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Article

Absent and Inverted Qualia Revisited

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1.

Over the past two decades, Sydney Shoemaker has published many important works in metaphysics and the philosophy of mind. He has dealt with the problem of personal identity, with the nature of causal relations, with the question of property identity, with the relation between behavior and mental states, and with the philosophical theory of mental states known as 'functionalism'. His work has always revealed a deep sensitivity to philosophical intuition while subjecting such intuition to extremely rigorous analysis. Thus, when we consider an issue so 'intuition-laden' as the nature of qualitative, conscious mental states, it comes as no surprise that Shoemaker has an important contribution to make.

In this paper, I want to discuss a position on this latter question that Shoemaker has developed over the course of several papers, in which he presents an important and intriguing defense of functionalism against the so-called 'inverted qualia' and 'absent qualia' hypotheses. These hypotheses are thought-experiments which purport to demonstrate that it is possible for two creatures to be functionally identical while experiencing sensations of quite different qualitative character, or even for one to have and the other not to have any qualitative experience at all. Shoemaker's strategy is to divide and conquer—he denies the possibility of absent qualia, arguing that it leads to intolerable first-person skepticism, but accepts the possibility of inverted qualia, arguing that it can be accommodated within a broadly functionalist framework. Thus Shoemaker, though

¹ 'Functionalism and Qualia', 'Absent Qualia Are Impossible', and 'The Inverted Spectrum', reprinted as essays 9, 14 and 15, respectively, in Sydney Shoemaker, *Identity*, Cause, and Mind: Philosophical Essays, Cambridge University Press, 1984 (hereafter, Philosophical Essays).

providing a defense of functionalism, deviates from what might be called 'pure functionalism'—the position that type-identity conditions for mental states can be provided in purely functional, 'topic-neutral' terms—since, according to pure functionalism, inverted qualia are not possible. The question that immediately arises, then, is why anyone out to defend functionalism from the 'qualia-centered' objections should choose to abandon pure functionalism in the process.

There are two reasons one might have for preferring Shoemaker's position to pure functionalism. The first reason is the one Shoemaker explicitly presents. He argues that since cases of intrasubjective qualia inversion would be behaviorally detectable, functionalists have no basis for denying that they are possible. But then there is a natural line of argument that leads from the possibility of an *intra*subjective inversion to the possibility of an *inters*ubjective inversion. Therefore, pure functionalism will not work when it comes to qualia.

The second reason is not so much an objection to pure functionalism per se, but rather a reason that Shoemaker's alternative to it might seem far more attractive. The absent and inverted qualia hypotheses are thought experiments which give concrete expression to what I will call, following the Churchlands, the 'pro-qualia' intuition.² This is the intuition that there is something special about conscious mental life that makes it inexplicable within the theoretical framework of functionalism, and materialism more generally. The pro-qualia intuition certainly constitutes one of the major obstacles to a fully adequate resolution of the mind/body problem.

If one is at all moved by the pro-qualia intuition, then a functionalist position that preserves at least some of its intuitive plausibility is bound to be more palatable than one that does not. Such a position constitutes a more powerful defense of functionalism against qualia-centered objections, since it better undermines the intuitive resistance to functionalism underlying these objections. Since Shoemaker allows the possibility of inverted qualia and the pure functionalist does not, Shoemaker's position seems superior on these grounds. If in fact Shoemaker can even partially reconcile the pro-qualia intuition with an overall functionalist theory of mind, he will have made significant progress toward a general resolution of the mind/body problem.

However, in this paper I will argue that Shoemaker's divide-and-conquer strategy fails—absent and inverted qualia stand or fall together. I will argue first that his position, despite appearances, does not really do any better than pure functionalism at accommodating the pro-qualia intuition. I will also argue that his inference from the detectability of a case of intrasubjective qualia inversion to the possibility of a case of intersubjec-

tive qualia inversion—once severed from the pro-qualia intuition—does not stand on its own. Therefore, there is no reason to adopt his modification of the functionalist position. When it comes to qualia, it's either pure functionalism, or no functionalism at all.

This conclusion is certainly not fatal to functionalism—in fact, Shoemaker provides the functionalist with a strong epistemological argument against the pro-qualia position. Still, what seemed unique and most interesting in Shoemaker's defense of functionalism—and what seemed to provide a hope of getting beyond the present stalemate between proqualia advocates and functionalists—disappears on closer inspection.

