

## **EMBODIED RATIONALITY AS A MODE OF THE VISIBILITY OF ETHICS (TO THE QUESTION OF THE TOOLKIT OF CONSTRUCTIVISM)**

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**Abstract.** Emphasizing a keen interest in the corporeal/bodily in its dynamics and its cognitive characteristics, the authors show that the appeal to the corporeal as a cognitive option changes the understanding and perception of such traditional phenomena as the world, reality, space, things. The proposition that the subject constructs the world, and our bodily experience is determined by the word and constructed by discursive contexts, looks incomplete: its limited nature requires some additions. The authors underline that the study of human sensual cognitive capabilities and the analysis of the cognitive map of the bodily forces us to pay attention to embodied rationality. Addressing it allows us to overcome constructivism, focused exclusively on the discourse of the word, because our intelligence was also shaped in accordance with the form of body action.

The authors turned to the problem of mode the visibility of ethics and posed a provocative question as follows: can the cognitive abilities of the bodily act as a basis for 'construction the morality' and occupy n equal position with verbal discourse? To solve this problem, the authors analyzed relevant scientific findings and their influence on the nature of the development of constructivist epistemology, studied the debate on the issue of ethics taking place among the representatives of constructivism, and, in particular, analyzed discussions on tools of the constructivism. At present, all ideas and works of constructivism must take into account bodily rationality as their obligatory component (in its general instrumental and methodological basis), and bodily rationality can serve as the basis for "constructing morality."

*Keywords:* body; embodied rationality; ethics; constructivism; epistemology

### **Introduction**

Today the statement that a person constructs the world, and our bodily experience is determined by the word and is constructed by discursive contexts, looks

incomplete: its narrowness requires some kind of additions. Constructivism finds its roots in the Enlightenment, when an attempt was made to create ‘social physics’ by extending the principles of the natural sciences, which were based on rational discourse, to the social world. The study of sensual cognitive capabilities of a person and the analysis of the cognitive map of the corporeal draw our attention to embodied rationality. Addressing it can overcome constructivism, focused exclusively on the discourse of the word, that is confirmed by H. Bergson’s words that “our thought is initially associated with actions. It is in the form of action that our intellect molded. Reflection is a luxury, while action is a necessity” (Bergson 1998, 58).

**The problem formulation.** Putting the phenomenological tradition of embodied cognition, constructivism and ethics of constructivism in one row, the authors turned to the problem of the mode of the visibility of ethics and posed a provocative question: can the cognitive capabilities of the bodily act as a basis for ‘constructing’ the morality and be considered as important as verbal discourse? To solve this problem, the authors examined scientific findings and their influence on the nature of the development of epistemology, epistemological constructivism, studied the debate on the issue of ethics taking place among the representatives of constructivism and, in particular, analyzed rational substantiation of ethics as a toolkit of constructivism.

**Methodology.** Since the humanities are prone to methodological pluralism, traditional philosophical methods (phenomenological, hermeneutical, structural-analytical, cultural) are used on the basis of the principle of composition (complementarity) in this study. The emphasis is on the search for the foundations of comprehending processes of embodied cognition, which are investigated on the basis of the principle of integrity, the ratio of functionality, organization, and consistency. The cognitive dynamics of the bodily as a feature of a living organism is considered on the basis of the principles of objectivity and evolutionism. The ethics of constructivism is subject to anthropological reflection on the basis of the universal laws of human development as a species, taking into account new trends in philosophy and science.

### **The Cognitive Map of the Bodily as a Matter of Interest**

In the works by N. Luhmann (he introduced such terms as ‘first-’ and ‘second-order observation’<sup>1)</sup>), J. Deleuze (who was interested in immanence)<sup>2)</sup>, J. Bataille (the relationship between homogeneous and heterogeneous realities)<sup>3)</sup>, J.-F. Lyotard, J. Lacan and others, the topic of cognitive processes that grow on the basis of bodily experience becomes large-scale. The question naturally arises: how are we provided the bodily experience itself (through a word or bodily gesture)? There are two points of view today. The first one, widespread, is as follows: the bodily experience is provided through words. Determining discursive thinking within the boundaries of a certain order, Aristotle proposed to subordinate judgments to norms, laws and

