- neurophenomenology is foreign to the project of theoretically *explaining* the origin of the phenomenal out of the physical, and
- neurophenomenology implies no metaphysical commitment to some sort of crypto-dualistic formulation of the hard problem.
- « 13 » But, unlike Varela, the authors adhere to a metaphysical view that is less distinct from non-reductive physicalism than claimed. Let us comment on the following sentence:
- 66 Phenomenal experience, on an REC view, just is a kind organismic activity. As such, it can be given a physical description. Nevertheless, physical descriptions neither adequately characterize nor capture everything that can apply to phenomenal consciousness. (§39)

« 14 » The only difference between this position and non-reductive physicalism is to be found in the "identity" claim, as opposed to the allegedly aspect-dual or property-dualist presupposition of standard non-reductive physicalism (§41). Similarly, the only difference between the authors' position and old-fashioned mind-brain identity theory, is that the sphere of the natural world that is "identified" with consciousness is expanded to the organism as a whole. As does every supporter of a strong variety of naturalism, the authors identify consciousness with a certain fraction of the objectified natural world (here, the living organism). But saying bluntly that the phenomenal is such and such a natural process amounts to closing one's eyes to the very meaning of the word "phenomenal": "phenomenal" is the adjective (in noun form) that applies to the non-objective, lived, experiential manifestation. Declaring that the phenomenal is some objective process of nature then neither solves nor dissolves the hard problem, but changes the meaning of one of the most crucial words that enters into its formulation.

Conclusion

 $\scriptstyle\rm ^{\rm w}$ 15 $\scriptstyle\rm ^{\rm w}$ To sum up, the naturalistic, identity-theoretic, approach of the authors

- is a weak variety of dissolution of the hard problem when compared to Varela's; and
- does not satisfactorily achieve the sought dissolution, because it leaves

on hold the "explanandum" of the hard problem ("something," which is not even a "thing" but a condition for anything to appear), and instead relies on a mere semantic sleight of hand bearing on the word "phenomenal."

By contrast, Varela's phenomenological approach offers a radical and complete dismissal of the hard problem for it penetrates in the very existential attitude which makes this issue appear as a *problem*. Its "curative" strategy thus turns out to be a full success, for it leaves nothing out of its experiential account: neither the phenomenal as a whole, nor the physical construed as a system of intersubjectively ascertained structures of experience.

«16» The only weakness of Varela's strategy is in fact our weakness: not everyone is ready to perform the existential mutation it requires; not everyone knows how to achieve the phenomenological *epochè*. To embrace Varela's point sincerely and wholeheartedly requires deep personal commitment to the transformation of one's conscious experience and its application to all life, including one's scientific pursuits, which not many are willing to undertake.

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Not to Avoid But Legitimize: Why the Gap Could Be Natural For the Enactive World

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> **Upshot** • I show that the gap problem is of no threat to the enactivist approach; moreover, if the enactivism model is thoroughly thought over through extending ontology, it may turn out that the gap should be naturally built in the wholeness of the world at the level of its selfcognition.

- «1» The target article by Michael Kirchhoff and Daniel Hutto captures very precisely the changes that have to be made in the modern science about consciousness, if we want to break the epistemological deadlock or stop spinning our wheels. Today, these changes are being discussed more and more often. We are talking here about the global objective of overcoming the subject and object dichotomy as well as the dualistic vocabulary of philosophy and science.
- « 2 » In the meantime, the authors tend to take a cautious approach. They focus on highlighting key points rather than on revolutionary reforms - we should leave the existing state of things as it is, but we should formulate the right attitude to it and learn to use it properly. In some way, the right attitude implies avoiding the notorious gap between the mental and physical worlds, the gap that lies at the heart of the well-known hard problem of consciousness. Scientists should keep studying consciousness, sticking to "how" questions, and stop fretting over the inefficiency of "what" questions. After all, the situation with consciousness is hardly more pitiful than the situation typical of most (if not all) of the problems in science, which can be compared with a black box. We can learn a lot about every aspect of the behavior of the box contents without looking into the box.
- $\mbox{\ensuremath{\mbox{``4}}}$ " This solution may be quite satisfactory for applied sciences, which generates

ally do not brood over fundamental matters not only regarding consciousness but also regarding any other objects' studies falling into their scope of studies. The question is whether this solution will be suitable for the philosophy of science or contemporary metaphysics. It may be doubtful. In reference to \$40, the main difference between the philosopher and the scientist is that while the scientist is engaging with a book (trying to find out how it is going to behave in different situations), the philosopher hopes to comprehend it directly (to understand what it is and what constitutes its essence).