2.

Let me begin by briefly presenting the absent and inverted qualia hypotheses, and then summarizing Shoemaker's argument. Functionalism, to repeat, is the position that type-identity conditions for mental states can be specified in terms of their relations to inputs, outputs, and other mental states. The inverted qualia hypothesis challenges this position in the following way. It seems possible to imagine two creatures who realize exactly the same functional states, yet experience sensations with different qualitative character. This situation would obtain, for instance, if someone, call her Sally, suffered from an 'inverted spectrum'. That is, suppose that Sally's visual experiences were of the sort that normal people would have were the color spectrum systematically inverted. So Sally's visual sensations of the clear blue sky and of ripe bananas have the same qualitative character as a normal person's visual sensations of ripe bananas and the clear blue sky, respectively. The difference between Sally and the rest of us wouldn't be detectable in her behavior because the inversion preserves all the relations among the colors. What's more, it very well could be that Sally's visual experiences were functionally identical to our own as well. If this is possible, then type-identity conditions for qualia cannot be specified in functional terms.

Once we allow the possibility of inverted qualia, we see that there is no conceptual link between the qualitative character of an experience and the functional role it plays. The suggestion then becomes difficult to resist that it is possible for some creature to be functionally identical to a normal human being, yet not have any qualia at all. This is the absent qualia hypothesis. If absent qualia are indeed possible, then functionalism completely fails to account for a central aspect of our mental life.

In response to the absent qualia hypothesis, Shoemaker argues as follows. If absent qualia are possible, then there might be a creature—call it 'the Golem'—that is functionally identical to me, yet lacking qualia. Suppose F is the functional state I'm in when I have a visual sensation of the clear sky. It follows that when the Golem is in F, there is nothing it is like for it to be in that state. My tokens of F are real visual sensations, the

² Paul and Patricia Churchland, 'Functionalism, Qualia, and Intentionality', Philosophical Topics, 12, No. 1 (1981). Reprinted in Mind, Brain, and Function, eds. J. Biro and R. Shahan (Norman, OK: University of Oklahoma Press, 1982).

Golem's are merely 'ersatz' sensations. Of course since, by hypothesis, the Golem and I are functionally identical, there would be no way to discern this crucial difference between us from observations of our behavior.

While it has often been recognized that such a possibility raises difficulties concerning our knowledge of other minds, it is not usually thought to be a problem how *I* know that *I* have real, as opposed to ersatz qualia. But Shoemaker claims that the problem arises for the first-person case as well. For part of what constitutes the functional role played by my visual sensation is its tendency to cause other mental states; in particular, a belief to the effect that I am experiencing a visual sensation of a certain sort. Shoemaker calls this a 'qualitative belief'.⁴ If the Golem's token states can really satisfy the functional specification F satisfied by my visual sensation, then they must share this tendency to give rise to qualitative beliefs. So the Golem would believe it experienced what I think I experience, except that the Golem's beliefs would be mistaken where mine are not. However, how do I know that *I'm* not mistaken as well? If ersatz qualia can normally give rise to qualitative beliefs in the Golem, why can't they be doing so in my case too? As Shoemaker puts it himself:

The gist of my argument against the possibility of absent qualia was that the supposition that ersatz pain is possible gives rise to insuperable epistemological difficulties. There is of course the problem of how we could know that our friends and neighbors are not imitation men [sic]. But there is also, on this supposition, a problem about how we can know that we ourselves are not imitation men [sic]. For one thing it appears that my grounds for thinking that my own pains are real and not ersatz can be no better than the grounds an imitation man [sic] would have for thinking the same about his ersatz pains.⁵

Although rejecting the possibility of absent qualia altogether, Shoemaker takes a different position on the possibility of inverted qualia. In discussing the inverted spectrum example, Shoemaker distinguishes between cases of *inters*ubjective inversion and cases of *intra*subjective inversion. In the former case there would be functional identity between the subjects and hence no way to detect the difference from their behavior. In the latter case, however, one could expect that the subject herself could tell the difference, which means there would not be functional identity between the subject's qualitative states before and after the inversion. It is the possibility of intrasubjective inversion, and its detectability, that Shoemaker believes renders the possibility of intersubjective inversion plaus-

ible. Again, as he puts it:

