

Theory & Psychology

<http://tap.sagepub.com/>

The ever-shifting problem of consciousness

Peter Kügler

Theory Psychology 2013 23: 46 originally published online 10 October 2012

DOI: 10.1177/0959354312457112

The online version of this article can be found at:

<http://tap.sagepub.com/content/23/1/46>

Published by:



<http://www.sagepublications.com>

Additional services and information for *Theory & Psychology* can be found at:

Email Alerts: <http://tap.sagepub.com/cgi/alerts>

Subscriptions: <http://tap.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://tap.sagepub.com/content/23/1/46.refs.html>

>> [Version of Record](#) - Jan 29, 2013

[OnlineFirst Version of Record](#) - Oct 10, 2012

[What is This?](#)

The ever-shifting problem of consciousness

Theory & Psychology

23(1) 46–59

© The Author(s) 2012

Reprints and permission:

sagepub.co.uk/journalsPermissions.nav

DOI: 10.1177/0959354312457112

tap.sagepub.com**Peter Kügler**

University of Innsbruck

Abstract

The aim of this paper is to develop a new understanding of what the “problem of consciousness” is and to indicate why it cannot be solved conclusively. It is argued that the problem cannot be captured by a single question, such as the currently popular “How does the brain produce consciousness?” From a broader point of view, the problem of consciousness is a “problem-in-repetition” in the sense of Gilles Deleuze: that is, a series of questions that replace each other in different theoretical frameworks. The problem will shift when the theory changes, but it will not go away. A brief survey of mind–body theories given in this paper includes property dualism, materialism, substance dualism, eliminativism, idealism, panpsychism, and dual-aspect theory. We will probably never have a final theory of consciousness. But as a final theory would have to describe some kind of “reality,” this issue also depends on general ontological assumptions. Drawing on Henri Bergson, Deleuze suggests an ontology of “actuality” and “virtuality” that helps to explain why any reality and hence any theory of consciousness will leave room for further questions.

Keywords

consciousness, Deleuze, philosophy of mind, problem-shift, virtuality

The problem of consciousness, or experience

Psychological research has been dominated by the experimental methods of neuroscience for many years. “Indeed, there is a largely shared presumption among many psychologists that virtually all psychological functioning can ultimately be traced to underlying origins in the brain” (Gergen, 2010, p. 796). There is no doubt that neuroscience has created a lot of insight by following this approach. However, critics have argued that at least one problem cannot be tackled in this way. It is usually called the “problem of consciousness,” but we could also call it the problem of “experience,” since in this

Corresponding author:

Peter Kügler, University of Innsbruck, Department of Philosophy, Innrain 52, A-6020 Innsbruck, Austria.

Email: peter.kuegler@uibk.ac.at

context consciousness is meant to be experiential consciousness. A mental state or process is conscious in this sense if it has some phenomenal (e.g., perceptual or imaginative) quality.

To be sure, the term “consciousness” comprises more than just phenomenality. Mental functions such as attention, introspection, intentionality, conceptual discrimination, and wakefulness are also regarded as forms of consciousness. Thus, depending on the context, the word “conscious” may mean “attentive,” “introspective,” “intentional,” “conceptual,” “awake,” and so on. David Chalmers (1995, 1996) has claimed that these notions, amongst others, give rise to a multitude of “easy” problems of consciousness, the term “easy” expressing the hope that these problems can in principle be solved by neuroscience: that is, by exploring the mechanisms of the brain that underlie the respective mental functions. We need not discuss whether this hope is justified or too optimistic, and what it would need to make the dream come true. The topic of this article is what Chalmers (1995) calls the “hard” problem, contrasting it with all those “easy” ones:

Of course, “easy” is a relative term. Getting the details right will probably take a century or two of difficult empirical work. Still, there is some reason to believe that the methods of cognitive science and neuroscience will succeed. The really hard problem of consciousness is the problem of *experience*. ... It is undeniable that some organisms are subjects of experience. But the question of how it is that these systems are subjects of experience is perplexing. Why is it that when our cognitive systems engage in visual and auditory information-processing, we have visual or auditory experience: the quality of deep blue, the sensation of middle C? How can we explain why there is something it is like to entertain a mental image, or to experience an emotion? It is widely agreed that experience arises from a physical basis, but we have no good explanation of why and how it so arises. (p. 201)

Following the reductive approach of neuroscience, the “hard” problem of consciousness is commonly stated in terms of explaining experience by neural processes. Many scientists and philosophers will agree with Chalmers that no such explanation exists today. What most of them share with each other, and with those who think that the explanation has already been accomplished, is the idea that the problem of consciousness is that of explaining why consciousness “arises” from or is “produced” by the material brain. But the problem of consciousness is not only a problem of *neural* explanation. It is also a problem for those who think that the brain is just one explanatory factor among others, as long as these factors are supposed to belong to matter. For example, when Alva Noë (2009) writes that, “far from showing that we can make sense of the idea that consciousness arises out of the brain alone, we rely here on the idea that consciousness depends on the interplay among brain, body, and world” (p. 175), he expands the scope of investigation, replacing neuroscience by a more comprehensive science of “incarnate consciousness” or “being-in-the-world.” Although it might be reasonable to do so, however, it would not solve the problem of consciousness, as the body and the world are just as material as the brain. We may still ask how consciousness arises from matter or, more cautiously, how it is related to matter.