« 4 » Despite these doubts, the attitude offered by the above authors is still very helpful - at the very least, it can help to refine our understanding of the possibilities rooted in neurophenomenology, which has so far not been able to overcome the gap between the mind and the body to solve the mind-body problem. I share the authors' belief that once the problem of the gap between the physical and mental worlds is voiced, we will not be able to solve it without bloodshed. Good solutions may be absent if the problems associated with the gap are recognized. The division into physical and mental invariably entails differentiation between the first-person ontology and the third-person ontology, the gap between which, if admitted, can hardly be eliminated.

«5» It can be illustrated by the following: Scientific research in classical epistemology is possible only for an objective picture of the reality, excluding subjective "points of view." However, since the objectiveness of the mind is to be subjective, that is, the essence of the mind is the subjective experience of the subject, the mind inevitably eludes the field of vision of scientists. This failure is related to the fact that knowledge of all the physical facts that make up the essence of a mind still does not allow us to live through the experience of another creature as our own experience while exactly this experience is the object of research. At the same time, we cannot subject it to the neural correlation that accompanies this experience. And we have to keep in mind the epistemic asymmetry of these two points of view; it is one thing to experience directly the taste of an orange, and something completely different to listen to a story about what an orange tastes like. Relying on non-

classical epistemology, neurophenomenology tries to eliminate asymmetry by including reports of test subjects in the research or, in other words, by including the first-person perspective in the research (as introspection sessions). However, the problem will still be there, as my telling about the taste of the orange is very different from my experiencing the taste of the orange. In other words, being involved in the minimum objectivization, I will be presented from the third-person perspective, even to myself. If we agree that subjective experience will systematically slip from the theories designed to explain the link between mental and physical facts, then the prospects of developing a satisfactory theory become seriously complicated.

« 6 » In this respect, the most adequate way of handling the unfortunate gap will be to admit that the situation, when we run into a shortage of means of explanation, is normal rather than ignoring this situation. If we are able to demonstrate that the gap in the explanation is a natural condition of the entire system and is initially built into it, such admission may be seen as the best way of handling the problem. The demonstration of the normal nature of the gap means actual overcoming of this gap, and it is, in its own way, a *logical solution* of the mind-body problem. What should be ignored is the problematicity of the gap, not the gap itself. The gap exists; however, it is not a problem - the problem would exist if the gap was absent. Thus we legitimize the problem instead of merely ignoring it.

«7» What should we do and what is it all about? In ontology's avoiding dualism, it is assumed that the mental and physical worlds are inseparably interconnected. This model is based on the phenomenological assumption stating that the subject and the object exist in an inter-determining relationship. As the two parts mutually assume and re-create each other, it is difficult to distinguish between them. This model tends to be accepted by neurophenomenology, according to which the inward (the qualitative dimension of self) cannot be separated from the outward (the physically explicated neural states of the brain). The subjective (the first-person perspective) must be taken into consideration, as objective characteristics of the brain (the third-person perspective) are meaningless without it.

«8» Different monistic assumptions, which are not distanced from neurophenomenology, are even more radical in their attempts to eliminate the gap. From the outset, philosophical monism is aimed at acknowledging the uniformity of everything that exists. For example, it can be argued that everything is experience (Varela, Thompson & Rosch 1991) or everything is information. In the history of philosophical thought, this concept has a number of well-designed precedents - first of all, models offered by Aristotle, Schopenhauer and Hegel. According to these scholars, the world, even initially, is neither a pure object (matter) nor a pure subject (knowledge, information, experience). These cannot exist individually and on their own. Pure matter cannot exist, as if it is unshaped (unidentified), it is nothing and, therefore, does not exist. Information (knowledge about what the matter is) cannot also exist without an object, as what the knowledge is about must definitely exist. The best metaphoric illustration here is a twopage spread where two pages are an integral whole, though they "do not see" each other and "do not meet with each other." Each of these "pages" has a gap problem.

« 9 » The most systemic concept of philosophical monism was offered by Hegel (1977). The person as a bearer of knowledge (experience about the world) does not come to the world, parachuting down from somewhere. From the very beginning, he is part of this world, he appears in it following its laws. He is endowed with an amazing ability to learn. Therefore, knowledge about the world must be part of the world. Apparently, the entire pattern must be cyclical - the world learns about itself through the person (his mind). The world forms a circle - it moves from nonorganic to organic, to life and, eventually, to the person who discovers the world. Thus, the consciousness of the person is the consciousness of the world. The person (consciousness) and the nature (matter) are two sides of one sheet - the world.

