of designing of reality is carried out by means of conceptual intuition and aprioristic synthesis. Thus the consciousness not only designs reality, but also "completes" itself. It helps to create steady idea of reality. Such designing is carried out by means of a human body (M. Merleau-Ponty) which defines the horizon of existential continuum and experience.

Means of designing of the content of individual consciousness and system of ideas of reality are "universal language structures" (F. de Saussure). The reality, thus, is a set of sign systems and texts. By means of the logical analysis by refining of words and sentences which make knowledge of reality, we can reach knowledge of the world. This is an essence of "logical atomism" (B. Russell). Thus the person "is dissolved" in a language order (J. Lacan). The language network entangles the world and reduces reality to language therefore the person turns into a symbol.

The intersubjectivity is only this way possible. The intersubjectivity is caused by processes of "habitualization", "reification", "legitimation" (P. Berger, T. Luckmann) and is a product of

communicative interaction. As the person always is in unity with cultural environment, even "the materialized" social institutes also are products of its creative activity; however it, as a rule, isn't realized by it. Social institutes have direct impact on outlook of the person through schemes of values, behavior, the roles acquired in the course of socialization [11]. The person interprets cultural symbols by means of "a network of preferences" (P. Ricoeur). These are the certain cognitive designs, acquired during education.

Intersubjectivity is intelligence. This intelligence is explained by immersion of the person in a context of "language games" (L. Wittgenstein). The purpose of language game is elimination of "traps" of a natural language by a way of continuous "translation" of unclear sentences in clear ones, helping to describe object exactly or the phenomenon according to "a network of preferences". Intersubjectivity functions only in system of language games and human activity.

If the culture exists in language games, the concepts sending to concreteness are characterized by "utopian designation" (R. Barthes). They have no ontological definiteness, natural communication between "designatum" and "denotatum" because designation in language games doesn't correspond directly to reality; it is connected with it only indirectly through a sign or a symbol [12].

As all manifestations of reality from the point of view of constructivism can be considered as cultural texts, it is impossible to understand these texts, without having destroyed former stereotypes (J. Derrida). The sense of the text exists only at the time of its reading, it isn't given us once and for all, and it has no unambiguous interpretation. The reality of the cultural text is "rhizome" (G. Deleuze, P.-F. Guattari). It is open dynamic system without the center which develops diversely according to different interpretations of sense [13].

Education "designs" the person. The person is in the power of usual language and trifles, he merges with crowd. The crowd washes away identity, imposes standards and values. To understand themselves and to find freedom, the person has to find the center, the reference point to which its forces will be directed. Freedom understanding in identity occurs by means of existence "on the verge". It gives a choice and belief in forces. Person in search of truth listen to itself. The understanding the person of unique "existencia" becomes the truth.

The teacher has to create for pupils a situation of a choice. The special attention should be paid to communication improvement. Each person is the participant of general process of training, and the freedom of expression is necessary to every person. It

can be compared with orchestra rehearsal. The discipline is supported because of self-discipline. This voluntary consent serves a common goal – harmony. However, it is possible to reach obedience by an “army” way. Here the discipline is supported only by fear of punishment. The good soldier is disciplined not for the sake of army as whole. It has no interest to this whole. He is dependent, deprived of identity. There is a desire to hope that during education there will be “a spirit of an orchestra”, instead of “spirit of army”.

All history of pedagogic is noted by fight of two ideas: the first, that education is the development going from within that it is based on natural abilities and ideas, and the second, that education – the formation going from the outside and representing process of transformation of natural bents in cultural skills. In our opinion, this fight of ideas has no sufficient philosophical basis. Dispute is based on “misunderstanding”. The thesis and the antithesis don’t deny each other, and serve as conditions for synthesis which and there is an education process. It carries out dialectic removal of contrasts. It is senseless to argue that it is more important for an organism – the right or left foot. Everything is interdependent, represents uniform dynamic system of interaction of basic designs of consciousness with environment, “a call and the answer”. This idea of constructivism is essence of philosophy of education.

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Corresponding Author:

Dr. Borisov Sergey Valentinovich
Chelyabinsk State Pedagogical University
Lenin Avenue, 69, Chelyabinsk, 454080, Russia

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