This leads to the question of putting the problem in the right words. Chalmers implies in the last sentence of the above quotation that the problem of consciousness is to explain why and how consciousness arises from a physical basis, whatever this physical basis may

be. It can be objected that even this rather liberal way of framing the problem already begs the question, since the problem is expressed in dualistic terms when we talk, for example, of “consciousness” and its “physical basis.” Even worse, the problem is usually expressed in terms of a one-way psychophysical *causality* when it is asked why, how, or whether material processes “cause,” “produce,” or “give rise to” consciousness. In order to prevent any dualistic prejudices, we should replace “causality” by “relation,” which yields “What is the relation between matter and consciousness?” Here we must keep in mind that, logically speaking, *identity* is a relation, too. So our question has no dualistic bias anymore.

Of course, the question still implies the existence of matter and consciousness, which seems to exclude idealism and eliminativism (i.e., eliminative materialism) as possible answers. Idealism claims that matter does not exist; eliminative materialism claims that consciousness does not exist. However, any question can also be answered by rejecting one or more of its assumptions. As the notorious example goes, the question “When did you stop beating your wife?” can be answered by rejecting the assumption that there was a beating. Accordingly, the question as to the relation of matter and consciousness may also be answered by arguing that one of the relata does not exist, which brings idealism and eliminativism back into play.

Problem-shifts in the philosophy of mind

There are some philosophers who doubt that a physical explanation of consciousness is possible. Joseph Levine (1983), for one, has argued against the epistemological sufficiency of materialism, claiming “that psycho-physical identity statements leave a significant *explanatory gap*, and, as a corollary, that we don’t have any way of determining exactly which psycho-physical identity statements are true” (p. 354). Daniel Robinson (2010) has made a similar point by using the same metaphor: “Mental life is a life of meanings. Physical entities are quite literally meaningless. I take the gap to be unbridgeable” (p. 791). However, the question whether a physical explanation of consciousness is possible can only be answered if we know what is meant by a “physical explanation.” A physical explanation is an explanation of consciousness in terms of material conditions—but what else is involved?

As many fields of science follow the ideal of *nomological* explanation—that is, explanation based on laws—it is popular to claim that an explanation of consciousness should also proceed in this way and postulate appropriate laws. These laws must be psycho-physical laws connecting conscious states to material processes. At the moment we cannot be sure that such laws really exist, but neuroscience has discovered correlations between consciousness and brain processes, which provides some reasons for believing in the existence of such laws. We also do not know whether the presumptive laws are deterministic or merely probabilistic. But as we are only concerned with possible solutions of the problem of consciousness, all we need to know is that *if* psychophysical laws did exist, they would solve the problem of consciousness—in a certain way.

The latter depends on what a psychophysical “law” is. Postulating psychophysical laws would not be of much help if these laws just were deterministic or probabilistic *regularities*—which is known as the “Humean” account of laws (after David Hume, 1739/2000, book 1, part 3, sect. 14–15). For to say that experiences are correlated to brain processes in a regular manner is no explanation at all, but rather a more elaborate

description of the problem. Levine (1983, p. 358) has indicated that the explanatory gap between brain and consciousness cannot be closed by a deductive-nomological explanation of consciousness alone, because such an explanation could not make intelligible why a person has an experience when the person's brain is in a particular state. In other words, the psychophysical laws cannot explain why brain and consciousness are correlated *according to these laws*.

Levine's objection is certainly justified if psychophysical laws are conceived as regularities. The Humean account is intended to be ontologically parsimonious: it does not assume the existence of any entities besides causes and effects. A regular correlation between causes and effects is not an entity in the world which really *connects* cause and effect. But this interpretation of laws as regularities is by no means the only one (see Carroll, 2010, for an overview). Other interpretations insist that a law is an extra ingredient of the world—a force, a relation, a property, or whatever. A comparably popular view, for example, conceives laws of nature as *universal relations* between properties. A second view is that laws are *dispositional properties* of objects. When we apply these two conceptions to the nomological explanation of consciousness, we get two conceptions of psychophysical laws. According to the first one, a psychophysical law is a universal relation between material processes and experiences; according to the second, it is a disposition of material objects to cause experiences. In any case, a psychophysical law belongs to a distinct ontological category. It is neither a material process nor an experience, nor a regularity between these two kinds of entities.