establish control over the thought-constructing procedure using these same norms, thereby laid the foundations of the tradition of discursive knowledge. It should be noted that the Greeks also used two methods of thinking called ‘techne’ and ‘phronesis’ (practical reasoning). Nicomachean Ethics Book 6 is a chapter on the mind that sets the stage for treating wisdom as a combination of science (apodictic knowledge) and the mind (intuition). Aristotle wrote: “Regarding practical wisdom [phronēsis] we shall get at the truth by considering who are the persons we credit with it. Now it is thought to be the mark of a man of practical wisdom to be able to deliberate well about what is good and expedient for himself, not in some particular respect, e.g. about what sorts of thing conduce to health or to strength, but about what sorts of thing conduce to the good life in general. This is shown by the fact that we credit men with practical wisdom in some particular respect when they have calculated well with a view to some good end which is one of those that are not the object of any art” (Aristotle 1983, 1140a, 25 – 30). Aristotle’s art (techne) deals with the production of not actions, but things, objects, this is skill and experience. But a special experience is needed: a craftsman needs to learn to see, and a seer needs to think. Theoretical intuitions are hidden in all life experience. This is the practice of art. Phronēsis is worldly human wisdom, but at the same time a natural and developed mind. Prudence deals with actions, with behavior, so there can be no art for this area. It is also noteworthy that by the end of chapter 6, Aristotle no longer turns to art.

Techne is technical reasoning and a method inherent in practical human activity. Phronesis is a form of practical reasoning based on moral norms, practical value-rationality. Any practice has a specific goal, and the goal is a ‘good’ that is internal and inseparable from practice and exists only in the practice itself. Therefore, reasoning about methods and goals are elements of practical reasoning. Vincent Carraud, explaining the difference between techne and phronesis and referring to A. McIntyre, emphasized that phronesis (unlike techne) is not an art or an intellectual dignity that can be learned in an isolated form and then applied in practice. It is rather a moral and intellectual merit rooted in the natural human ability to “do the right thing in the right place, at the right time, and in the right way” (Carraud 2006, 188). We can say that Plato and Aristotle based their theoretical thinking not only on the experience of the intellectual individuation but also on the ethical one. The idea of rationality took on a honed form in the Age of Enlightenment, strengthening its position due, first of all, to scientific rationality, but at the same time losing interest in the ethical.

The question of the experience of perceiving and cognizing the world based on a gesture, taking into account bodily determinants, was raised in new contexts. H.U. Gumbrecht tried to rehabilitate the effects of sensual, bodily presence with the help of the philosophy of presence. M. Sheets-Johnstone, Merleau-Ponty’s follower, played a special role in the development of the tradition of non-discursive

knowledge. She was a professor of dance, choreographer/performer, and dance scholar for a number of years prior to her professorship in philosophy. Sheets-Johnstone is follower of M. Merleau-Ponty's phenomenology of perception. We recall that at one time it was phenomenology that raised the question of the role and significance of the corporeal (bodily). The studies in the field of modern phenomenology, the roots of which we find in the philosophy of E. Husserl, M. Merleau-Ponty, etc., expand their horizons precisely because of such representatives who were directly or indirectly related to body techniques, were professional dancers or engaged in gaining or improving their theatrical skills and so on. Sheets-Johnstone's first book was *The Phenomenology of Dance* (Sheets-Johnstone 1966). She unfolded the project of the cognitive significance of a gesture, in strength and depth equal to the intellectual revolution. M. Sheets-Johnstone has introduced the notion of *kinesthetic intelligence*. She actively uses it and is sure that this intelligence is possessed by humans and the entire animal world, that can move and coordinate their movements in space,

“Not only do we come into the world moving: we come into the world in whole-body fashion. Movement bequeaths us a whole body. Whatever the part that is moving, our whole body is engaged in its dynamics, even in such seemingly simple movements as opening and closing our eyes, turning our head, kicking our leg, crying, and so on” (Sheets-Johnstone 2011, 51 – 68).

