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## *Experience and the Physical*

Strawson's challenging and provocative defence of panpsychism<sup>1</sup> begins by sensibly insisting that physicalism, properly understood, must unflinchingly countenance the occurrence of conscious experiences. No view, he urges, will count as 'real physicalism' (p. 4) if it seeks to get around or soften that commitment, as versions of so-called physicalism sometimes do.

Real physicalism (hereinafter physicalism *tout court*) must accordingly reject any stark opposition of mental and physical, which is not only invoked by many followers of Descartes, but even countenanced by many recent physicalists. Conscious experiences, Strawson persuasively urges, are a special case of the physical, just as cows are animals.

Panpsychism enters the picture because, despite the physical nature of conscious experiences, Strawson maintains that we cannot describe or explain the experiential using the terms of physics or neurophysiology. Since the experiential is nonetheless physical, Strawson concludes that the physical ultimates must, in addition to whatever properties physics and neurophysiology reveal, have experiential properties as well.

Strawson argues that we cannot avoid this conclusion by maintaining that combinations of physical ultimates constitute or give rise to experiential properties. Physical ultimates cannot give rise to conscious experience unless those ultimates are themselves in some way 'intrinsically experiential' (p. 22). The experiential cannot emerge from nonexperiential ultimates in the way that macroscopic liquidity is standardly held to emerge from molecular properties. Strawson concludes that at least some physical ultimates must be 'intrinsically experience-involving' (p. 22); and, since it's reasonable to see the physical ultimates as homogeneous in nature, we should assume that they all have experiential properties.

[1] Strawson (2006). Except as otherwise noted, all references are to this article, and all emphasis in quotations is in the original.

In Section I, I will raise doubts both about Strawson's claim that we cannot describe the experiential in nonexperiential terms and his argument for that claim. In Section II, then, I will suggest some concerns about Strawson's argument against emergence and his consequent ascription of experiential properties to the physical ultimates. I will close in Section III with some general remarks about physicalism and subjectivity.

### I. Subjectivity and the Physical

The pressure for panpsychism stems from combining physicalism with Strawson's claim that we cannot fully describe conscious experience using the terms of 'physics and neurophysiology or any non-revolutionary extensions of them'. It may well seem that the only way to reconcile this claim with physicalism is to adopt Strawson's conclusion 'that there is a lot more to neurons than physics and neurophysiology record (or can record)' (p. 7).

Strawson sensibly understands the physical not solely by reference to physics, but rather in terms of the clear paradigms of the things we know to be physical. 'The physical is whatever general kind of thing we are considering when we consider things like tables and chairs and [assuming physicalism] experiential phenomena. It includes everything that concretely exists in the universe' (p. 8). Physicalism does not imply 'that the terms of physics can fully capture the nature or essence of experience' (p. 4).

Still, one might well see Strawson's denial that physics or neurophysiology can describe conscious experience not as supporting panpsychism, but rather as telling against physicalism. Indeed, many would see the rejection of physicalism as far the more sensible of those alternatives. But independently of that there is reason to contest Strawson's claim that we cannot describe the experiential in the terms used in 'physics and neurophysiology or any non-revolutionary extensions of them'.

To sustain that claim, Strawson refers us to his splendid book, *Mental Reality* (Strawson, 1994, pp. 62–5). There he urges that 'experiential phenomena outrun the resources of human language' in that, even if you and I describe our experiences in exactly the same way, 'still we cannot know that we are similar (identical) in respect of our experiential properties' (p. 62). Even when exactly the same terms apply to conscious experiences, what it's like for each of us to have those experiences may well differ from one individual to another.

Strawson concludes that no terms available to us can capture what conscious experiences are like for any particular individual. No

matter how fully we describe a conscious experience, there remains on Strawson's view 'a real and unanswerable question about whether the experience is the same or different for any two of us' (Strawson, 1994, p. 63). Conscious experiences are, he concludes, outside the reach of 'human science' (p. 62).

Many would agree that quality inversion is possible that cannot be detected by any third-person means.<sup>2</sup> But there are compelling reasons to doubt that it is. Fundamental to that view is the claim that we know about the qualitative character of experiences only by appeal to the way each individual is conscious of those experiences. It may seem tempting to hold that we cannot determine whether conscious qualitative properties are the same from one individual to another because what is conscious to one individual is not conscious to anybody else. But that would matter only if our knowledge about conscious qualitative properties derived exclusively from the way each individual is conscious of them. If we can know about conscious mental qualities in some way that's independent of the way one is conscious of them, that would enable us to tell whether qualitative character is the same from one individual to another.