Unfortunately, no progress is being made when the problem of consciousness is “solved” in this way. Extending the underlying ontology by introducing psychophysical laws just shifts the problem. If you accept that a psychophysical law is a universal relation between mental and physical properties or a disposition of material objects, you will face the question as to why these laws (these universal relations, these dispositional properties) exist. You have replaced one problem with another one: the problem of explaining consciousness with the problem of explaining the psychophysical laws. The latter problem is at least as difficult to solve as the first one. Moreover, it is hard to see how the postulation of a psychophysical law *qua* universal relation or disposition could make the relation between matter and consciousness any more intelligible than before. What is the point in saying that matter gives rise to consciousness because the world includes universal relations or dispositions which we identify as psychophysical laws? Although this may be a correct ontological interpretation of the relation between matter and consciousness, it is not an intelligible explanation of why consciousness exists.

Other solutions of the problem of consciousness will create their own problem-shifts. It will suffice to give a brief outline in the following. The theories I am going to sketch can be found in typical textbooks on the philosophy of mind (see, e.g., Heil, 2004; Jaworski, 2011; Ravenscroft, 2005). As it is common practice, I will use broad labels such as “materialism” and “dualism” which each cover more specific positions. The differences between the latter are not relevant for the present purposes.

Property dualism

Philosophers advocating the existence of an explanatory gap between matter and consciousness often show a preference for property dualism.¹ Experiential properties must

be different from material properties if the first cannot be explained by the second. So the explanatory gap separates two kinds of properties. We have seen that the gap can be bridged by psychophysical laws, which transforms the problem of consciousness into the problem of psychophysical laws. But property dualism can also proceed without invoking the notion of psychophysical law.

Benjamin Libet (1994), for example, suggests that experiences are properties of “conscious mental fields.” Although this model may look attractive at first sight, it is rather disappointing from a philosophical point of view, as it does not say how the field interacts with the brain. Moreover, Libet writes that his theory “could be shown to be potentially compatible with virtually any philosophical mind–brain theory” (p. 120). But this is not an advantage, since it is desirable that a theory should exclude other theories. To answer a question means to exclude all theories that give a different answer to this question. If Libet’s theory of conscious mental fields does *not* exclude other mind–brain theories, it cannot give an answer to any question on which these theories disagree. Suppose theory A states that p is the case and theory B states that p is not the case, then Libet’s theory must be neutral with respect to p in order to be compatible with both A and B. Hence it must leave a lot of questions open.

Materialism

An alternative to distinguishing between experiences and physical processes is to identify them. This is the strategy of materialism.² The question “How does consciousness arise from matter?” need not bother the materialist anymore, if this question is meant to imply that matter produces some non-material entities. Many materialists seem to believe that this is a sufficient solution of the problem of consciousness. And in fact, they are right that the original problem disappears when experiences are identified with material processes. But materialists tend to overlook that their theory raises a very similar question: “Why do some material processes consciously appear?”

In order to understand this new question, we may envisage a future neuroscience having discovered that all conscious brain processes share a certain neural property F that distinguishes them from non-conscious ones. Even if the future scientists assume that experiences are *identical* to brain processes, they will have reason to wonder why all brain processes with property F are experienced. Hence the problem of consciousness will return in a different form. The dualist version of the problem—“How does the brain produce consciousness?”—will be replaced by the materialist version—“Why do brain processes with property F consciously appear?” There is no indication that the materialist version of the problem can be solved if the dualist version cannot. What is more, the two questions resemble each other so much that one is inclined to say that it is the same problem in different disguises.

Substance dualism

Substance dualism is less popular today than property dualism and materialism. One reason for this is probably the fact that substance dualism raises the classic mind–body problem: that is, the problem of the relation between the soul and the body, both being conceived as substances. Historically, the two most important variants of substance

dualism were parallelism and interactionism. The first one claims that activities of the soul and activities of the body exist simultaneously without influencing each other. This congruence of soul and body has often been explained as a work of God.

Interactionism, by contrast, has it that the soul and the body causally interact, which raises the question where and how this interaction takes place. There was René Descartes's notorious claim that the interaction takes place in the pineal gland: somehow the soul "feels" the movements of this gland, which conversely "acts immediately" on the soul (Descartes, 1649/1989, art. 34–36). John Eccles (1994, ch. 6), a modern substance dualist, assumes that mental units, which he calls "psychons," interact with specific neural structures ("dendrons"). Eccles also gives an account of what the psychon does to the dendron, but he cannot say *why* or *how* the psychon does what it is supposed to do.³ Other proponents of interactionism have not been more successful in explaining the nature of the interaction.