In her opinion, the activity and dynamics of the sensual constitute the basis of a person's cognitive map. I. Sirotkina has developed the topic of kinesthetic intelligence and argued that movement is capable of producing corporeal knowledge – practical knowledge, ‘knowledge of how’, in contrast to the verbalized and formalized ‘knowledge of what’. She claims, that

“Kinesthetic intelligence is inherent in everything moving – not only we are smart, but animals are also smart, and only for the reason that they can simply move and coordinate their movements. We are talking about discursive knowledge obtained through the word and non-discursive knowledge, that is, about the knowledge obtained through the body” (Sirotkina 2016).

The tradition of non-discursive knowledge, indicating that intellectual sensuality leads to the formation and legitimization of a new rationality, has opened the way to the substantiation and significance of embodied rationality.

### **Naturalistic Epistemology to Support Embodied Rationality**

The corporeal (morphological) organization of a living organism makes it possible to perceive, cognize, and act in its own way with the sole purpose of survival. The Estonian-German biologist J. von Uexküll focused on this problem. Having described the life of a dust mite in a typical environment for the latter, he came to the conclusion that any organism perceives the world selectively, that is, each in its own way, ‘directing’ its corporeal characteristics to adapt to

the environment, where it equips its skills, instincts, the ability to have offspring (Uexküll & Kriszat 1956). His followers not only recalled these discoveries, but drew attention to the following fact: the corporeal organization and the capabilities of the organism, on the one hand, and the influence of the reality, that the living organism was developing and filling with some sense, on it, on the other hand, are always connected (Claus & Kull 2011). It resembles a kind of call back/feedback. The modern scientist Carlo Brentari, who studies biosemiotics, exploring the idea of Umwelt (Uexküll's term), emphasized the evolutionary relationship between bodily and body safety, "Umwelt is a perceiving and active world that surrounds animal species; it is a subjective species construct that provides living organisms with greater safety and stability of behavior" (Brentari 2015).

The idea of call back (feedback) was developed by Claus Emmeche and Kalevi Kull (Emmeche & Kull 2011). They pointed out that the features of the bodily (all organisms' vital functions 'work' only in the context of the response from the environment), its dynamics and typology form feedback, construing it in the form of sign relations (Emmeche & Kull 2011). These discoveries have become a significant contribution to the implementation of the naturalistic turn in modern epistemology. It must be noted that the discoveries of biologists are supplemented by the discoveries of physicists. The latter proposed space-time concept of the development of consciousness, which confirms the originality and significance of the naturalistic turn. They proposed a spatio-temporal concept of the development of consciousness, which confirms the originality and significance of the naturalistic turn (Kaku 2015). Today the assumption that a person constructs the world, and our bodily experience is given by the word and constructed by discursive contexts, looks incomplete: its narrowness requires some kinds of additions. The morphological organization of the organism (first of all, its corporeal capabilities, its physiology, structure and functioning) promotes living in environmental contexts that are 'convenient' and 'real' for its existence. Such contexts cannot be assessed, recognized and described without the decisive determinant (bodily/corporeal), and understanding the organization of a living organism's vital activity is impossible without resorting to intellectual sensuality (therefore, to embodied rationality). Embodied rationality is "a capability to act, focused on the realization of 'knowledge of how' and on the construction of such a being in which the ultimate reality is achieved at the expense of bodily capabilities" (Dolska 2020, 44 – 45).

### **Embodied Rationality as the Basis of Morality**

(to the Question of Strengthening the Methodology of Constructivism)

Due to the latest high technologies, methods and means of improving both the reality and human corporeality are being rapidly developed, which means that the construction of the human body in its various modifications will become a tasty 'piece' for the modern science. It is no accident that the theme of the bodily 'sound-

ed' in the context of the methodology of constructivism (Baird 2017) as well as in the context of understanding the connection between the human mind and ethics. The topics of construing reality and the issues of the ethics of constructivism turned out to be interrelated and became the object of discussion.

The authors of the article consider constructivism basing on social constructivism and epistemological constructivism. The phenomenological sociology of knowledge, advocated by Peter Ludwig Berger and Thomas Luckmann (Berger & Luckmann 1966), is focused not so much on the study of specialized forms of knowledge but on "everyday knowledge", "the reality of everyday life". Epistemological constructivism raises questions that contribute to the awareness of the possibilities of human cognition and its boundaries. The authors are of the following opinion: constructivism in modern philosophy acts as a general methodological principle, which is put into the basis of human thinking (as the movement of thought with specific goals) and human actions; it is carried out according to certain rules with strict boundaries for their implementation; it has its own categorical glossary. It is opposed to realism and is actively used in the analysis of living systems.

