The Explanatory Gap is Not an Illusion: 
Reply to Michael Tye

Brie Gertler

The claim that there is an ‘explanatory gap’ between physical and phenomenal properties is perhaps the leading current challenge to materialist views about the mind. Tye tries to block this challenge, not by providing an explanation to bridge the gap but by denying that phenomenal–physical identities introduce an explanatory gap. ‘Since an explanatory gap exists only if there is something unexplained that needs explaining, and something needs explaining only if it can be explained (whether or not it lies within the power of human-beings to explain it), there is … no gap.’ (Tye 1999, p. 719) Tye’s strategy differs crucially from the claim that identities never stand in need of explanation because they constitute ultimate explanations; for he allows that identities such as ‘water=H₂O’ are explainable. Unlike WATER and H₂O, which are descriptive concepts, phenomenal concepts are ‘perspectival’ and hence irreducible to descriptive concepts, according to Tye. The fact that something picked out by a perspectival concept is identical to something picked out by a non-perspectival concept cannot be explained.¹ So, he concludes, phenomenal–physical identities need not be explained.

I shall argue that, rather than alleviate the explanatory deficit, Tye’s strategy merely shifts the explanatory deficit from the alleged ‘gap’ to the allegedly special nature of phenomenal concepts. The remaining explanatory deficit is no less troubling than the (original) explanatory gap. It has two sources: (1) Tye’s construal of phenomenal concepts as special, relative to physical concepts; and (2) Tye’s failure to show that any concepts could play the demanding role in which he casts phenomenal concepts.

¹ At least, this cannot be explained in the substantive way that ‘water=H₂O’ can. Tye distinguishes four construals of the question which proponents of the gap claim deserves an answer, but the version of the question which concerns gap proponents is one which Tye claims is unanswerable. I return to this issue below.
1. A conceptual difference can generate an explanatory gap, as follows. Suppose that, contra Tye, phenomenal concepts are descriptive. Then, if a single state token satisfies both a phenomenal description and a physical description, this fact would call for explanation. For according to materialism, this fact is not a mere coincidence; the state satisfies these descriptions by virtue of having a physical property which realizes the phenomenal property. This is, in part, why Tye maintains that phenomenal concepts are perspectival and non-descriptive. No comparable explanatory deficit seems to stem from the fact that a single thing non-coincidentally satisfies both a descriptive and a non-descriptive concept.

Tye’s strategy, construing phenomenal concepts as non-descriptive, thus neutralizes the question why something with these (descriptive) physical features also has these (descriptive) phenomenal features. But in doing so it raises another question: what explains the fact that c-fibres firing realizes pain, and thus that a given token falls under both the concept PAIN and the concept C-FIBRES FIRING? Since this is not a coincidence, it seems to warrant an explanation.

Tye sketches four construals of this question. He claims that, on two of these construals, the question is answerable. He admits that on the remaining two construals it is unanswerable, but claims that the unanswerability of the question on these construals carries no ontological consequences. The construal of central concern to proponents of the gap calls for an account of ‘higher-order physical property Q is pain’ that is on a par with the standard account of ‘water is H\textsubscript{2}O’.

On the standard account, ‘water is H\textsubscript{2}O’ is true by virtue of certain conceptual facts (roughly, that on our conception water is the actual waterish stuff around here) together with certain empirical facts (roughly, that the actual waterish stuff around here is in fact H\textsubscript{2}O). In a crucial move, Tye denies that we should expect such an account for physical-phenomenal identities, for ‘it is conceptually guaranteed by the character of phenomenal concepts and the way they differ from third-person concepts that the question has no answer’ (ibid., pp. 718–9). What ‘guarantees’ that this question has no answer is, simply, that phenomenal concepts are perspectival; physical concepts are non-perspectival; and no perspectival concept is reducible to a non-perspectival one. This qualifies as a ‘conceptual’ guarantee because the irreducibility of the perspectival to the non-perspectival is a conceptual fact. Given this conceptual irreducibility, the fact that a given non-perspectival property realizes a given perspectival one is explanatory bedrock.
Still, this move seems only to recast the relevant question, which now becomes: what is special about the phenomenal, relative to the physical, which makes it the case that phenomenal concepts are perspectival, and irreducibly so, while physical concepts are non-perspectival? Dualists can claim that what is special about phenomenal concepts, relative to physical concepts, is that phenomenal concepts are concepts of properties which are themselves non-physical. Dualists need not construe phenomenal concepts as perspectival: phenomenal concepts may be fully descriptive concepts, which are irreducible to descriptive physical concepts because the corresponding properties are irreducible. In any case, the ontological irreducibility of the phenomenal allows for a substantial explanation of its conceptual irreducibility.

Dualism may not be the best explanation of phenomenal concepts’ specialness, for of course dualism introduces explanatory problems of its own. But dualism’s resources illustrate what is missing in Tye’s proposal. And Tye appears to rest his view on the claim that it does away with the explanatory deficit, not that it involves an explanatory deficit which is less troubling than the explanatory deficit involved in dualism (a point that would remain to be shown).

I do not object to the claim that perspectival concepts are irreducible to non-perspectival ones. My objection is to Tye’s treatment of the perspectival quality of phenomenal concepts as a brute fact, requiring no explanation. It is the bruteness of this fact which renders ‘physical state $Q$ realizes phenomenal state $S$’ unexplainable. And again, this fact seems to need explaining, if not by invoking a special ontological category—such as non-physical qualia or Russellian sense-data whose ontology is tied to their epistemic features—then by some other method.