Eliminativism

A brief overview of four additional positions in the philosophy of mind will further substantiate the idea that theoretical transformations always go along with typical problem-shifts. The first of these is eliminativism (eliminative materialism), which is the view that consciousness does not exist at all.⁴ On this assumption, the question as to how consciousness arises from matter obviously does not make sense anymore. But once consciousness is eliminated from the scene, other questions emerge (which eliminativists usually ignore): Why do people have the illusion of experience? Why do people (falsely) believe they have conscious states if there is no consciousness in reality?

Eliminativists like to compare the illusionary belief that consciousness exists with other beliefs that had been held in the past but were later dismissed as false. Examples include the belief in witchcraft as well as the belief in the phlogiston theory of combustion. Just as these beliefs were made obsolete by modern science, the belief in consciousness would be made obsolete by future theories of the brain. However, there is an important difference between these cases that must not be overlooked: In the case of witchcraft and phlogiston we have an idea of how the illusions could occur. There are psychological and sociological explanations of why people have believed, and some still believe, that witchcraft can cause various things. And we can imagine how an observer who sees the rising smoke can come to believe that a substance called phlogiston leaves the burning material. So these illusions can be explained in some way, but no eliminativist has been successful in answering the question as to why people believe in the existence of their consciousness and why this "illusion" is so strong that philosophers from Descartes on have often regarded it as a self-evident belief. After all, many contemporary philosophers reject eliminativism just by indicating that the existence of their own consciousness is beyond doubt.

Idealism

Elimination on the other side of the mind–matter divide gives us idealism (which admittedly is not widespread today). If matter does not exist, however, consciousness

becomes even more mysterious than in dualist approaches. Once more the fundamental problem changes its appearance, as we can no longer ask how consciousness arises from matter. But what we need to ask now is the following: Where does consciousness come from if it is not caused by matter? George Berkeley (1710–1713/2004) thought that inner experiences are produced by the soul, whereas the experiences of sense perception are caused by the power of God (pp. 64–65; §§ 33 and 36). Immanuel Kant (1781–1787/2003) wrote that experiences emerge when the mind is “affected” by the “transcendental object,” which is neither mental nor material but a “purely intelligible cause of appearances” (p. 441; B 522). Unfortunately, it is not known how things which are neither mental nor material can “affect” anything at all. Berkeley’s souls and Kant’s transcendental objects are very mysterious entities which only exemplify the inability of idealism to explain the existence of consciousness in an intelligible way.

Panpsychism

In contrast to idealism, panpsychism has undergone a remarkable revival in recent years. Part of its appeal comes from the fact that it promises to give a more adequate picture of psychophysical laws (Rosenberg, 1996). If these laws exist, they would be expected to work on a deeper ontological level: not on the level of brain functions, but on that of fundamental physics. The laws would correlate primitive experiential properties to physical properties of, say, elementary particles or quantum physical processes. Although this might be a plausible interpretation of psychophysical laws, panpsychism turns out to be a Pandora’s box which releases some unpleasant questions. An old objection to panpsychism is that it cannot explain how primitive experiential properties combine to make up the complex experiential properties of large organisms (see James, 1890, p. 160). In addition, there is a close analogy to the problem of how consciousness arises from the brain. The panpsychist version of this problem goes like this: Why is there any experience on the level of fundamental physics? Or, if this should be a matter of “production,” why do elementary physical processes inside and outside the brain produce experience?

Admittedly, the latter formulation is unfair to those panpsychists who do not maintain that elementary physical processes “produce” experience. There is a tendency among panpsychists to regard the coexistence of physical and experiential properties as a brute metaphysical fact that cannot be traced back any further, comparable to the values of physical constants, such as the charge of the electron and the speed of light, which are treated as brute facts in scientific theories. However, to say that the existence of experience is a brute fact is just to say that there is a question and that this question cannot be answered. But a question it still is.

Dual-aspect theory

This situation does not change for the better when panpsychism is presented in the form of a dual-aspect theory, as it is often done. If physical processes and experiences are two aspects of the same thing, the obvious question to ask is: “What is the underlying reality that has the two aspects?” A well-known answer is that the two aspects are aspects of

information (Chalmers, 1996, ch. 8), but we have no satisfactory explanation of how a physical process can encode the information which is phenomenally encoded by a conscious state. Wherever the concept of information is used intelligibly, it is associated with a medium, such as human language or DNA, which “carries” the information. But what is the medium of information in the dual-aspect approach? If matter and/or consciousness were such media, it would not make sense to call them “aspects.” They would just be two kinds of entities that carry the same information. Yet if a third entity besides matter and consciousness serves as the medium, we would like to know what it is, apart from calling it a “carrier of information.” All in all, dual-aspect panpsychism is certainly not less problematic than a panpsychism without “aspects.”