"10" This model is consistent with what Francisco Varela implies in his concepts of "lived experience," "emboded cognition" (Thompson & Varela, 2001). The cognizing mind and the surrounding world are inseparable and constitute a single system. By and large, it is in line with ideas of radical enactivism, where the subject and the object have

a relationship of involvement. It also is very similar to the concept of the world construed as *umwelt* by Jakob von Uexküll (1921), where the world is seen as an equivalence of things and actions of the organism, equivalence of life and cognition.

«11» A similar approach is offered by endophysics, a present-day science, which shows to what extent reality is built by the observer and is necessarily dependent on the observer, on his physical characteristics and conscious intentions. In this paradigm, events of the world are controlled and constituted by the observer, who, in his turn, is made and controlled by the events created by him. He plays a dual role of the one who is observed and the one who is observing; therefore, endophysics often uses the metaphor of interface (Rössler 1998), which should be renamed as autointerface.

«12» Let us ask another question – how could each side of the whole see the entire structure? We can reconstruct the existence of the whole as a certain statement, but we will not be able to substantiate it in a consistent way, as in this case we should have *gone beyond* the system, whereas we *form* it. As long as we are part of the integral though two-sided, system, we cannot perceive its wholeness. We could talk about such perception only if we were outside the system. That is what is denied in the monistic assumption of enactivism.

"13" When the gap problem is discussed, everyone tends to ignore the question of why this gap exists. In the meantime, the explanation of what causes the gap could be the best solution in this situation. This explanation, in my opinion, is a better way of handling the problem than ignoring the gap. The explanation helps to show that the gap is naturally built into the whole of the system. By using the explanation, we can say that the existence of the gap proves our assumption about the arrangement of the whole. In this case, we can remove the word "problem" from the word combination "the gap problem."

"14" In fact, the elimination of the gap means total and non-controversial self-reference of the system within its closed selfness. However, it is absolutely impossible. Wholeness cannot be found *in* the world, for the world itself is wholeness. If we, being in the world and being its part, were able to observe

wholeness (non-controversial combination of the mental and physical parts), it would mean that we are not in the world and that we are outside the world. The system is always either controversial or incomplete, if it attempts to perceive itself (its arrangement) by using its own tools. Our own body is another simple and clear example illustrating the idea of non-wholeness. We, being the body, cannot see it as a whole - we can see different parts and we have only inner intuition of the integrity of our body, though this integrity is never given as an object (in the third-person perspective). On a global scale, the gap problem will mirror the situation with observation of fragmentation of our own body. The world can be an integral monistic whole (no matter whether it is experience or an information field), but it does not mean that it (represented by a scientist or a philosopher) will be able to discover its own wholeness as objective characteristics. The wholeness of the world cannot be found inside the world (as an object for studying and observation). This impossibility induces the problem of the persistent gap. The incompleteness of our knowledge about the world seems to be a systemic shortage of knowledge, which is essential for the successful functioning of the system and its reproduction as an autopoietic system (Luhmann 1991).

«15» It can be explained by using the following logical model. In the general form, these problems have the form of a metalanguage paradox - we try to turn something that is a tool into an object, and in this case the naturalizing procedure cannot be fulfilled. This is connected with the fact that we try to gain access to consciousness through the very framework of logical categories, which is the fundamental attribute of consciousness itself. It is not clear, however, what the meta-description could be in this case. Moreover, consciousness itself appears as the only condition for the possibility of operating these categories. It is impossible to determine consciousness by means of subject-object or type-sort distinctions, not only because it is not an object or type, nor a subject or sort, but also because consciousness inevitably turns out to be prior to all other similar distinctions.

« 16 » It can also be explained with the help of the following metaphor. If we look in the mirror and see our reflection, our at-

tempt to take the mirror to pieces will not help us to have an understanding of the one who is reflected. The system is fully and cyclically reflected in itself (the world), but no (auto) dissection of the world will help us to understand the arrangement of the system.

«17» The metaphor of light can be a good example. Let us assume that the world learns about itself, lights itself (through the mind of the thinking actor). What is special about spotlighting objects? The trick is that everything is seen in the light, but the light cannot be seen. This metaphor clearly shows that if the world sees itself, it does not see how it sees. That is why we cannot find consciousness in the world and we cannot find it among objects. Consciousness helps us to find the world and all objects in the world, but we cannot find consciousness as an object. Speaking about consciousness in the world, it is not so much a gap as a blind spot (in the sense of Heinz von Foerster 2003).

«18» The aforesaid leads to the conclusion that the gap problem is no threat to models of enactivism and neurophenomenology. In a way (as I summarized in my commentary), the existence of the gap proves an ontological arrangement that is consistent with the models of philosophical monism, which underlie enactivism in whole and ontology in part. The gap problem should not be ignored. It may be worth rethinking as an important element of enactivism theory.

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