2. Tye defends his construal of phenomenal concepts, which leads to denying that ‘physical state $Q$ realizes phenomenal state $S$’ is explainable, by claiming that this construal preserves three key intuitions. (1) We have direct, immediate access to phenomenal states through introspection; (2) fully understanding a phenomenal quality requires experiencing it; and (3) the presence of a phenomenal state is not deducible from the presence of any physical state, even if physicalism is true. As I now show, the truth of (1)–(3) would indeed be entailed by the existence of phenomenal concepts as Tye construes them. But this does not justify his construal of phenomenal concepts, for there is reason to
doubt that anything could instantiate the collection of features his construal attributes to them.

The conceptual irreducibility of the phenomenal to anything purely descriptive entails (2) and (3). Since the phenomenal concept PAIN is not equivalent to any description, no one can know pain *qua* PAIN purely by using a description. Hence, someone with full non-phenomenal knowledge of pain—a zombie or robot neuroscientist, say—may lack the concept PAIN. So descriptive knowledge is insufficient for full phenomenal knowledge, as (2) says. Add to this the claim that physical concepts such as C-FIBRES FIRING are descriptive, and (3) follows: for one who knows that there are C-fibres firing may be unaware of the presence of (phenomenal) pain.

Both (2) and (3) imply that physical/descriptive knowledge is not sufficient for phenomenal knowledge. By contrast, (1) implies that physical/descriptive knowledge is not necessary for phenomenal knowledge. To accommodate (1), Tye’s account must explain how the immediate application of a non-descriptive phenomenal concept could suffice for knowledge. He asserts that ‘it is part of [phenomenal concepts’] characteristic functional role, *qua* phenomenal concepts, that they enable us to discriminate phenomenal qualities and states directly on the basis of introspection’ (ibid., p. 713). To advance his view, Tye must further demonstrate that a concept *could* play that distinctive functional role. Specifically, he must show that a direct application of a non-descriptive concept—one which fits intuitions (2) and (3)—can carry the epistemic weight required to accommodate intuition (1).

On his view, what makes phenomenal knowledge immediate is that the awareness of a phenomenal state ‘causally triggers’ the relevant phenomenal concept, ‘without the use of any descriptive, reference-fixing intermediaries’ (ibid., p. 713). Tye does not explain how the fact that a phenomenal state immediately ‘triggers’ the application of a phenomenal concept, in a way which does not require that the phenomenal state meets any description, results in (or reflects) a knowledge of what it is like to instantiate that phenomenal property. He does mention that this triggering is ‘a reliable process’, but the reliable connection between phenomenal states and phenomenal concept application cannot carry the epistemic weight here. For as Tye notes, a knowledgeable neuroscientist can reliably detect Fred’s pain, and reliably apply to it a non-phenomenal concept such as ‘the feeling that Fred is having right now’, while having no idea what that feeling is like.

Tye claims that the neuroscientist case shows that phenomenal concepts aren’t simple indexicals; in true phenomenal state introspection,
there is some additional concept being exercised that is not operative in the external conception, a general phenomenal concept’ (ibid., p. 710). This remark describes what would be required for Tye’s approach to work; it does not show that the required item is available. The ‘additional concept’ here must ensure that one who applies it knows what it’s like to experience that feeling, and it must do so without descriptively capturing the property. The difficulty is to see how the application of a concept could be both epistemically substantial and free of ‘descriptive, reference-fixing intermediaries’. The importance for materialists of resolving this difficulty is again evident in the alternative available to dualists or proponents of sense-data. Dualists and sense-data proponents can use the ontological specialness of phenomenal states, relative to physical states, to explain how knowledge of a phenomenal property can be descriptive, and hence epistemically substantial, while at the same time epistemically immediate, that is, free of the intermediaries involved in knowledge of physical properties. Such an account appears unavailable to materialists like Tye.

Since Tye construes phenomenal states as functional states ontologically on a par with physical states, he cannot use familiar ontological strategies (invoking non-physical qualia or sense-data) to explain how phenomenal states can be known descriptively and yet with epistemic immediacy. This is what leads him to the view that phenomenal concepts are non-descriptive. But draining phenomenal concepts of their descriptive force robs them of their epistemic weight. The triggering of a non-descriptive phenomenal concept is a reliable indicator of a phenomenal state, at best; as regards knowing what it’s like to instantiate that state, such triggerings are on a par with the reliable triggerings of non-phenomenal concepts such as ‘the feeling that Fred is having right now’. (See my (forthcoming) article for an account of how a phenomenal property can be grasped descriptively and yet with epistemic immediacy.)

3. Tye’s picture of phenomenal concepts leaves intact an explanatory deficit, but not simply because that picture construes phenomenal concepts as special. If it calmed ‘explanatory gap’ worries, the specialness of phenomenal concepts might possibly be acceptable. The real problem with Tye’s account is that we have no reason to believe that any concept could instantiate the collection of features which purportedly makes phenomenal concepts special. Tye at best relocates the mystery of the explanatory gap, from the specialness of phenomenal qualities to the specialness of phenomenal concepts. But because his account does not
diminish the mystery, it fails to resolve explanatory gap worries or to show that they will yield to a conceptual rather than an ontological resolution.²

References


² I thank Michael Tye for helpful comments on a previous draft.