If we did not think we could have these kinds of evidence of intrasubjective spectrum inversion, I think we would have no reason at all for thinking that spectrum inversion of any sort, intrasubjective or intersubjective, is even logically possible. To claim that spectrum inversion is possible but that it is undetectable even in the intrasubjective case would be to sever the connection we suppose to hold between qualitative states and introspective awareness of them, and also their connections to perceptual beliefs about the world and, via these beliefs, to behavior. . . Indeed, the supposition that intrasubjective spectrum inversion could occur, but would be undetectable, is incoherent in much the same way as the 'absent qualia' hypothesis. 6

Of course it seems reasonable to suppose that if one's own spectrum became inverted, one would certainly notice. Therefore, there seems to be no epistemological reason to doubt the coherence of such a possibility. But so far there is no threat to functionalism either, since the qualitative difference between one's visual sensations before the inversion and after the inversion can be captured as a difference in their functional roles. The threat to functionalism arises from the plausibility of the inference from the possibility of an intrasubjective inversion to the possibility of an intersubjective inversion. For suppose Sally, as an adult, suffers a spectrum inversion. She wakes up one morning and finds that the clear sky looks to be the same color that ripe bananas did yesterday, and vice versa. Presumably something happened, perhaps inside her brain, to cause this switch in her color experience. Now, whatever this new condition is, just imagine that it obtained at Sally's birth. Sally, of course, would not then have been in a position to know that something was peculiar about her visual experience, and so we would have a case of full-fledged qualia inversion.

If a case of intersubjective inverted qualia is possible, then type-identity conditions for a particular kind of qualitative character—an individual quale—cannot be given in functional terms. However, Shoemaker argues, the notion of qualitative similarity and difference can be captured in functional terms. He argues as follows. When it comes to intrasubjective comparisons of qualitative character, it seems plausible that one can introspectively determine whether or not two experiences are qualitatively similar. As we just noted, an intrasubjective spectrum inversion would be detectable. Furthermore, when two visual experiences are qualitatively similar, they would normally give rise to beliefs in an objective similarity in the objects perceived. Thus we have a basis for functionally defining

³ I get the term from Ned Block, who credits Lawrence Davis.

⁴ Philosophical Essays, page 189. ⁵ Philosophical Essays, page 316.

⁶ Philosophical Essays, page 197f.

the notion of intrasubjective qualitative similarity. Two qualitative states, Q_1 and Q_2 , are qualitatively similar for a particular subject S if, were S to experience both Q_1 and Q_2 , S would tend to judge that the relevant properties of perceived objects (like their color) were similar, and also would tend to form the qualitative belief that the two experiences were qualitatively similar. Armed with this functional definition of the relation of qualitative similarity for a subject, we can also provide a functional definition of what it is for a state to have qualitative character. S's state, Q, has qualitative character iff it is qualitatively similar (or dissimilar) to another of S's states. We still do not have a functional definition of what it is for a state to have a particular qualitative character. But Shoemaker feels that so long as functional definitions for the notions of qualitative similarity and a state's having a qualitative character are available, 'functionalism has nothing to fear from qualia'.⁷

So far we've only provided a definition of qualitative similarity for the intrasubjective case. Shoemaker discusses a view—he calls it the 'Frege-Schlick' view8-according to which comparisons of qualitative character only make sense intrasubjectively. On this view, of course, cases of fullfledged, intersubjective qualia inversion are impossible, for to even describe the case one has to use a notion of intersubjective qualitative similarity (or dissimilarity). Shoemaker argues that the Frege-Schlick view seems to fly in the face of common sense, since it seems sensible to ask whether or not my visual sensation of blue is qualitatively similar to someone else's. What's more, the argument from the possibility of an intrasubjective inversion to the possibility of an intersubjective inversion certainly presupposes the meaningfulness of intersubjective comparisons of qualitative character. Thus, in order to accommodate the common sense view, including the possibility of intersubjective qualia inversion, while maintaining the functionalist framework, Shoemaker must show how to extend the notion of qualitative similarity, as defined above, to include intersubjective, as well as intrasubjective comparisons of qualitative charac-

Shoemaker's solution is to let the similarity/dissimilarity of the physical states which realize qualitative states determine the similarity/dissimilarity of their qualitative character. Since there is presumably no problem in determining physical similarity/dissimilarity intersubjectively, there will be no problem in determining qualitative similarity/dissimilarity

⁷ Philosophical Essays, page 341.