Let me sum up the preceding discussion. There are various philosophical responses to the question “How does consciousness arise from matter?” While some of these responses actually provide an answer that is supposed to solve the problem of consciousness, others avoid the question by removing some of its presuppositions. Idealism, for example, denies the existence of matter, and materialism denies that matter produces any non-material entities. In all of these theories, however, the question as to how consciousness arises from matter gives way to new questions that seem to be “hard problems” as well.

Table 1 shall provide an overview. The theories mentioned above are listed in the first column. The second column shows the various remedies for the problem of consciousness: that is, the theoretical ingredients or strategies by which the particular theory “solves” the problem. The third column gives some of the questions that arise when the problem is solved in those ways. It goes without saying that each of these questions is associated with many other questions which do not appear in the table. For example, “Why do psychophysical laws exist?” is obviously related to “What is a psychophysical law?”

The problem in repetition

Terminological issues are sometimes dismissed as concerning “only the words” and as matters of “mere definition.” But there are cases in which new meanings for old words

Table 1. How theories shift the problem of consciousness by “solving” it

Theory	Remedy	Question
Property dualism	Psychophysical laws	Why do the psychophysical laws exist?
Materialism	Psychophysical identity	Why do some material processes consciously appear?
Substance dualism	Interactionism or parallelism	How do soul and body interact? Why are they parallel?
Eliminativism	Elimination of experience	Why do we have the strong illusion of experience?
Idealism	Elimination of matter	Why are there any experiences?
Panpsychism	Experience is everywhere	Why is experience everywhere?
Dual-aspect theory	Experience and matter as two aspects of the same	What is it that has the two aspects?

can help to see things in a different light. In our case, however, it is more like seeing the forest instead of the particular trees. In the first section the scene has been set for this bird's-eye view on the problem of consciousness. We will better understand what we see from this angle when we consider what Gilles Deleuze has to say about the notion of a "problem."⁵ Most important for us is his distinction between "problem" and "question." Deleuze (1968/2004) argues that a problem is expressed by different questions in different philosophical or scientific frameworks:

Therefore interrogation, in turn, expresses the manner in which a problem is dismembered, cashed out and revealed, in experience and for consciousness, according to its diversely apprehended cases of solution. Even though it gives us an insufficient idea, it thereby inspires in us the presentiment of that which it dismembers. Sense is located in the problem itself. Sense is constituted in the complex theme, but the complex theme is that set of problems and questions in relation to which the propositions serve as elements of response and cases of solution. (p. 196)

Moreover, when a question is answered, the respective problem is not only "solved" but also *repeated*. Hence a "problem" in the sense of Deleuze is a problem-in-repetition. Neither is it a particular question raised by a particular theory, nor is it an invariant "essence" that some questions have in common. It can be best described as a dynamical entity: as a sequence of questions that stretches across different theories.⁶ Deleuze also uses the word "Idea" (with capital "I") for this dynamical entity, referring to Immanuel Kant (1781–1787/2003), who described a transcendental idea as "a problem to which there is no solution" (p. 319; B 384). Commenting on Kant, Deleuze (1968/2004) states that a problem does not disappear when it is solved:

By that [Kant] does not mean that Ideas are necessarily false problems and thus insoluble but, on the contrary, that true problems are Ideas, and that these Ideas do not disappear with "their" solutions, since they are the indispensable condition without which no solution would ever exist. (p. 215)

Of course, it is trivially true to say that a problem, after it has been solved, still "exists" as a *solved* problem. It exists in textbooks, university courses, and so on, where it is presented together with its solution. But the emphasis Deleuze lays on this point indicates something more substantial: When a problem is solved, it returns in a different form. Kant's phrase "there is no solution," as read by Deleuze, refers to this repetition. Here it is useful to recall Deleuze's distinction between two kinds of repetition:

The first repetition is repetition of the Same, explained by the identity of the concept or representation; the second includes difference, and includes itself in the alterity of the Idea, in the heterogeneity of an "a-presentation." ... One is static, the other dynamic. ... One is developed and explicated, the other enveloped and in need of interpretation. One is revolving, the other evolving. One involves equality, commensurability and symmetry; the other is grounded in inequality, incommensurability and dissymmetry. ... One is a "bare" repetition, the other a covered repetition, which forms itself in covering itself, in masking and disguising itself. (p. 27)

It is the second kind of repetition that is relevant for our purposes. A solved problem repeats itself in a sense of “repetition” which includes difference and evolution. The problem does not return as the same, and it can only be uncovered by means of interpretation.

Now we have the conceptual means to give a Deleuzian re-description of the problem with which we are concerned in this paper. Following Deleuze, we may say that the idea of consciousness is a problem which is expressed in concrete terms by asking particular questions, such as “How does the brain produce consciousness?,” “How do mind and matter interact?,” or “Why do some material processes consciously appear?” As we have seen, each of these questions can be “solved” by changing the theory—by moving, for example, from substance dualism to reductive materialism, or from property dualism to eliminativism. But any of these transitions will be accompanied by a problem-shift that can be interpreted as a repetition of the problem in another form. We can cope with particular questions by changing the theory, but we cannot prevent the problem from reappearing in the form of a new question.

