

The Inadequacy of Materialistic Explanation

A Review of Joseph Levine's *Purple Haze*

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REVIEW OF: Joseph Levine. (2001). *Purple Haze: The Puzzle of Consciousness*. Oxford: Oxford University Press. 204 pp. £24.50 hbk. ISBN 0195132351.

ABSTRACT: *Purple Haze: The Puzzle of Consciousness*, by Joseph Levine, is reviewed. The position that Levine takes in the current philosophical debate about consciousness is identified and the general approach of the essay outlined. I focus on two of the more important issues in the book - the conceivability argument against materialism, and the explanatory gap argument against dualism - and argue that Levine's argument against the former is unconvincing and his diagnosis of the source of the latter leads him into problems. I suggest a more promising route.

One of the many problems which the existence of phenomenal consciousness poses is the task of explaining just how it arises (if it in fact does) from the biological and thus physical/functional systems from which we are composed. The idea that there is an epistemic divide between the two kinds of phenomena was first discussed by Levine in the early eighties (Levine, 1983) and is now one of the central issues in the philosophy of mind. Here, in his first monograph, he presents, develops, and defends this impervious puzzle in a succinct, thoroughgoing, yet comprehensive survey of the field of which it is part, illustrating convincingly why the mind-body problem remains just that.

Levine takes a middle ground position between materialism and dualism, holding that mental properties are realised by physical properties, whilst acknowledging the fact that we have no clear idea of how this is so. The aim of the essay is not to provide a positive solution to the problem, but to show just why it is a problem, why materialist theories of phenomenal consciousness are inadequate, while defending materialism from anti-materialist arguments. He covers a lot of ground, discussing such wide ranging views as functionalism, panpsychism, representationalism, higher order theory, property dualism, and eliminativism (each chapter taking its title from the lyric of a Jimi Hendrix song). The first task is to give an account of materialism, which he defines negatively as the thesis that only non- mental properties are instantiated in a basic way, all mental properties being realised by the instantiation of these basic ones. This would, ofcourse, be vacuous without an account of what it is for a property to be mental, so Levine offers the following fairly standard categories: those properties which are intentional or are directed towards the world (and which can be subject to intelligent manipulation), and those which are phenomenally conscious (are "bits of awareness" or qualia). The motivation for this materialist approach is the commonplace view that mental properties interact causally with physical properties and vice versa, and so if mental properties are part of the causal order, they must themselves be or be realised by physical properties. This vague ontological picture doesn't really set Levine apart from most of his contemporaries, it is only when the question of explanatory adequacy is considered that his views become interesting. He claims that "while we seem to have some idea how physical objects, or systems, obeying physical laws, could instantiate rational and intentional properties, we have no idea. how a physical object could instantiate a subject of experience, enjoying, not merely instantiating, states with all sorts of qualitative character" (p.76). To demonstrate his point, he devotes a chapter to exposing the inadequacies of most of the more recent reductive accounts of conscious experience, and another to defending the reality of qualia from the ostrich-head-in-the-sand option of denying that we actually enjoy any phenomenal experiences at all. Though some of the more problematic scenarios for a qualia realist which have been outlined by Dennett (1990) are not discussed, both chapters forcefully make out the case for the idea that there is something missing from our physicalistic worldview.

The meat of the book though, is his defence of materialism from the conceivability argument, and his general argument for the existence of the explanatory gap. The main obstacle to a purely materialistic metaphysic, he tells us, is the logical possibility of zombies. From a complete physical/functional description of a creature that is conscious (which picks out the lower order properties), we cannot derive by a priori means only that that creature has conscious experiences (the higher order properties), so it is conceivable (conceptually possible) that the physical/functional mechanisms responsible for the nature and existence of conscious experiences and the experiences themselves could exist independently of one another. If this is conceptually possible, then there is a possible world in which this situation is a metaphysical reality, but then materialism must be false for materialism is the thesis that all properties are or are realised by non-mental properties. An obvious response to this is to point out that standard cases of necessary a posteriori identities such as "water = H₂O", fall foul of the same argument, since it is conceptually possible that H₂O could have none of the higher order properties that it in

fact has (such as liquidity, transparency, etc.) Because this is a metaphysical impossibility (for H₂O cannot fail to have the higher order properties that it in fact has) there must be something wrong with the argument, and so what must really be going on in this case and the mental-physical case is that there are two different modes of presentation - two different concepts - which pick out the same situation. However, this response cannot account for the fact that in the mental-physical case, we don't seem to have two different concepts picking out the same situation, but, rather, two distinct concepts picking out two distinct properties - a physical one and an experiential one - and no matter how we try to analyse an identification of the two, we will always be left with what Smart had called "an irreducibly psychical property" (Levine also considers arguments from Kripke and Chalmers but the main point is the same).

