REPRESENTATIONS AND INHOMOGENEOUS BEINGS

László Ropolyi*

Department of History and Philosophy of Science – Eötvös Loránd University
Budapest, Hungary

ABSTRACT

Beside the regularly applied concepts (e.g. neuron, brain, sign, representation, code, sense, experience, perception, etc.) an additional collection of concepts (entities, interaction, border, inhomogeneity, dialectics, necessity and contingency, freedom, historicity, acquaintance and knowledge, culture.) is proposed for the better understanding mind and cognition. An anti-Parmenidian ontology is suggested in which all entities can be regarded as entities only in a certain context, i.e. all entities are inhomogeneous beings. In this ontology there are some essential common characteristics of the inorganic, the organic and the human beings. Representation is a key concept in the ontology of inhomogeneity. Taking into account the natural history a history of representation can be reconstructed: passive inorganic, active organic, and reflective human representations generate expression, acquaintance and knowledge. In the evolution of representation three essentially different strategies can be identified: the bound, the free and the mixed strategies. Bound representations generate acquaintance, free strategies generate knowledge. Human beings can follow both strategies at the same time – i.e. humans have a mixed representation strategy. In this way the advancement of freedom can be identified as a drive of the emergence and functioning of mind and cognition.

KEY WORDS

CLASSIFICATION

*Corresponding author, η: ropolyi@caesar.elte.hu; +36 1 3722949;
 1117 Budapest, Pázmány Péter sétány 1/c, Hungary

INTRODUCTION

A few years ago I had to review a dissertation written about philosophy of mind. As a philosopher, of course, I had some views on the topic, but I thought perhaps it would be necessary to strengthen my ideas with some arguments from the recent literature. Searching for papers I realized that David Chalmers & David Bourget compiled "a bibliography of work in the philosophy of mind, the philosophy of cognitive science, and the science of consciousness. It consists of 28 490 entries" [1]. I was shocked.

As a contemporary Hungarian philosopher, Ákos Szilágyi mentioned in a paper "we are not living in time, but on deadline" (well, this is a nice and untranslatable equivoque with the word "idő" (time) in Hungarian, but hopefully understandable in part), so, then I had to give up my ambition to get a more or less coherent and literarily informed position on philosophy of mind.

Telling the truth, a posterior study of a reasonable segment of the above mentioned literature disclosed an interesting characteristic of these works: in spite of the huge number of books and papers the spectrum of the philosophical ideas and methodologies included into their argumentations was surprisingly narrow. This observation inspired me to imagine "alternative" approaches to philosophy of mind with additional, in this context unusual or occasionally applied philosophical methodologies and ideas. In other words: instead of the simplified, universal context of the majority of this works, I would prefer much more individual, plural, and rich contexts to reach a deeper understanding of the mind. Unfortunately, I had practically no chance to go further: just a few conference lectures, several paragraphs included in papers or books focusing on something else – this is what I was able to realize from this "program" until now. Additionally, meanwhile the Chalmers – Bourget bibliography has essentially extended and in these days includes 63 046 items [2].

In this way I was really glad to receive Andrej Ule's thoughtful papers on his philosophy of mind [3, 4] and get the possibility to contribute to their discussion. I can agree with his fundamental non-reductionist, but naturalist position on the evolution and emergence of the mind, so an important condition of the fruitful discussion is given. I accept also his aim to contribute to the naturalization of the mind elaborating some ideas based on the works of Bateson, Peirce, and some scholars in biosemiotics. In this short paper I try to propose several additional philosophical ideas, alternative approaches to several problems in order to take Andrej Ule's views into a broader context. The ideas developed in this paper I dedicate to Andrej.

First of all I propose to involve into the description of the evolution, emergence and functioning of the mind a collection of concepts as follows: entities, interaction, border, homogeneity and inhomogeneity, dialectics, necessity and contingency, freedom, historicity, acquaintance and knowledge, and culture. I suppose that beside the regularly applied concepts (e.g. neuron, brain, sign, representation, code, sense, experience, perception, etc.) using these concepts has a crucial role in the better understanding the mind and cognition. There is no enough room here to explain the details I just try to sketch some – hopefully convincing – relations.

ONTOLOGY OF INHOMOGENEITY

All entities can be regarded as entities in a certain context. We cannot say anything about something which exists "just simply", devoid of all circumstances, effects or interactions, at least not except for what we have already mentioned, namely that we do not know anything about it. If something does not have a context, it does not exist. Here we use the expression "context" in a wide sense which implies both ontological and epistemological components. Following Heidegger's encouragement, we could probably use the concept of "world" for ontological purposes instead of "context", and we could talk about being – in – the – world

or, following different traditions, we could also use the concept of "environment" as well, but perhaps the expression "context", with both ontological and epistemological meanings, will be more suitable.