No end of questioning

At least in some cases the transition from one theory to the next—especially if the second one is uncommon or entirely new—may be inspired by the hope that the problem-shift will come to an end in a final theory of consciousness. Is this hope justified? Will there ever be a theory that sets an end to all questioning, a final solution of the Deleuzian “problem” of consciousness? We cannot give a definite answer, but we can try to make a reasonable prediction by comparing our problem to other ones that have bothered science and philosophy. In the 19th century, for example, the German physiologist Emil du Bois-Reymond (1880) identified a small set of “world riddles” which in his opinion defy any solution. Among these riddles was the problem of consciousness. Two others concerned the nature of matter and force, and the origin of motion in the world.

Philosophy has dealt with the latter two problems since the time of antiquity. Before the emergence of modern science, and even after that, theism provided the theoretical framework in which fundamental questions of matter, force, and motion were discussed. An instructive example is the theistic metaphysics of Spinoza (17th century), who defined material things as “modes” of extension, and extension as an “attribute” of the one substance, which is God (Spinoza, 1677/1996, pp. 31–33; part 2, def. 1 and prop. 2). Moreover, Spinoza claimed “that God is the efficient cause of all things which can fall under an infinite intellect” (p. 13; part 2, prop. 16, cor. 1)—which implies that God is also the cause of the motion of material things. We need not go into the details of Spinoza’s theory here, but it is quite obvious that it shifts the problem of the nature of the material world to the problem of the nature of God. Since Spinoza was aware of this problem-shift, he tried to settle the issue of God’s nature by claiming that God is a cause of itself (*causa sui*), in other words, God is “that whose essence involves existence, or that whose nature cannot be conceived except as existing” (p. 1; part 1, def. 1).

If you ask why God exists and why he has the attributes that he has, you will get an answer that refers to God’s essence. Spinoza and other theists thought that this answer is something like a final explanation, as we cannot ask beyond God’s essence. But this

assumption is not true, because we *can* ask beyond God's essence. It is reasonable to ask, for example, why God has his particular essence; whether this essence has been correctly described; whether it makes sense to say that an essence involves existence, and so on. Nothing can prevent us from asking questions like these, and many of them have actually been asked by critics of the notion that God is a cause of itself.⁷

This was just an historical example, but it illustrates how difficult it is to find an explanation that could stop any further questioning if the fact to be explained is a basic metaphysical fact such as the existence of matter or the existence of consciousness. Returning to the problem of consciousness—which also concerns a basic metaphysical fact—we must admit that we cannot be sure that the situation here is the same as in other areas. But what we know is that no existing theory of consciousness has been able to settle the issue once and for all. And as we have just seen in the example of Spinoza, even when you seem to get in touch with a conclusive explanation, critical minds will insist that the final word has not yet been spoken. Although the situation could be different with regard to consciousness, we have no reason to believe that it is. We have no reason to believe that our questions will ever come to an end in anything like a *causa sui*. The problem of consciousness will probably not go away.

What is more, the philosophy of Deleuze also provides a clue for understanding *why* the problem will not go away. I am thinking of the distinction between the “actual” and the “virtual,” which is one of the ideas that Deleuze has taken from Henri Bergson (see Deleuze, 1966/1991, in particular pp. 96–103; Deleuze & Guattari, 1991/1994, p. 156). The notion of actuality is associated with space, matter, and objectivity, whereas “virtuality” is associated with time (i.e., Bergson's “duration”), life, and subjectivity. According to Deleuze, both the actual and the virtual can be said to be *real*. In contrast to the merely possible, “the virtual is not opposed to the real; it possesses a full reality by itself” (Deleuze, 1968/2004, p. 263). Moreover, actuality is always accompanied by virtuality: “Purely actual objects do not exist. Every actual surrounds itself with a cloud of virtual images” (Deleuze, 1996/2006, p. 112).

Thus, for Deleuze (1968/2004), any reality whatsoever consists of actual and virtual layers. The virtual layers can also be characterized as *problems*: “The virtual possesses the reality of a task to be performed or a problem to be solved: it is the problem which orientates, conditions and engenders solutions, but these do not resemble the conditions of the problem” (p. 264). Problems, in turn, arise when life interacts with matter. What is “real” is always real *for* a human being or any other form of life:

Each line of life is related to a type of matter that is not merely an external environment, but in terms of which the living being manufactures a body, a form, for itself. This is why the living being, in relation to matter, appears primarily as the stating of a problem, and the capacity to solve problems: the construction of an eye, for example, is primarily the solution to a problem posed in terms of light. (Deleuze, 1966/1991, p. 103)

Much more could be said about this virtual (some would say “pragmatic”) aspect of reality. But here it will suffice to draw a conclusion for the problem of consciousness: Whatever “object” or “reality” (in the widest sense of these words) the term “consciousness” may denote (a product of matter, the brain, a mental substance), this object or reality will also have virtual layers. It will be surrounded by a “cloud” of

problems, to use Deleuze's metaphor from above. Thus, in the context of Deleuze's "Bergsonism," the reason why the problem of consciousness cannot be solved is of a very general kind. It is rooted in ontology, more precisely, in the twofold notion of "reality" as "actuality" plus "virtuality."