There is reason, moreover, to think that we do know about conscious mental qualities apart from any first-person access to them. Our knowledge about mental qualities could depend solely on such first-person access only if such qualities never occur without being conscious. If mental qualities do sometimes fail to be conscious, we can, in those cases at least, determine which qualities occur without appeal to first-person access. And presumably such third-person access would also apply when the relevant qualities are conscious. We would have information about mental qualities that's independent of how, and even whether, the relevant individual is in any way conscious of it.

There is compelling empirical evidence that qualitative states do occur without being conscious. Priming experiments show that non-conscious perceptual states have qualitative character, since such states prime for subsequent perceptual recognition in ways that reflect differences in mental quality, for example, differences in colour.<sup>3</sup> Since nonconscious states prime differentially for various conscious

[2] Some, such as Sydney Shoemaker, concede that, in the human case, asymmetries in the similarities and differences among mental qualities preclude undetectable quality inversion, but urge that creatures are conceivable in which such inversion occurs. (Shoemaker, 1982; reprinted in Shoemaker, 1984, p. 336; and Shoemaker, 1996, p. 150.) I'll argue in Section III that such asymmetries are unavoidable.

[3] See, e.g., Marcel (1983), and Breitmeyer, Ro and Singhal (2004). For a useful review of various kinds of evidence for the occurrence of nonconscious qualitative character more generally, see Kim and Blake (2005).

qualities, we can determine the qualitative character of those non-conscious states by reference to which conscious qualitative states they prime. We can accordingly determine qualitative character apart from the way the relevant individual is conscious of it. This also allows for useful theoretical ways to identify and taxonomize mental qualities independently of the way individuals are conscious of them, and hence precludes undetectable quality inversion; I'll return to that in Section III.

One might simply insist that no state can have qualitative character without being conscious, and that nonconscious states achieve their priming effects by way of some nonmental, physiological properties. But there is no independent reason to interpret the empirical results in that way, independent, that is, of the unsubstantiated claim that consciousness is our only avenue to information about qualitative character. The natural interpretation of these results is that nonconscious mental qualities prime for conscious versions of the very same qualities.

Strawson does seem to hold that we know about mental qualities only from the way an individual is conscious of them.<sup>4</sup> So he might deny that any account that does enable us to determine whether two individuals have the same mental qualities can capture the true nature of experiential states, and hence that it is relevant to his 'real physicalism'. But it's again unclear what independent reason there might be for that denial.

If we cannot tell whether two individuals have states with the same mental qualities, Strawson would be right that there can be no 'human science' of conscious experience. We would be unable to account for conscious qualitative character in terms of a nonrevolutionary extension physics or neurophysiology. But if we can tell whether qualitative character is the same from one individual to another, an objective account of qualitative character may well be possible. And then we may well be able to use the terms in a nonradical extension of neurophysiology in developing such an account.

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[4] Thus his appeal, following Ned Block, to the Louis Armstrong style answer to what qualitative character is: 'If you gotta ask, you ain't never gonna get to know' (n. 6), which in effect denies the possibility of any informative account of qualitative character. But the Louis Armstrong reply is apt only if one builds into the very notion of qualitative character that we can know about it solely by the way an individual is conscious of it.

It is striking that those who hold that no more informative account of qualitative character can be given are just those who also see a mystery about its nature. But, as I shall argue in Section III, we can indeed give a more informative account of qualitative character, and thus dispel such mystery.

## II. Emergence and Experience

Physicalists often hold that physical reality gives rise to conscious experience by combining in various ways. No physical ultimates are themselves experiential, but the experiential emerges from combinations of physical components.

Strawson contests this wide-spread idea. Whenever emergence occurs, he urges, 'there must be something about the nature of the emerged-from (and nothing else) in virtue of which the emerger emerges as it does and as what it is' (p. 15). This condition is plainly satisfied, for example, in the case of molecular properties' giving rise to liquidity. But Strawson sees the experiential as crucially different; we have no idea, he insists, of anything about the physical ultimates that could give rise to conscious experience.