The issue can be resolved, thinks Levine, by focusing on a general question in the theory of meaning - whether or not we have a priori access to enough information to determine the referent of a term in a possible world considered as actual. If we think that we have, then we are what Levine calls "ascriptivists" about that mode of presentation. When we use a term to refer to something, we have in mind, either implicitly or explicitly, some description that enables us to pick out that something in a given possible world. The term "water", for example, always picks out the substance that has the higher order properties of actual water, since it is part of the meaning of "water" that it is liquid, transparent, etc. In other words, "water" always refers to "watery" stuff. However, if we think that we have very little or no conceptual content in mind when using such referring terms, we are "non-ascriptivists" about the mode of presentation. All there is to the correct application of a term is the appropriate relation of the symbol to its referent in the actual world, so "water" always refers to H₂O in any given possible world. Using this latter approach, Levine can explain why we can't derive a priori the higher order properties of something from its lower order properties (or microproperties) - why we can't derive liquidity and transparency from the microphysics of H₂O. We can conceive of H₂O with few or even none of the higher order properties that it in fact has, since it is conceptually possible that H₂O be opaque in normal conditions, or that it not be capable of being in a liquid state. This is conceivable because when we refer to H₂O with the term "water", it is not essential that we have any of the properties that we usually associate with this term in mind. But though such a situation is conceptually possible, it does not follow that it is metaphysically possible, for, as already noted, H₂O cannot fail to have the higher order properties that it in fact has (given that the rest of physics and chemistry remains the same). The same considerations apply to the mental-physical case. Even if we had a complete physical/functional theory of consciousness, we could not infer the nature or existence of the experiential properties which the physical/functional mechanisms involved give rise to because of the non-ascriptive character of that mode of presentation. But to infer from this that the physical and phenomenal are not identical is unwarranted, and so the conceivability argument is no threat to materialism.

An epistemic problem remains though. Nothing we can say about the physical/functional basis of consciousness makes it fully intelligible why conscious states have the particular nature that they have, or why, indeed, there should be any at all. Though the higher order properties of water can't be derived from the microphysical properties a priori, once all

the relevant empirical information is complete (physics and chemistry), there is no sense left in wondering how H₂O could have the higher order properties that it has. This is not so in the mental-physical case, for even when we have all the relevant empirical information about the physical/functional basis of phenomenal consciousness, there still seems to be "genuine, substantive cognitive significance" (p.83) left to the question of just how such properties could give rise to phenomenal experiences or qualia. This is due to the fact that our concepts of qualia are "presentationally thick" - they serve as their own modes of presentation (are "substantive") and present themselves as having a specific quality (are "determinate"). This is in contrast to the "presentationally thin" conceptions we have of other properties or substances such as water, in which the referring term involved acts as no more than a label for its referent. But now this motivates a second conceivability argument. The existence of zombies now seems possible due to the very fact that there is this kind of substantive and determinate qualitative residue left which is unexplained by our physical/functional theories, and so we can conceive of the existence of a creature which is physically/functionally identical to a conscious one, but which does not instantiate this qualitative residue. Levine's response is a desperate one. He simply denies that this "gappiness" must be explained by a distinction in properties, telling us that the assumption that it must is based on a kind of Cartesian model of access to the facts, and that the possibility that distinct concepts can refer to the same thing must always remain a live option. I agree, but then Levine's whole argument seems to be, in the end, little more than a straight denial that distinct concepts must pick out distinct properties, but that is the very issue which the distinct property objection targets.