8 Philosophical Essays, pages 338-341.

intersubjectively. For example, suppose that Fred and Sally are functionally identical (at least regarding their visual sensations). Let B be the qualitative character involved in Fred's perception of blue objects, and Y the qualitative character involved in his perception of yellow objects. Also let FB be the functional state he is in when perceiving blue objects, and FY the functional state he is in when perceiving yellow objects. Finally, let PB be the physical state which realizes FB in Fred, and PY the physical state which realizes FY in Fred.

We know that when Fred is in PB his experience is qualitatively different from his experience when he is in PY, since, by hypothesis, they realize different functional states. By the intrasubjective definition of qualitative similarity the two states would count as qualitatively dissimilar. Suppose that Sally realizes FB with the physical state PY, and she realizes FY with the physical state PB. So, when Fred and Sally are both looking at the sky on a clear day, Fred will be in states FB and PB, and Sally will be in states FB and PY. In this case, Shoemaker would say, it makes sense to say that Fred and Sally, though they are in functionally identical visual states, are nonetheless in qualitatively different visual states. For were Fred now to be put into state PY, the same physical state Sally is in currently, he would say that the clear sky now appears to have the color of ripe bananas. Similarly, were Sally now to be put into state PB, the same physical state Fred is in currently, she would say the same thing. Therefore, we have good reason to say that, since Fred is now in PB and Sally is in PY, their visual qualia are inverted with respect to each other. Notice that the functional definition of qualitative similarity is now extended to cover the intersubjective case. So long as two subjects are capable of instantiating the same physical states, it is possible for them to experience the same qualia.

Shoemaker distinguishes between the 'Frege-Schlick' view and the 'common sense' view of qualia; the latter allows the intersubjective comparability of qualia, whereas the former does not. He believes it is a virtue of his position that it legitimates the common sense view. Of course, this alone does not distinguish his position from pure functionalism—i.e. the position that qualia are functional states, *simpliciter*. For the pure functionalist can also make sense of intersubjective comparisons of qualitative character. What makes Shoemaker's position distinctive, rather, is

[&]quot;In the 'Inverted Spectrum', *Philosophical Essays*, page 342, Shoemaker says that, though qualia are not functionally definable, their similarity and identity conditions are. Therefore, '...qualia too can be said to have physical realizations. ...'. But it isn't quite clear just what it means for a quale—not itself being a functional state—to be physically realized. I will argue below that what he must intend is that a quale is *identical with*, not merely realized in, a physical state.

The fact that pure functionalism legitimates intersubjective comparisons of qualitative character puts a certain wrinkle in Shoemaker's position in a puzzling light. In a postscript to 'The Inverted Spectrum' (added in *Philosophical Essays*) in response to a rather complex objection, he admits that perhaps his account of intersubjective comparisons of qualitative character will not work. If so, he concludes, then we will have to accept the Frege-Schlick view. But this doesn't follow—one can instead adopt pure functionalism, which seems intuitively on stronger ground than the Frege-Schlick view. So, why doesn't Shoemaker take this route? My guess is that Shoemaker still feels that the conceivability of a case of intrasubjective qualia inversion somehow undermines pure functionalism. I will argue below that this is mistaken.

his willingness to accept the possibility of a case of full-fledged, intersubjective qualia inversion.

As I mentioned at the outset, there are two sorts of grounds for preferring a version of functionalism that allows the possibility of inverted qualia over a version that does not. The first involves the pro-qualia intuition. To the extent that the inverted qualia hypothesis gives expression to this deep intuition, and to the extent that Shoemaker's version of functionalism can accommodate it, his position will constitute a significant improvement over pure functionalism. The second sort of ground derives from the argument that the clear conceivability of an intrasubjective qualia inversion leads to the conceivability of an intersubjective qualia inversion as well. In the next two sections, however, I will show why neither sort of ground for preferring Shoemaker's position to pure functionalism is convincing in the end.

3.

My argument against the first consideration in favor of Shoemaker's position—that, by allowing inverted qualia, it partially accommodates the pro-qualia intuition—takes the form of a dilemma. On the one hand, Shoemaker might mean by 'inverted qualia' what we normally mean. That is, we have a fairly substantive idea of what it is like to experience a visual sensation of blue, and we imagine that that is what it is like for Sally when she looks at ripe bananas. On this interpretation of 'inverted qualia', Shoemaker's position does indeed address the pro-qualia intuition. However, the problem is that if we accept his argument against the absent qualia hypothesis—that it leads to first-person skepticism—then we must also reject the inverted qualia hypothesis, since the same sort of argument can be used to derive first-person skepticism here too.