Strawson urges that we should not model the emergence of the experiential from the nonexperiential on the emergence of liquidity from the molecular. We should see it instead as more like the extended emerging from the unextended or the spatial from the nonspatial. How could the extended emerge from that which is in no way extended, to say nothing of the spatial from what is not spatial?

But the extended does arguably emerge from the unextended. Geometrical points, though unextended, nonetheless constitute lines, planes and solids; and that might be enough for us at least to keep a provisionally open mind about the emergence of the experiential from the nonexperiential.

Strawson insists that the factors blocking the emergence of the experiential from the nonexperiential are 'not epistemological' (p. 15). Still, his discussion does often appeal to considerations that seem epistemological. To sustain a claim that the experiential emerges from the physical, he urges, we need some 'imaginative grip' on a suitable analogy that can ground that emergence (p. 15), and the features of what emerges must 'trace intelligibly back to' the features they emerge from (p. 18).

But these things aside, there are reasons to be particularly cautious about concluding, in advance of empirical investigation, that the experiential cannot emerge from the neurophysiological. As Strawson notes, when one phenomenon uncontroversially emerges from another, the emergent phenomenon 'arise[s] simply from the routine workings of basic physical laws' (p. 13). Since we don't now know the laws that govern the occurrence of conscious experiences, we cannot see at present how the experiential might emerge from the neurophysiological. The reason that currently contemplating such emergence may well

‘boggle the human mind’ (p. 15) is that without suitable knowledge of the laws governing conscious experiences we cannot give substance to the way such emergence might work. When we do discover laws and mechanisms that govern the occurrence of conscious experiences, we will be in a position to see whether, and if so how, experiences arise from neurophysiological functioning. That case may then come to seem rather like the emergence of liquidity from molecular interactions.

Strawson takes note of the argument that the emergence of the experiential from the nonexperiential is no more problematic than the emergence of life from nonliving matter. And he writes that ‘[t]his very tired objection’ fails because the emergence of life has itself seemed problematic only insofar as experience is taken as an essential aspect of life (p. 20).

But that is far from obvious. Henri Bergson argued, for example, that an *élan vital* is needed to explain evolution and the development of organisms, independent of conscious experience (Bergson, 1955). Rather, comparing the emergence of mind with the emergence of life is useful because we can now see how the living emerges from the nonliving only because, unlike those earlier vitalists, we now know the relevant laws and mechanisms. And it is just such knowledge that we do not yet have in the case of the experiential and the neurophysiological.

Can we discover laws and mechanisms that govern the way the experiential arises from neurophysiological functioning? Perhaps not if Strawson is right that we know about conscious experiences only by our first-person conscious access to them. Laws or mechanisms that govern the way conscious experiences arise from neurophysiological functioning would give us another, competing way for us to know about experiential states, which would undermine Strawson’s claim. This doubtless explains his scepticism about such laws and mechanisms and the emergence they might sustain. But, as argued in Section I, there is compelling reason to doubt that we can know about conscious experiences only by way of our first-person access to them.

Because Strawson holds that the experiential cannot emerge from the physical ultimates, he sees physicalism as defensible only if those ultimates are themselves in some way ‘intrinsically experiential’ (p. 19). And he seeks to make room for that possibility by endorsing a view of physical reality that he traces to Bertrand Russell and Arthur Eddington. Russell held that our knowledge about physical reality is solely mathematical; Eddington goes farther, insisting that our knowledge of the physical is solely an operationalist matter of meter readings (Russell, 1948, p. 240; Eddington, 1929). On neither view does physics

speak to the intrinsic nature of ultimate physical reality; we have only indirect, structural knowledge about that nature. And that, Strawson urges, leaves it open for us to ascribe experiential properties to the physical.

But we know more about physical reality than these views claim. We learn about physical reality by formulating successful theories that ascribe properties, not all of them mathematical or purely structural, to the things those theories posit. Physics and the other theoretical sciences tell us more about physical reality than mere meter readings, and more than purely mathematical and structural properties.