The context of entities necessarily separates and can be separated well from the entities and in this separation they mutually secure each other's identity. Their relationship is symmetrical in a certain sense, though it is possible to break the symmetry through a decision: from now on I will regard something as an "entity" and something else as "context" and asymmetry prevails. In this procedure, the main question is the creation of identities. By preserving the symmetry between an entity and its context, I can also say that the entity receives its identity from its relation to the context and vice versa, or through a decision for their asymmetrical relationship, I derive the identity of an entity from the identity of the context. Even this quite abstract scheme reveals the possible basic structures of organisms: the "entity – context system" is a single complex system the identity of which is "determined from the inside"; in contrast, the entity put into a context presents itself as simple and homogenous and receives its identity from outside of itself. We would like to draw attention to the fact that the choice between the mentioned organism concepts is free; there is no logical constraint, both views are intelligible – of course, if we use them consistently and repeatedly, we get to different worldviews and different problem areas. We can make the value system of our culture effective and we can satisfy our ideological needs through a free choice between the mentioned alternatives.

In other words: Parmenides was wrong, entities with identity are inhomogeneous beings. A necessary coexistence and distinguishability of the two (or more) sides/parts/aspects/components of the beings is the condition of their identity. The parts of the beings are inseparable to each other, but a border separates them and the interaction between the parts can be considered as a form of the existence of the beings. Border and interaction: these are the very essential beings. All beings are structured beings, i.e. organism.

Besides their identity, another basic characteristic of organisms is their integrity. The concept of integrity is for describing the "wholeness" and "unity" of the organism and the degree and stability of its identity. The organisms suffer the effects of the external factors which influence their integrity, and they either give in to it or resist it. The effect of internal factors – if we can interpret them at all – will become the trigger of mutual and constant transformations. It is obvious that we can describe the integrity of organisms without a structure with the dichotomy of formation and destruction, but the "life history" of a structured organism can be more complex; it can go through a historical development, that is, a series of transformations between its formation and destruction during which it relatively preserves its integrity.

The key form of the existence of organisms is reproduction. Reproduction can be either active or passive: the organism can reproduce itself and it can suffer reproduction. The organism preserves its integrity when there is equilibrium between the two. The necessary errors of reproduction and construction/production play an important role both in case of self-reproducing organisms and organisms construed and (re)produced by external constraints.

This way of thinking can be useful in the philosophy of mind as well, especially in the naturalizing approaches to the mind. (It is easy to see that most of Bateson's criteria [3] express these relations, but in a different language.) Considering the brain-in-its-natural-context entity the brain-environment coexistence and inseparability, their interaction, the brain/context border (the experiences), etc. can manifest themselves in a new way. For instance in this view the Putnamian "we are brains in a vat" statement seems to be nonsense.

Much more important consequences can be found if we apply this inhomogeneous ontology together with historicity. Natural history can be considered as one of the most elementary and broadly accepted appearance of historicity. Taking the historical sequence

of inorganic-organic-human spheres in the natural history seriously a history of mind / consciousness can be reconstructed. In this perspective important similarities can be found between the existence of inorganic, organic, and mental entities. In other words: the existence of a stone on the field, a non-human living organism in its natural environment, and the human beings in its artificial environment can be considered as three steps in a historical process. This process can be identified as the evolution of representation.

STRATEGIES OF REPRESENTATION

If we have inhomogeneous beings representations unconditionally exist. Representation is an appearance of the inhomogeneity of beings: its different parts / aspects / etc. coexist, i.e. interact with each other, are determined by each other, refer to each other, express each other – represent each other. Representation is a mutual relationship.

The "entity-with-its-context" beings together with its integrity and reproduction can be described in different languages, for example in this way: a kind of representation of the environment for the "beings" has a crucial role to support their "survival". In this style of thinking we can identify three historical forms of representations:

1) representations in the inorganic sphere of beings are passive and generate expression;
2) representations in the organic sphere of beings are active and generate acquaintance;
3) representations in the human sphere of beings are reflective and generate knowledge (and consciousness).