The term "consciousness" will never denote a piece of reality that has no virtual or "problematic" sides. There can be no final theory of consciousness that only describes the "actual" without also describing new problems. Philosophy as a "continuous creation of concepts" (Deleuze & Guattari, 1991/1994, p. 8) is also a continuous creation of questions.

However, this does not mean that we should stop creating new theories just because we cannot hope to find a perfect one. Perhaps the problem of consciousness will be tackled one day on the basis of new empirical data and by using new theoretical categories. "Information" or any presently unknown concept may be for a future science of the mind what "substance" was for philosophers like Descartes and Spinoza. After all, Deleuze himself tried to shift the problem of consciousness to the next theoretical framework. Among the ideas that he obtained from Bergson is also a view of consciousness that is very uncommon in contemporary philosophy of mind: "Duration, Life, is *in principle* (*en droit*) memory, in principle consciousness, in principle freedom. 'In principle' means virtually" (Deleuze, 1966/1991, p. 106; see also his 1968/2004, pp. 96–100, and Deleuze & Guattari, 1991/1994, pp. 212–213).

John Protevi (2011) calls this view "biological panpsychism." Although we cannot discuss it here in detail, we can be sure that it will not settle the issue once and for all. Like other theories of consciousness that have been developed in the past or will be developed in the future, it is at best an innovative, yet transitional, step in the series of questions that constitute the ever-shifting problem of consciousness.

Funding

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Notes

1. Property dualism comes in different kinds, including "naturalistic dualism" (Chalmers, 1996, ch. 4), "theory of emergence" (Broad, 1925, pp. 58–69) and "epiphenomenalism" (see Heil, 2004, pp. 37–40, as well as Caston, 1997, for some historical background). Note that property dualism is conceived as an alternative to substance dualism (see below), although the latter also implies a distinction between mental and physical properties. Property dualism rejects the duality of substances.
2. Depending on the particular version of materialism, the words "experience" and "physical process" refer to types or tokens, but this distinction does not matter here.
3. At this point in Eccles's approach, quantum theory comes into play. Since quantum theory causes metaphysical problems of its own, it has a potential to make consciousness even more mysterious. Quantum approaches to consciousness are beyond the scope of this paper, but compare Atmanspacher (2011) for some more optimistic opinions.
4. "So contrary to what seems obvious at first blush, there simply are no qualia at all" (Dennett, 1988, p. 74). Despite Dennett's influence, however, eliminativism about consciousness is actually rather rare. It should be noted that not only the "hard" problem of consciousness but also

- the “easy” problems can be treated in an eliminativist way. Paul Churchland has argued for decades that the categories of folk psychology must be eliminated (see, e.g., Churchland, 1981, and, for an example from psychological research, Anderson, 2011, on attention).
5. Deleuze has written on the brain in his books on Bergson (Deleuze, 1966/1991, pp. 24–25 and 52–54) and on cinema (1985/2005, pp. 196–207), and he is occasionally cited in philosophical investigations of brain and consciousness (see Malabou, 2008, pp. 36–40). For the most part, however, neither neuroscience nor the philosophy of mind has taken notice of his work.
 6. The term “theory” may not be the most appropriate one to denote the context of a question in Deleuze’s account. “Framework” or “paradigm” may be a better choice. At one place Deleuze (1968/2004) speaks of “the constitution of a unitary and systematic field which orientates and subsumes the researches or investigations in such a manner that the answers, in turn, form precisely cases of solution” (p. 215).
 7. Spinoza scholars will realize that I have simplified his account. Spinoza actually derives the claim that God is a cause of itself in a few steps from a couple of “definitions.” Thus, a critic will mainly question the adequacy of these definitions.