Strawson quotes Russell's claim that '[p]hysics is mathematical . . . because we know so little [about the physical world]' (Russell, 1948, p. 240; quoted by Strawson at p. 10). But that's very likely not why physics proceeds mathematically. Physics characterizes things mainly in mathematical terms because it abstracts from properties such as colour and sound, which, because they are special to the particular ways we sense things, capture only superficial aspects of their objective nature. And abstracting from such properties leaves us with mainly mathematical descriptions of physical reality. Still, physics does posit nonmathematical properties as well, such as mass, spin, charge, and the like.

The ultimates that physics describes seem in any case poorly suited to be bearers of experiential features, however primitive or elemental. Indeed, it is arguably harder to see how such ultimates could have intrinsically experiential features than to see, even at our current stage of empirical and theoretical knowledge, how ordinary conscious experiences might emerge from neurophysiological functioning.

### III. Experience and Physicalism

It is a striking phenomenon, to which Strawson usefully calls attention, that many recent advocates of physicalism have tacitly assumed an opposition between mental and physical. Indeed many saw the defence of physicalism as largely a matter of overcoming that opposition.

Some physicalists overcame the opposition simply by adopting the eliminativism that Strawson rightly rejects. Others, such as J.J.C. Smart and D.M. Armstrong, sought instead to overcome it by construing mental descriptions of experiences in topic-neutral terms. If mental descriptions are topic neutral, they would be neutral about whether experiences are physical. Mind-body correlations together with Ockham's razor would then show that experiences are physical.

But that strategy wildly overshoots, since if mental descriptions are topic neutral, they are also neutral even about whether experiences are mental. Topic-neutral construals thereby in effect eliminate the distinctively mental. One would seek to defend physicalism this way only if one held that being distinctively mental is actually incompatible with being physical.<sup>5</sup>

Strawson's own argument, however, also appeals to a kind of incompatibility between mental and physical. We cannot, he insists, know about conscious experiences except from our own first-person access, a restriction that holds of nothing that we describe as physical. To dissolve that incompatibility, Strawson urges that we see physics as fixing only the mathematical and structural properties of physical reality, which then allows us to ascribe experiential properties to the physical ultimates. Earlier physicalists sought to overcome the opposition they saw between mental and physical by construing experiential descriptions topic neutrally. Strawson seeks to overcome a somewhat different opposition between mental and physical by a topic-neutral construal of physics. And, whereas the topic-neutral construals of earlier physicalists undercut ordinary notions about mental phenomena, Strawson's purely structural construal of the physical arguably conflicts with established views about ultimate physical reality.

But we needn't adopt either the topic-neutral translations of earlier physicalists or Strawson's structural view of physical reality. As argued above, there is reason to resist Strawson's claim that we cannot describe conscious experiences objectively, which underlies the need to ascribe experiential properties to the physical ultimates.

Nor does the commonsense contrast of mental with physical that concerned earlier physicalists undermine physicalism. That contrast implies no incompatibility between mental and physical, and so is compatible with those occurrences' being a special case of the physical. The contrast between mental and physical is in this way similar to other contrasts with the physical, which also imply only that the contrasted phenomena are a special case of the physical, not that they fail themselves to be physical. Chemical processes and combinations contrast with physical processes and combinations, but are plainly special cases of the physical. And we contrast living things with what is merely physical and the virtual memory of computers with their physical memory, even though the things we contrast with the

[5] It is crucial that these authors did not argue that the relevant descriptions are neutral simply about whether experiences are physical, but that they are topic neutral in general.

For more on the way topic neutrality has these results, see Rosenthal (1976), Section II.

physical are again special cases of the physical. The term 'physical' simply applies in these cases to the more inclusive realm with which we contrast a range of special phenomena.

We have no reason to see the commonsense contrast of mental and physical as at all different. Nothing about mental phenomena is indisputably nonphysical, at least when we understand being physical in the broad way that includes macroscopic physical objects.<sup>6</sup> The mental is a special case of the physical, just as chemical and biological phenomena are, and just as cows are animals.<sup>7</sup> So understood, '[t]he physical . . . includes', as Strawson urges, 'everything that concretely exists in the universe' (p. 8), and with no need to ascribe experiential properties to the physical ultimates.

In Section I, I urged that we can determine what qualitative character an experience has independently of the way one is conscious of that experience. I'll close by briefly expanding on this.

Experiences are states that enable us to perceive things in our environment and conditions of our own bodies. To do this, experiences must register relevant similarities and differences among the perceptible properties of the things we experience. Mental qualities are the properties experiences have in virtue of which they register those similarities and differences.