The problem discussed in the article arises from two questions. The first question is about the nature of the rational foundation of ethics, which is the basis of constructivism. In particular, can the cognitive capabilities of the bodily be the basis for the 'construing' of morality and take an equal position with the discursive or the verbal? The second question is related to the rationale for the necessary departure from the one-dimensional understanding of rationality, characteristic of the Enlightenment. Also, accounting for the studies by Butt, who emphasizes the blurring of the regulatory framework of constructivism and writes about moral perspectives, we propose to strengthen constructivism with a new, for example, embodied rationality as an obligatory principle of the way of thinking in the general toolkit of constructivism.

It should be noted that these questions were caused by the very nature of the development of epistemological constructivism. Non-classical (reformed) epistemology not only challenged constructivism, built exclusively on the basis of discursive practices, but provoked a change in the trajectory of discussion of the topic of ethics, primarily directing it to deconstructing the Enlightenment ideas. The editor-in-chief of the AHCI-journal *Constructivist Foundations* A. Riegler put forward a constructivist research program, the first point of which reads, "Constructivist approaches question the Cartesian separation between objective world and subjective experience". And further, "...it is futile to claim that knowledge approaches reality. Instead, reality is brought forth by the subject" (Riegler 2005, 4 – 5). The managing editor of the *Journal of Constructivist Psychology*, Dr. Raskin, engaged in a dialogue with S.A. McWilliams, L.M. Osbeck, and others, expanded the horizons of questions about constructivism, realism, epistemology, ontology and ethics. Having posed the problem of the ontological and epistemological dimension of

constructivism, he emphasized that all human-created meanings actively influence each other, and epistemological construction opens horizons for the deconstruction of previously created constructions,

“Epistemological construing expands things by allowing people to deconstruct their own constructions. It acknowledges that not all construing is directed at, or even remains committed to, the idea of an unyielding external reality. Although epistemological construing does include what many – like Osbeck (this issue) – might consider imagination, it is not solely about imagining things. It is also about deconstructing previously accepted constructions in order to entertain alternative ways of making sense of reality” (Raskin 2018).

The emphasis is on deconstructing the ideas of the Enlightenment. In this interesting discussion, we saw the need to improve the human mind, to move away from a univocal understanding of the rationality of the Enlightenment. T. Butt’s reasoning, who built his research program on the topic of moral relativism and the ambiguous understanding of the scientific construing of reality, is of extreme interest in this context. He uses the expression “an increasingly enlightened moral outlook”, which is unusual for a modern reader. T. Butt wrote, “Science offered opportunities for liberation, a move away from humankind’s seeing itself as determined either by events or by dogma. It was Kelly’s hope, as it was Dewey’s before him, that scientific progress would go hand in hand with an increasingly enlightened moral outlook” (Butt 2000, 95). He does not think that the term can cause any misunderstandings, on the contrary, in his studies Butt repeatedly emphasizes the need to accompany the scientific construction of reality only with ethical perspectives of “an increasingly enlightened moral outlook”.

How to understand the expression *an increasingly enlightened moral outlook*? What possible meanings can it have? The explanation can be as follows. During the Enlightenment, the way of thinking was based on the mind-body scheme, where the mind held the dominant position, which in its turn found its realization in the ideals of the Enlightenment. The power of the mind was also absolutized by the opposition of the body and the mind. However, the mind, taken by itself, separated from the corporeal, loses its validity. It became obvious at the beginning of the 20th century: representatives of phenomenology began to actively turn to bodily practices, and at the end of the 20th century, naturalistic-evolutionary epistemology also paid attention to it. On the basis of scientific and philosophical studies of the twentieth century, it became clear that the ‘mind – body’ scheme emphasizes not only their epistemological continuity, but also their ontological integrity. The potential and pathos of the ‘human’ cannot be considered outside this scheme, but with an equal value of its components.