References

- Anderson, B. (2011). There is no such thing as attention. *Frontiers in Psychology*, 2, 1–8.
- Atmanspacher, H. (2011). Quantum approaches to consciousness. *Stanford Encyclopedia of Philosophy*. Retrieved from <http://plato.stanford.edu/entries/qt-consciousness>
- Berkeley, G. (2004). *Principles of human knowledge and three dialogues*. London, UK: Penguin. (Original work published 1710–1713)
- Broad, C. D. (1925). *The mind and its place in nature*. London, UK: Routledge & Kegan Paul.
- Carroll, J. W. (2010). Laws of nature. *Stanford Encyclopedia of Philosophy*. Retrieved from <http://plato.stanford.edu/entries/laws-of-nature>
- Caston, V. (1997). Epiphenomenalisms, ancient and modern. *The Philosophical Review*, 106, 309–363.
- Chalmers, D. J. (1995). Facing up to the problem of consciousness. *Journal of Consciousness Studies*, 2, 200–219.
- Chalmers, D. J. (1996). *The conscious mind*. New York, NY: Oxford University Press.
- Churchland, P. M. (1981). Eliminative materialism and the propositional attitudes. *The Journal of Philosophy*, 78, 67–90.
- Deleuze, G. (1991). *Bergsonism* (H. Tomlinson & B. Habberjam, Trans.). New York, NY: Zone. (Original work published 1966)
- Deleuze, G. (2004). *Difference and repetition* (P. Patton, Trans.). London, UK: Continuum. (Original work published 1968)
- Deleuze, G. (2005). *Cinema 2* (H. Tomlinson & R. Galeta, Trans.). London, UK: Continuum. (Original work published 1985)
- Deleuze, G. (2006). The actual and the virtual (E. R. Albert, Trans.). In G. Deleuze & C. Parnet (Eds.), *Dialogues II* (pp. 112–115). London, UK: Continuum. (Original work published 1996)
- Deleuze, G., & Guattari, F. (1994). *What is philosophy?* (H. Tomlinson & G. Burchell, Trans.). New York, NY: Columbia University Press. (Original work published 1991)
- Dennett, D. C. (1988). Quining qualia. In A. Marcel & E. Bisiach (Eds.), *Consciousness in contemporary science* (pp. 42–77). Oxford, UK: Oxford University Press.
- Descartes, R. (1989). *The passions of the soul* (S. H. Voss, Trans.). Indianapolis, IN: Hackett. (Original work published 1649)

- du Bois-Reymond, E. (1880). *Die sieben Welträtsel* [The seven world riddles]. Retrieved from <http://vlp.mpiwg-berlin.mpg.de/library/data/lit28646>
- Eccles, J. C. (1994). *How the self controls its brain*. Berlin, Germany: Springer.
- Gergen, K. J. (2010). The acculturated brain. *Theory & Psychology, 20*, 795–816.
- Heil, J. (2004). *Philosophy of mind: A contemporary introduction*. New York, NY: Routledge.
- Hume, D. (2000). *A treatise of human nature*. Oxford, UK: Oxford University Press. (Original work published 1739)
- James, W. (1890). *The principles of psychology* (Vol. 1). New York, NY: Holt.
- Jaworski, W. (2011). *Philosophy of mind: A comprehensive introduction*. Oxford, UK: Wiley-Blackwell.
- Kant, I. (2003). *Critique of pure reason* (N. Kemp Smith, Trans.). Houndmills, UK: Palgrave Macmillan. (Original work published 1781–1787)
- Levine, J. (1983). Materialism and qualia: The explanatory gap. *Pacific Philosophical Quarterly, 64*, 354–361.
- Libet, B. (1994). A testable field theory of mind–brain interaction. *Journal of Consciousness Studies, 1*, 119–126.
- Malabou, C. (2008). *What should we do with our brain?* New York, NY: Fordham University Press.
- Noë, A. (2009). *Out of our heads: Why you are not your brain, and other lessons from the biology of consciousness*. New York, NY: Hill & Wang.
- Protevi, J. (2011). Larval subjects, autonomous systems and E. coli chemotaxis. In L. Guillaume & J. Hughes (Eds.), *Deleuze and the body* (pp. 29–52). Edinburgh, UK: Edinburgh University Press.
- Ravenscroft, I. (2005). *Philosophy of mind: A beginner's guide*. Oxford, UK: Oxford University Press.
- Robinson, D. N. (2010). Consciousness: The first frontier. *Theory & Psychology, 20*, 781–793.
- Rosenberg, G. H. (1996). Rethinking nature: A hard problem within the hard problem. *Journal of Consciousness Studies, 3*, 76–88.
- de Spinoza, B. (1996) *Ethics* (E. Curley, Trans.). London, UK: Penguin. (Original work published 1677)

Peter Kügler is Associate Professor of Philosophy at the University of Innsbruck, Austria. He has published on a variety of topics in epistemology and metaphysics, including functionalism about mental states, the distinction between primary and secondary qualities, mysticism and the logic of questions. He agrees with Richard Rorty that philosophy is but one voice in the “conversation of mankind.” Address: Department of Philosophy, University of Innsbruck, Innrain 52, A-6020 Innsbruck, Austria. Email: peter.kuegler@uibk.ac.at