

Alternative approach to the mind-body problem¹

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Abstract. A new methodology to approach the solution of the mind-body problem is being proposed. It is based on hypothetico-deductive scientific method and its merit can be seen in avoiding the problem of other minds.

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The history of physics offers several examples when a new theory with less and/or simpler axioms explained *essentially* more phenomena than the old one. Typical case is represented by Einstein's general theory of relativity which, with just two axioms, explained phenomena which were even unknown to the classical physics, like bending of the light beam in gravitational field.

Moreover, the axioms of the new physical theory use to be, as a rule, less evident than those of the old one — many times they are even counterintuitive. One example is sufficient to mention: quantum mechanics has introduced the notion of superposition of states (according to which, figuratively speaking, a particle can be at the same time at many different places). If we push this reasoning *formally* to an extreme, one could expect that the final theory, searched for by theoretical physicists, could rely on a single axiom which would be intuitively utterly unintelligible but would explain everything.

I believe that what holds for physics can be expected to apply to the problem of consciousness as well. In the present contribution I outline a proposal how to adopt the above approach to the science of consciousness. I have to remark beforehand that I share the views of C. McGinn [1] according to which it may be quite possible that we will never understand the essence of consciousness. Despite that, nevertheless, I hold also for possible that we will, eventually, be able to use the hypothetico-deductive approach to explain the properties of a conscious system resulting from a — possibly strange — hypothesis. The real problem is accordingly being shifted to the question of how to find (and identify) such a hypothesis.

Consider a set of behaviors B_i of type *expected* of a conscious system. The precise specification of the behaviors is not the most important here because we suppose that there are no objectively verifiable criteria to know whether a system

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is conscious or not. It is, instead, sufficient to base our choice on our intuition. Adding new types of behavior to the system B_i we obtain a new system, say B_{i+1} . In such a way we can create a series of sets B_i *ordered* so that the set B_j includes all types of behavior found within all the sets with $i < j$, i. e. B_i is a subset of B_j — in mathematical notation $B_i \subseteq B_j$.

Let then to any of the sets B_i correspond an explanation (explanatory “theory”) E_i , explaining *all* types of behavior found in B_i . We can imagine E_i as being e. g. a computer program simulating the behaviors found in the set B_i , departing from a set of principles, or “axioms”. In such a way we obtain a series of explanations E_i corresponding to the series of behaviors B_i . We do not need to insist on precise explanation of why and how E_i explains B_i , a plausible one should be satisfactory. What is important here is to have a well defined correspondence between every B_i and E_i . The crucial point then is to have sufficient number of couples (B_i, E_i) so as to be able to analyze the *simplicity* of explanations E_i . If we would succeed in finding such selection of sets E_i that with growing i the explanations E_i become simpler (as judged e. g. by smaller number of axioms needed to construct the explanation) we could claim that we are approaching the scientific explanation of consciousness, not troubling ourselves with the question what is it like to be conscious for the system under consideration and thus avoiding, in a sense, the problem of other minds.

It will probably happen that the simpler the theory E_i becomes, the less understandable it will be. We have *a priori* no reason to expect more understandable theory of more complicated behavior. But the theory closer to the true state of affairs can be expected to be simpler since it will contain less *ad hoc* hypotheses introduced with the sole purpose to match up the theory with the behavior.

The possibility to simplify a theory by broadening the set of behaviors to be explained can be considered a hallmark of successful *approach* of explanations to the acceptably plausible theory — without claiming that what is being approached is a causal or necessarily “true” explanation of consciousness. In my view this is the best possible result one can expect given the elusive nature of consciousness.

These general ideas are illustrated with an example of behaviors B_i simulating a system moving within a hostile environment and avoiding obstacles. With growing i the simulations become more precise and are based on less rules which are progressively less evident.

References

- [1] C. McGinn, Can We Solve the Mind-Body Problem? In: C. McGinn, *The problem of consciousness: essays towards a resolution*, Basil Blackwell, Oxford 1991, p. 1-22.