We are sure that today in constructivism (and we associate it, first of all, with constructivism of an evolutionary nature, the purpose of which is not only to influence reality, but also to construct it), the mode of the visibility of ethics is activated,

and this does not fit into the Enlightenment version of understanding the rational, in which the mind acquired priority over the bodily. The Enlightenment ideal emphasized the importance of the theoretical, rational to ensure an active approach to life. But at the same time, it limited the understanding of that that the improvement of rationality is possible thanks to the practices of life itself, into which our body is inscribed. It is time to recall Le Goff's words that our body constructs history in the same way as economic, social and mental representations (Le Goff & Truong 2016). That is, the body itself is a context of life, and the convergence of the ontological, social and, of course, epistemological in this context creates a complex interweaving and at the same time becomes a reality for embodied rationality.

Embodied rationality laid the foundations of ethics, the key components of which were trust, care, and altruism. Reflecting on these components, we turn to M. Sheets-Johnstone. She connects their understanding with “human experience as fundamental to understanding human morality” (Sheets-Johnstone 2008, 266), with caring and with rationality, not only intellectual but also the one that takes into account the peculiarities of our physical structure. In her opinion, a person as a species was ‘forced’ to face such phenomena as trust, care, attitude towards the dead, etc. things that are the roots of morality. She writes in her work,

“Altruism is an empirical fact of animate life, the understanding of which rests on genealogical understandings of its source in intercorporeal sense-makings. Altruism is in fact not simply an instance but a paradigm of analogical apperception: one individual sees that a smaller individual needs help or special treatment, as in play (see Chapter 6); one individual sees that an individual is being chased aggressively by another individual and intercedes; and so on. One can readily see in view of just such genealogical underpinnings that altruism is a paradigm of the sense-makings underpinning the metaphysical experience of caring. Concern and devotion to the welfare of others such as to enhance their life in some way involves actions and behaviors that are intelligent” (Sheets-Johnstone 2008, 314).

She demonstrates quite clearly and accurately that life practices lead us to rationality, which grows on the basis of the bodily capabilities.

The moral constructions of the new ethics become practically moral material things, that means how relevant the mode of visibility of the new ethics – the post-Enlightenment ethics – is. Sheets-Johnstone stresses the importance of the sensual and sensations in the ‘construing’ of trust, which is valued much higher than the trust ‘constructed’ by verbal discourse. We see that M. Sheets-Johnstone insists on a new understanding of rationality, while this is not about rejecting the Enlightenment rationality, but about its incomplete or one-dimensional understanding,

“As a classic theoretical doctrine, rationalism is narrowly understood as a vision of – and a credence in – rational man reading the rationality of the universe. The understanding is narrow because rational man himself must be held up to the light and rationally examined. The actual scope of rationality is thus far broader. So

realized, rationality encompasses an awareness of the ties that bind humans as much in a common humanity and a common creaturehood as to a common evolutionary heritage and to a common world" (Sheets-Johnstone 2008, 303).

T.E. Baird insists in his studies that new methodologies are needed to rationalize norms and social contexts as they act as a means of updating the toolkit for creating not only special contexts but also social constructs. T. Baird believes that "constructivist approaches" must be actively applied to understanding 'normative change' <...>, "and the objects of analysis are the processes of socially embedded rational calculation" (Baird 2017). We emphasize that in the concept of constructivism, rationality and contextuality act as a complex basis for deriving causal relationships (their non-linear nature is underlined). Professionals dealing with the problems of constructivism unanimously accentuate that the new toolkit should be based on rational calculations, on rationality, which requires that the norms, conditions of implementation and the effects of norms be consistent. This statement proves the importance of rationality for constructivism, which is an obligatory component that forms the methodological base, social contexts and even worldview. And the 'mind-body' scheme with an appeal to a multivocal understanding of rationality is put at the heart of the methodology of constructivism.

The validity of the roots of ethics, the connection of the discursive with the materiality of things becomes an optimistic option for our past and our future, and the extended understanding of rationality is striking in its simplicity, consistency, and scale.

### **Conclusions**

The body and bodily experience set the volumetric nature of the vision of reality and activate the mode of ethics visibility while the mind and intellect are called upon to refine this reality with verbal and semantic contexts. Constructivist projects acquire colossal proportions in the modern world, but at the same time, epistemological constructivism opens horizons for the deconstruction of previously created human meanings.