On the other hand, Shoemaker can avoid these skeptical consequences, but only by changing his notion of qualitative character in such a way as to strip it of what is essentially *qualitative* about it. Therefore, though his position in some sense allows the possibility of inverted qualia, it really goes no farther in accommodating the pro-qualia intuition than pure functionalism. I will take up each horn of the dilemma in turn.

3.1

If a case of intersubjective qualia inversion is possible, then someone, say Sally, could be in a state functionally identical to my visual sensation while looking at the clear sky, and yet experience a sensation with the same qualitative character I have while looking at a ripe banana. Call the qualitative character normally associated with visual sensations of blue 'B', and the one normally associated with visual sensations of yellow, 'Y'. I experience B when looking at the sky, and Sally, by hypothesis, experiences Y. Of

course, since our visual sensations are functionally identical, they will tend to give rise to the same beliefs, including qualitative beliefs. Among my qualitative beliefs is the belief that I am having an experience of a certain type, type B. But then, by hypothesis, Sally must also believe that she is having an experience of the very same type. ¹¹ If Sally and I both believe we are having experiences of type B, and yet she is mistaken, what grounds do I have for thinking that I am not also mistaken? Thus the inverted qualia hypothesis leads to the extremely implausible conclusion that I can't know which type of qualitative character my sensation has.

Notice that it doesn't help to advert to the physical states that realize our respective functional states as a source of evidence regarding the type of qualitative character we each experience. Perhaps from the fact that I realize the functional state F with PB and Sally realizes it with PY I can determine, as in the case of Fred and Sally above, that our qualia differ. But then I am still left with the question, which one of us has which quale? If B and Y can each play the same functional role, then how could I ever tell which one of them I experience, and which one Sally experiences?

It might be thought that there really is no problem here. After all, when we use phrases such as 'the qualitative character associated with a visual sensation of blue' (the definition of 'B'), there is actually an implicit indexical element, indexing the subject of the experience. That is, by the phrase above I mean the qualitative character associated with my visual sensation of blue, or Sally's, or whomever. If inverted qualia are possible, I certainly can't assume that there is a unique quale picked out by the phrase no matter who the subject of the experience is. Therefore, the objection, as stated, makes no sense; if by 'B' I mean 'the qualitative character associated with my visual sensation of blue', then there can be

Of course, one might wonder why we don't run the argument the other way. That is, why not say that since Sally presumably has a belief to the effect that she is having an experience of type Y, and since Sally and I are functionally identical, then I too must believe that I am having an experience of type Y? It doesn't really matter how the situation is described, so long as the essential point is kept in focus; namely, that Sally and I are in functionally identical qualitative belief states, yet are experiencing qualia of different types.

Incidentally, one might try to avoid the problem by maintaining that, although Sally's and my qualitative beliefs are functionally identical, they are still type-distinct in virtue of their being the typical causal result of different qualitative states. Thus, neither Sally nor I have mistaken qualitative beliefs, and so the problem of skepticism does not arise. The problem with this line of reply is that it is available to the advocate of absent qualia as well. She too can maintain that, although both I and the Golem have qualitative beliefs that are functionally identical, still they are type-distinct, since my beliefs are caused by qualia, and the Golem's by ersatz qualia. Presumably, Shoemaker would respond by asking what grounds we have for our claim to know that, in this sense, our beliefs are type-distinct from the Golem's. Whether this response works or not is not my present concern. My only point is that if it works to preserve his skeptical argument against the possibility of absent qualia, then it works as well for the skeptical argument I have just sketched against the possibility of inverted qualia.

no doubt that, when looking at the clear sky, I experience B, not Y.

But this reply only pushes the problem back one step, to the definition of 'B' and 'Y' in the first place. That is, I can very well decide to dub the quale I am now experiencing 'B' and the quale Sally is now experiencing 'Y'. However, so long as the two constitute what Shoemaker calls an 'invertible pair', I really don't know which quale it is that I'm referring to with the term 'B'.