Perhaps the most we can say about the source of the explanatory gap is that it is due to the nature of the properties involved, and this at least enables us to avoid an objection which might be raised against Levine's own diagnosis of the problem. According to Levine, there is an explanatory asymmetry between the water-H₂O case and the mental-physical case. Given all the relevant empirical information in the former case, we can't conceive of H₂O without its actual higher order properties, but we can conceive of the relevant physical/functional mechanisms responsible for phenomenal consciousness without the qualia. Now it might be objected that even after we have been supplied with all the relevant empirical information in the water-H₂O case, we can still conceive of H₂O without any of its actual higher order properties, or even with completely different ones, so there is no asymmetry between the two cases. So either all such cases will involve explanatory gaps and there is no special threat to materialism from the existence of qualia, or there are no such cases which involve explanatory gaps, and so materialism is safe. I think that this shows that the real source of the explanatory gap is due to the difference in nature of the two kinds of property involved, the conscious and the non-conscious, and that the gap exists because we cannot understand how properties of the first kind can be identical to, realised by, or interact with, properties of the second kind. This is the more fundamental problem. There is simply no need for further explanation of the higher order properties of water once we have been supplied with all the relevant empirical information about its microproperties, whether or not we can conceive differently, because the former properties are captured, in an informative way, by the same kinds of concepts and principles that capture the latter properties, and we can

immediately see how the microphysical properties give rise to the higher order properties in terms of these concepts and principles. The situation is different with qualia. No physical or functional concept or principle can capture, in a fully informative way, the unique properties which qualia possess: the specific qualities which they have as we experience them (why the bark of a dog is experienced as being different to the miaow of a cat, or why a square of red in a Mondrian is experienced as being different to a square of yellow which sits next to it), the general property of being non-spatial - having no location or spatial constitution, and the bewildering property of being "bits of awareness", as Levine would have it. These features are presented as being properties of qualia, not properties of physical or functional states of the brain, and so they are irreducibly psychical properties, at least in the epistemic sense. So though it may be possible to conceive of H₂O with very different properties even after being supplied with all the relevant empirical information about the microlevel, we are still just conceiving of what we refer to as more physical and functional properties, and there is no significant explanatory gap here. But when we conceive of a zombie that instantiates no conscious properties, or perhaps a simple thermostat which does, we are thinking about properties that just cannot be made intelligible by using our physical/functional vocabulary, because such unique qualities have never had, and it is hard to see how they ever will have, a place in the physical/functional conceptual scheme. This is where the explanatory asymmetry comes from, and this is why there is an explanatory gap.

The ignorance which creates the gap (the "Purple Haze" of the title) is due, Levine claims, to the nature of our conceptions of qualia. The substantive and determinate nature of qualitative properties is somehow cognitively apprehensible to us in an immediate way, and so the problem also affects our theories of cognition. Not only does qualitative character need to be explained, but also our cognitive relation to this character, that is, - our subjectivity. Now it is surprising that there is no clear statement of whether he thinks that these two related problems are permanent ones, or merely temporary hitches that future empirical research or conceptual analysis will resolve. But he has built on his earlier views in other ways. He has developed his idea of why epistemic possibility is not sufficient for metaphysical possibility, and his reason - non-ascriptivism - is a persuasive response to many of his more recent critics. Also, he now holds that materialism is a contingent thesis rather than a necessary one, though he doesn't tell us how this view gets around Kripke's notorious argument to the contrary, - that contingent identities cannot be strict identities at all. One further problem for Levine is that the whole idea of the explanatory gap undermines his own motivation for materialism, since part of accepting the idea that there is a gap involves acknowledging the fact that we cannot understand how phenomenal properties can be causally efficacious. Yet at the very beginning of the book he tells us that it is the very fact that they are which motivates his position. But he has no better reason to opt for materialism than interactive dualism, for the dualist too claims that non-material properties interact in some way with the material ones, but can't provide an explanation of how they do this either. If both involve a gap, why settle for ontological monism? Perhaps the motivation for materialism then, should be something like ontological economy or simplicity, coupled with the idea that there are some phenomena which aren't mental - a subset of the physical -, but no mental phenomena which aren't physical.

Though difficult to follow in places - something which might be expected given the nature of the arguments involved - this essay is a state of the art report on the current debate about phenomenal consciousness, and should be read by anyone wanting to be brought right up to speed with just where the important problems now lie. Levine has both painstakingly examined some of the more difficult issues involving conceivability and possibility, and outlined the conundrums which both materialist and anti-materialist continue to face. By doing so, he has brought into focus the need for more rigorous criteria of when to count something as a property and when to count something as a concept, the issue which now seems to be central to the mind-body problem.

References

Dennett, D. (1990) Quining Qualia. In William Lycan (Ed.), *Mind and Cognition: A Reader* (pp. 526-536) Blackwell.

Levine, J. (1983) Materialism and Qualia: The Explanatory Gap. *Pacific Philosophical Quarterly*, 64, 354-61.