Since these meanings actively influence each other, constructivism, due to the processes of updating social contexts, norms, conditions for their implementation and rational-contextual justification, requires new tools and new methodologies. The analysis of studies on the cognitive map of the body and on the nature of changes in the constructivism of an evolutionary nature, on the one hand, and the constructivism in combination with ethical perspectives, on the other hand, allowed the authors for making such conclusions as: firstly, today, constructivism cannot be described theoretically and practically without resorting to embodied rationality; secondly, at present all ideas and works of constructivism should take into account embodied rationality as its obligatory component (in its general instrumental and methodological base), and embodied rationality can serve as the basis for 'constructing morality'.

Since, under the conditions of scientific and technological society, “the living space of a person and his body will undergo dangerous turns, which is comparable to driving without rules” (Latour, Illouz, Nancy 2020), the authors suggest that any constructivist project should be developed taking into account the possibilities of embodied rationality since only rationality as the integrity of the bodily and verbal brings us closer to a harmonious perception of the world.

## NOTES

1. N. Luhmann, criticizing the theory of the subject, proposed his theory that is based on the principle of colliding descriptions, as the interaction of the present systems, which explains the introduction of the term “external observer”. Luhmann actively uses the category presence, following Erving Goffman. The latter believed that presence is a bodily presence: Goffman drew attention to the arbitrary self-expression with which people send information about themselves in universally significant symbols, and to the involuntary one (for example, any involuntary or accidental gesture of a person can completely destroy the declared claim to his/her social status). (Goffman 2000). In his work “Was ist der Fall?” und “Was steckt dahinter?” Die zwei Soziologen und die Gesellschaftstheorie, Luhmann describes the “interaction of those present” in the form of interaction (Luhmann 2007, 101) and discusses the latency (it is this that causes such questions as “What is happening?” and “What is behind this?”). At the same time, he introduces such terms as a first-order observer and a second-order observer to describe the concept of the autologous, which is self-implicating and at the same time self-disavowing: “It could be related to only one observer and only to a first-order observer, but at the same time it was a concept of the observation of this observer, that is, a concept of the second-order observation. If the sociological theory is now radically converted to a second-order observation relationship and thus reflects its own sociality, the old ontological (being-related) concept of latency disappears.” (Luhmann 2007, 116).
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3. In his works “La structure psychologique du fascism” (Bataille 1989) and “La valeur d’usage de D.A.F. de Sade” (Bataille 1970) G. Bataille developed the idea of heterology, which, according to his plan, should become a quasi-scientific study of human affective impulses. Within the framework of heterology, Bataille postulates a fundamental division of human reality into homogeneous and heterogeneous. The first is associated with everyday orderly existence, it is the result of rational calculation and pragmatic benefits. The heterogeneous reality unfolds as a result of the realization of intense affective experiences. Prelogic affective impulses and drives serve as new guidelines for human behavior. Impulses, affects, drives constitute the most important part of the human being, therefore it is necessary to look for their role and the importance that they occupy in modern life. They also cancel the subject-object relationship, allowing a person to feel continuity with the surrounding world or with its individual objects.

## REFERENCES

Aristotle. 1983. *Nikomahova etika*. (Vol. 4). A. I. Dovatura (Eds.). Moskva: Myisl, 53 – 294 [in Russian].

Baird, T.E., 2017. Interest groups and strategic constructivism: business actors and border security policies in the European Union. *Journal of Ethnic and Migration Studies*. Taylor & Francis Group, 44(1), 118 – 136. Available from: doi: 10.1080/1369183X.2017.1316185.

Bataille, G., 1970. La valeur d’usage de D.A.F. de Sade. *Bataille G. Œuvres complètes II. Œuvres complètes II*. Paris: Gallimard, 54 – 70.

Bataille, G., 1989. La structure psychologique du fascism. *Hermès*, 5 – 6. 137 – 160.

Berger, P. L. & Luckmann, T., 1966. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City, New York: Doubleday

Bergson, A., 1999. *Tvorcheskaya evolyutsiya: materiya i pamyat’* [Creative evolution: substance and memory]. Minsk: Kharvest. [in Russian].