Perhaps an analogy would make the point clearer. Imagine two pages of a child's coloring book arranged as follows. On each page is a picture carved into subregions, with numbers inside each subregion. The numbers determine, according to the color chart accompanying the book, which color crayon to use in that particular subregion. The pictures on the two pages are identical, carved in identical ways. However, the numbers in the subregions of the two pictures are 'inversely' related; if you color the figures according to the code, each figure will look like the other figure would had one's spectrum been inverted. Now, suppose that you are presented with these two pages and given the information concerning the significance of the two numbering schemes just presented above, but you are not given the code itself. So all you know is that if, say, the number 1 appears in subregion A on the first page, and 15 appears in subregion A on the second page, then the colors corresponding to 1 and 15 according to the code constitute an invertible pair. (We can add that you know which invertible pair it is-e.g. blue-yellow-though you don't know which is which.) You could of course decide to dub the color corresponding to 1 'B' and the color corresponding to 15 'Y', and you would in fact succeed in picking out a particular color with each of these terms, since the color chart determines a definite color to correspond to 1 and 15. However, in a very crucial sense, you wouldn't know which color it is that you've succeeded in picking out in this way, for the only way to know that is to see the color chart itself! Similarly, I can succeed in picking out a particular quale with the phrase, 'the quale associated with my visual sensation of blue', but, so long as invertible pairs of qualia are possible, and so long as I have no independent access to the 'chart' itself (i.e. information concerning the identity of the quale not encoded in its functional role), then I really don't know which quale it is that I'm experiencing when I look at the clear sky.

One might deny that any question concerning the identity of the quale I am experiencing can ever arise, since I clearly do know—immediately from my experience—what the character of that experience is. Perhaps so. The point is that whatever the grounds of such knowledge consist in, it cannot, if inverted qualia are possible, be characterized functionally. So, if such grounds do exist for knowing the identity of the quale one is experiencing, even given the possibility of inverted qualia, then similar grounds must exist for knowing that one has any qualia at all, even given the possibility of absent qualia. Shoemaker can't have his cake and eat it too.

To present the second horn of the dilemma, it helps to refer to Shoemaker's discussion of one possible line of reply to his argument against the absent qualia hypothesis. He says that one might attempt to escape the skeptical consequences he derives from the possibility of absent qualia by adopting what he calls the 'parochial' position. The parochial position, as Shoemaker puts it, is the position that '...mental terms have their references fixed, a la Kripke, to what are in fact...certain physiological states. We can suppose that these states are the physical realizations in us of maximally good functional definitions of the mental states.'12 On the parochial position absent qualia are certainly possible, since, for instance, the Golem might not share any of our physiological states, despite being functionally identical to us. Furthermore, it doesn't make sense to doubt whether we in fact experience qualia, since to experience qualia just is to realize certain functional states the way we do. Thus there is no room for Shoemaker's skeptical doubts to intrude. The parameter of the second property of the property of the property of the parameter of the property of the parameter of the property of

The relevance of the parochial position to our discussion of the inverted qualia hypothesis should be clear. I argued that, on the assumption that first-person skepticism follows from the possibility of absent qualia, it also follows from the possibility of inverted qualia. If, however, the parochial position can be used to block the derivation of first-person skepticism from the absent qualia hypothesis, it can also be used to block the derivation of skeptical consequences from the inverted qualia hypothesis. That is, if by 'visual experience of blue', or 'B' (to use the term introduced above) I rigidly designate a particular physiological state, say PB in the example above, then it doesn't make sense to wonder whether or not I really do in fact experience B, rather than Y. Again, the bond between the notion of experiencing a quale of a certain sort and instantiating certain physiological

12 Philosophical Essays, page 320, emphasis in original.

3.2

¹³ It is worth emphasizing how this position differs from another possible line of reply to Shoemaker's skeptical argument, one with which it can easily be confused. That is, one might argue that we have more evidence to go on in determining that we in fact experience qualia than can be functionally characterized; we can see how our functional states are realized. If I determine that I realize my functional states via a normal human physiology, then that constitutes good evidence that I have real, and not ersatz qualia.

But this reply would only work if the question at issue were whether or not I, in particular, have qualia, but not whether human beings in general do. For then my physiological similarity to the rest of the human race might constitute good evidence that I experience qualia. However, Shoemaker's argument puts in doubt the claim that any human beings experience qualia. Therefore, before appeal to human physiology can be used to establish the reality of anyone's qualitative states, it must first be determined that human beings in general enjoy the privilege of qualitative experience. On the other hand, on the parochial position, this problem does not arise, since the relation between having a human physiology and experiencing qualia is not merely evidential, but rather constitutive.

properties closes the epistemological space into which skeptical doubts might enter.