Shortly on a really long history: passive, active and reflective representations generate expression, acquaintance and knowledge. The passive representation (sometimes it is called simply interaction) has a crucial role in the natural history, but here and now we would like to focus on the more complex active and reflective representations. Their complexity basically associated with the more complex entity-with-its-context structure. It is very clear that a living organism is much more structured then the inorganic beings. A trivial appearance of this structural distinction is the passivity-activity transformation.

Considering the active and reflective representations and their interrelationships in the processes of evolution two representation strategies can be characterized: the bound and the free strategies. In this view the nature of reflection is associated with a more structured activity of a more structured organism, and the possibility of the "self" (in the form of self-interaction, self-activity, self-organization, etc.) appears at a moment.

For a better understanding of this process a clear distinction between the bound and free strategy is very crucial[1]. First it is necessary to characterize the concept of acquaintance and knowledge.

Cognition – if we interpret its concept widely enough – can result in acquaintance and knowledge. Acquaintance and knowledge are different mainly in that acquaintance represents the object of cognition but it does not necessarily reflect on it; on the other hand, knowledge is reflected representation, that is, it is a special version of acquaintance. The necessary and contingent characteristics of the object are usually not separated in acquaintance; however, as a result of reflection, this separation necessarily appears in knowledge. Thus, following Aristotle, it seems to be justified differentiate between the knowledge of the contingent and the necessary. Acquaintance implies only knowing the contingent, it is about what exists. Knowledge involves knowing what is necessary; it is about what exists and cannot exist in any other way. Acquaintance is not necessarily conscious; typically, consciousness is not even needed for it; a certain sensitivity and perhaps memory are sufficient for it. In fact, all entities are acquainted with some things, at least during their existence since their existence, among other things, consists in representing their environment in a peculiar way; in other words, they are different and can be differentiated from their environment. Using reflection, knowledge, which is

necessarily conscious, limits our being at mercy of our environment and creates the possibility of an active relationship to it. Obviously, human cognition uses both versions of cognition.

These versions of cognition follow different strategies of representation. While acquiring acquaintance, the bound strategy of representation is useful; however, we can only acquire knowledge through following the free strategy of representation. The bound strategy offers an accurate, unambiguous and stable representation of the object of cognition quickly without conditions and changes, and this representation is individually accessible at any times. In contrast, the free strategy disconnects the representation from its object and it represents its object while operating flexibly, with multiple meanings and inaccuracy. Meanwhile, the access to the representation is a slow process loaded with conditions, changes and community relationships. Any kinds of material mechanisms can represent acquaintance created through the bound strategy; however, there is a need for a consciousness for knowledge which requires a free strategy.

Acquaintance gained through the bound strategy is directed at contingencies and circumstances and through the representation of the situation, it serves the "control" over the situation directly, "here and now", that is, they serve the persistence of the existence of the cognizing agent and its separation from its environment. The knowledge which can be produced through the free strategy can at most be utilized in an indirect way, since it only represents certain existing elements of the concrete situation (which exist necessarily, that is, in other situations as well) and in this way, it is oriented towards the "not here and not now". Knowledge does not serve the "dasein" or the existence of the agent "here" but his existence "not here" and it makes his existence as "an other", that is, the expansion of his environment (into a world) possible, and it makes the evaluation and understanding of his endowments and possibilities available for him.

Representation is the representation of something in both strategies of cognition (e.g. the environment of the agent) and as a result, it necessarily requires a connection between the representing entity and the represented. The representing entity replaces the represented entity – it is as if the former was the latter, the representing entity is virtually the represented. We can also describe this connection by utilizing the concept of information, provided that we notice that it is only the entity identified and understood (interpreted) as a sign which exists as if it was the signified, that is, it is virtually the signified. Information itself is a virtual entity which comes into existence as a result of this identification and interpretation process, that is, when an entity proves to be the sign of another and when we regard it as such. In the end, both representation strategies could be characterized through the analysis of the development and understanding of information as well. In this case, we would have to concentrate on the characteristics of the correspondence between the sign and the signified (the representing entity and the represented entity) and we could take it into account that in case of acquaintance produced through the bound strategy, the interpretation of the sign (the representing entity) is essentially determined by the signified (the represented entity) while in case of knowledge achievable through the free strategy, the interpretation of the sign (the representing entity) is essentially free.

In human cognition, we can identify typical forms of representation connected to each strategy. Thus for example technologies understood in the widest possible sense (that is, the methods which provide a control over concrete situations) are usually satisfied with using acquaintance connected to the given technological situation, while in the sciences (situation independent) knowledge operates. In the end, the ancient Greek terms "techné" and "episteme" refer to such differences.