Brentari, C., 2015. *Jakob von Uexküll. The Discovery of the Umwelt between Biosemiotics and Theoretical Biology*. Biosemiotics. Part of the Biosemiotics book series. V. 9. Dordrecht: Springer. Available from: doi: 10.1007/978-94-017-9688-0.

Butt, T., 2000. Pragmatism, Constructivism, and Ethics. *Journal of Constructivist Psychology*. **13**(2), 85 – 101. Available from: doi: 10.1080/107205300265892.

Carraud, V., 2006. Filosofiya i obrazovanie (Carraud, V. Philosophy and Education). *Sotsialnyie i gumanitarnye nauki*. Ser. 3 Filosofiya. Referativnyiy zhurnal, 1, 184 – 192. [in Russian].

Delez, Zh., 1998. *Razlichie i povtorenie*. (N. B. Mankovskaya, E. P. Yurovskiy Trans.). Sankt-Peterburg: Petropolis. [in Russian].

Deleuze, G., 2001. Immanence: A life. *Deleuze, G. Pure Immanence. Essays of Life*. (A. Boyman, Trans.). New York: Zone Books, 25 – 33.

Dolska, O., 2020. Time to Think About Embodied Rationality (The Stands of the Sporting Events Are Empty!). *Mokslas ir praktika: Aktualijos ir perspektivos. Moksliinių straipsnių rinkinys. Theory and practice: Problems and prospects. Scientific articles*/ Kaunas: Lietuvos sporto universitetas. 37 – 46.

Emmeche, C. & Kull, K., 2011. *Towards a Semiotic Biology: Life is the Action of Signs*. World Scientific. London: Imperial College Press.

Goff, J. Le & Truong, N., 2016. *Istoriya tela v srednie veka* [History of the Body in the Middle Ages]. Moskva: Tekst. [in Russian].

Gofman, I., 2000. Tehniki prezentatsii. *Abels H. Interaktsiya, identichnost, prezentatsiya: vvedenie v interpretativnyu sotsiologiyu*. Sankt-Peterburg: Aleteyya.

Illouz, E., 2020. L'insoutenable légèreté du capitalisme vis-à-vis de notre santé. In: Latur, B., Illouz, E., Nancy, J.-L., *How is the world looks like after a pandemic?* Available from: <https://politkrytyka.org/2020/03/31/yakyj-svit-pisly-a-pandemiyi-bruno-latur-yeva-illuz-zhan-lyuk-nansi>

Kaku, M., 2015. *Buduschee razuma* [The Future of the Mind]. Moskva: Alpina Publisher [in Russian].

Kant, I., 1964. *Kritika chistogo razuma*. (Vol. 3). Moskva: Myisl. [in Russian].

Luhmann, N., 2007. “What ist the case?” and “What is hidden behind it?” – Two sociologies and the theory of society. *Russian Sociological Review*. **6**(3), 100 – 116.

Raskin, J. D., 2018. Constructivism, Ethics, and Knowing What's Right: A Reply to McNamee, Burr, McWilliams, Osbeck, and Held. *Journal of Constructivist Psychology*. **31**(4), 413 – 419. Available from: doi: 10.1080/10720537.2017.1383956.

Riegler, A., 2005. Editorial. The Constructivist Challenge. *Constructivism Foundations*, **1**(1): 1 – 8.

Sheets-Johnstone, M., 2019. Foundational Dynamics of Animate Nature. In: *Zwischenleiblichkeit und bewegtes Verstehen – Intercorporeity*,

*Movement and Tacit Knowledge.* 51– 68. Available from: doi: 10.14361/9783839435793-003.

Sheets-Johnstone, M., 1966. *The Phenomenology of Dance*. University of Wisconsin Press.

Sheets-Johnstone, M., 2008. *The Roots of Morality*. University Park, PA: State University of Pennsylvania Press.

Sirotkina, I., 2016. Human movement: semiotic and phenomenological approaches. *Practices & Interpretation*, 1(4), 197 – 212. [in Russian].

Uexküll, J.B. & Kriszat, G., 1956. *Streifzüge durch die Umwelten von Tieren und Menschen*. Ein Bilderbuch unsichtbarer Welten. Bedeutungslehre. Mit einem Vorwort von Adolf Portmann. Rowohlt Hamburg.

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