This holds of the mental qualities of both conscious experiences and nonconscious perceptual states. Qualitative states, whether conscious or not, function perceptually, and to do so the similarities and differences among their mental qualities must reflect the perceptible similarities and differences among the things we perceive. So the mental qualities of each sensory modality must occupy positions in a quality space that matches the quality space defined by the similarities and differences among the properties that the modality in question enables one to perceive.

The mental quality of any perceptual state is that property which enables an individual that is in that state to perceive the corresponding perceptible property. Each mental quality occupies a position in the quality space of its sensory modality that matches the position of the

[6] For more on this, see Rosenthal (1976), Section I.

[7] One might object that we do not speak of a contrast between being red and being coloured or between being a cow and being an animal as we speak of the contrast between mental and physical. But we do contrast being red with merely being coloured, and being a cow with merely being an animal. And we have no reason not to see the commonsense contrast between mental and physical as a contrast of the mental with the merely physical, i.e., the physical in general.

For more on this understanding of the mental-physical contrast, see Rosenthal (1980), Section II.

perceptible property in the space of properties to which that modality enables perceptual access. So we can determine the mental quality of any experiential state by fixing the position in the relevant quality space of the perceptible property to which that mental quality is a normal perceptual response.

We can, moreover, fix the space of objective perceptible properties to which each modality is responsive by seeing which properties an individual can discriminate (see, e.g., Clark, 1993, chs. 4 and 6; Goodman, 1966, chs. 11 and 12; and Goodman, 1972, pp. 423–36). And, since we can do this independently of the individual's first-person access to the relevant perceptual states, we can determine the mental qualities that figure in these discriminations independently of first-person access. A mental quality is conscious, then, when one comes to be conscious of oneself as being in a state that has that mental quality. What it's like for one to have a conscious experience is a matter of being conscious of oneself as having that experience.<sup>8</sup>

On this account, your mental quality of red and mine are automatically the same if our abilities to discern physical colour properties are the same. Indeed, this must be so. Mental qualities are fixed by their relative position in the quality space of the relevant sensory modality. So any inversion of qualities between your quality space and mine would be undetectable by third-person means only if that inversion preserved the relations of similarity and difference that the switched qualities bear to all the others. If those relations of similarity and difference changed, so would the perceptual function of the switched qualities, and others would then be able to detect that switch. Because qualities are the same if their relations of similarity and difference are the same, undetectable quality inversion is not possible.<sup>9</sup>

Why, then, has it seemed to so many that it is possible?<sup>10</sup> If one sees mental qualities solely in terms of the way one is conscious of them, the ties those qualities have with perceptible properties will seem to be merely contingent. One will then conclude that there can be no way to tell whether your mental qualities are the same as mine. The alleged

[8] For more on this, see Rosenthal (2005). The similarities and differences among perceptible properties that matter here are those which can be perceived, not similarities and differences that hold in respect of psychophysical descriptions of those properties.

[9] The asymmetry in human quality spaces that Shoemaker acknowledges makes quality inversion impossible for us (see n. 2, above) is no accident; it is required for mental qualities to play their distinctive perceptual roles.

[10] The hypothesis of undetectable inversion famously appears in Locke (1975), II, 32, 15. But it can be found even in Sextus Empiricus *Against the Logicians*, I, (*Adversus Dogmaticos*), 95–198, describing the views of the Cyrenaics; Sextus Empiricus (2006), pp. 40–41. I owe the reference to Sextus to Ben-Yami (unpublished).

possibility of undetectable quality inversion is of a piece with the view that mental qualities can be known only by the way one is conscious of them.<sup>11</sup>

Strawson's probing article seeks to reconcile our first-person access to qualitative character with our third-person understanding of objective reality. This is the fundamental challenge in understanding experiential phenomena. Strawson's strategy is to accommodate the claim that we can know about the qualitative only by first-person access by adjusting our view of the physical. But we can more successfully square our first- and third-person access to reality by rejecting that claim. In that way we can understand how our first-person access to conscious experience fits with the objective role that conscious qualitative character plays in perceiving.

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[11] For more about the impossibility of undetectable quality inversion, see Rosenthal (2005), Section 7.

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