We collected the most important characteristics of the bound and the free strategies of cognition in the Table 1.

Table 1. A comparison of strategies of cognition.

BOUND STRATEGY	FREE STRATEGY
The representation	*The representation*
Accurate	Indefinite
Unambiguous	Multiple meanings
Stable	Flexible
Its accessibility	Its accessibility
Fast	Gradual
Unconditional	Conditional
Individual	Community
Standardizing	Changing
Typical medium of representation	*Typical medium of representation*
Biochemical, physiological, physical and other material mechanisms	The mechanisms of consciousness, communication and culture
The content of the representation	*The content of the representation*
Acquaintance	Knowledge
Contingency	Necessity
Circumstances	Causes
Situation	The World
Purpose: control	Purpose: understanding
Typical form of representation	*Typical form of representation*
Technology	Science
"Techné"	"Episteme"

MIXED STRATEGY

Man does not simply exist, but he is also able to sustain and change his existence. He does not only operate his representational abilities in his relationship to his environment but also his reflective representational abilities. Man is the "citizen of two worlds" in several senses: he is subjected to natural and "cultural" limitations, he is the impression of his environment and he also shapes it, he is both "a character and the author of his own drama". The concrete and historical coexistence of the bound and free strategies presents human cognition as a never ending, complex, multipurpose, changing process which develops special methods, structures and organisms.

The typical example of the *mixed strategy* is the special ability of the human brain through which it can represent the object of the cognition in two ways simultaneously: on the one hand, following the bound strategy, as an object represented with its most concrete characteristics, on the other, following the free strategy, through the so-called secondary representation [5] as something completely different, for example as a tool which makes it possible to attain a goal. Secondary, tertiary, etc. representations are indispensable conditions of becoming human and they already appear in the development of primitive tool use and tool making, speech and conceptual thinking, consciousness and communities.

The complexity of human cognition, the mixed form of acquaintance and knowledge which intricately permeates human activities (think of for example the technological elements which can be observed in scientific activities) and the multitude of the levels built on each other contingently (e.g. brain/consciousness/culture) do not make it unjustified to clearly separate the basic cognition strategies, acquaintance and knowledge. Indeed, let us also mention that

by taking them into account, the peculiar division of labor of the brain acquires a special meaning: the coexistence of the brain mechanisms following the bound strategy and the mental mechanisms following the free strategy in one system is obviously an evolutionary advantage.

After this discussion of cognition strategies, we can identify a few characteristics of *culture*. First of all, it is important to notice that it is the usage of the free strategy of cognition which makes the development of culture possible. In this way, the claim according to which only man, who (also) operates the free strategy, has a culture seems to be justified. It is also important that culture is inseparable from knowledge created through reflexive representation. The development of culture is tantamount to man stepping out of the situation dependent form of existence and building a world from the multitude of situations. Besides the knowledge of situations, he is also interested in knowing the world, since man's activities also become extended: they become worldwide.

Perhaps we can summarize what we have said in this paragraph so far in the simplest way by saying that man is the creature who does not only live in naturally given circumstances, but through his own activities, he shapes his life conditions, that is, he *revaluates and occasionally transforms* the naturally given circumstances both in his thought an in his practical activities. We can regard this activity of revaluation and transformation, the *cultivation* of natural circumstances, this world creation as the essential meaning and most basic form of culture. The revaluation does not take place on the basis of definite characteristics – neither its execution nor its execution in a given way is necessary. To a certain degree, man's own possibilities, which he influences through his own decisions, are realized in the revaluation and transformation of natural circumstances and a certain *freedom* of man appears. The whole process, at least to some degree, is autotelic, that is, culture in fact necessarily contains contingency and even superfluous things. The artificially created and maintained human environment developed through continuous revaluation and transformation is the *cultivated world*. In this way, culture equally exists as a human possibility (as a *possibility* of revaluation and transformation of the circumstances around man), as an actual human activity (as the acts of revaluation and transformation, that is, as cultivation), and as a realized *result* (as the artificial environment containing the cultural circumstances).

CONCLUSION

A final conclusion of this short and certainly fragmented train of thoughts perhaps could be a simple statement: the source of human mind and cognition can be found in the context of the extension of freedom of beings, and for the understanding of the emergence and functioning processes would be useful to apply a philosophy which sensitive enough to the problems of freedom.

REMARK

[1]Fred Dretske's concepts of systemic and acquired indicator of representations has a similar function in his theory than the bound and free representations strategies in our views [6].

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