In his reply to Block, Shoemaker argues that to adopt the parochial position regarding the general property of having any qualitative character at all involves an unprincipled chauvinism. It seems wrong to deny that alien beings can experience qualia, merely on the grounds that they're made out of different stuff from us. He says that if one insists that terms like 'consciousness' and 'qualitative character' rigidly designate our physical states, thereby automatically ruling out creatures with radically different physiologies, then '...these expressions will simply fail to express the philosophically interesting concepts they were introduced to express'. 14

I agree with Shoemaker's sentiments here, but I believe they carry over to notions of particular types of qualitative character as well as the notion of having any qualitative character at all. Though Shoemaker does not explicitly say that he endorses a parochial position for particular qualia, from what he does say, 15 and from my argument so far, it seems to me that he has to endorse it. For if he doesn't, he will be forced to admit that the inverted qualia hypothesis leads to first-person skepticism in the same way that the absent qualia hypothesis does. Thus his position, as I reconstruct it, amounts to a rejection of parochialism when it comes to the general property of having qualitative character at all, but acceptance of parochialism when it comes to the particular property of having a qualitative character of some particular type.

One might defend this divided attitude toward parochialism on the following grounds: Parochialism regarding the possession of any qualia at all entails a vicious chauvinism. It treats as unfeeling creatures any alien form of life not sharing our physiological structure, which is counterintuitive and morally offensive. On the other hand, parochialism regarding particular types of qualitative character only entails that the alien's qualia are not like ours, which does not have the same moral consequences as the claim that they have no qualia at all. Their pains may not feel the same way ours do, but so long as they have pains, and so long as they bear attitudes similar to our own toward pains, we are morally obligated to avoid causing them pain. Is it so implausible, then, that what it is like for us to experience pain, or a visual sensation of blue, is quite different from what it is like for creatures with a radically different physiology?

While no doubt the problem of chauvinism looms large in his rejection of the parochial position, in the passage quoted above—that, on the parochial position, the terms 'consciousness' and 'qualitative character' '...will simply fail to express the philosophically interesting concepts they were introduced to express'—Shoemaker seems to be getting at an even

deeper problem. The parochial position is presented here as a way for the advocate of the absent qualia hypothesis to save it from intolerable skeptical consequences. Yet, in fact, by adopting the parochial position the advocate of the absent qualia hypothesis robs it of its substance, its philosophical significance, leaving an empty shell in its place.

To see this, one need only reflect on what a parochial conception of the absent qualia hypothesis really amounts to. That is, to conceive of a case of absent qualia is merely to imagine that there might be creatures who realize certain of their functional states—the ones we happen to call 'conscious' when instantiated in us—in different physical mechanisms from the ones in which we realize them. So what? If by 'having qualitative character' the parochialist simply means having our physiology, then who cares whether aliens turn out to have qualia or not? For that matter, who really cares whether we ourselves have qualia? As Shoemaker says, the notion of qualitative character will have lost its 'philosophical interest'.

I believe the very same considerations show that Shoemaker's qualified parochialism saves the inverted qualia hypothesis from his skeptical argument at the price of stripping it of its philosophical interest. After all, on his position, what it is to wonder whether Sally and I are having an experience of the same qualitative type when we both look at the clear sky is just to wonder whether certain of her functional states, the ones we call 'qualitative', are realized in physical structures of the same type as mine. But why should anyone care about that? Notice that it isn't open to Shoemaker to answer that we care whether Sally and I realize our functional states in the same physical structures because we care about what it is like for us to have certain experiences, and we have reason to believe that what it is like for us to have these experiences is determined by the nature of our physical structure. This would make sense if we had a substantive conception of what it is to experience quale B and quale Y, and then brought to bear a theory that explained why one experience has B and another Y on the basis of the underlying physiological structures involved.16 But such a conception requires that we have independent access to the identity of the quale we experience, and then by a process of correlation and theoretical explanation tie it to a certain physiological structure. If Shoemaker's skeptical argument goes through, we don't have this independent access, since all we can know about the nature of our qualitative experience is captured in a description of its functional role. Thus, to avoid the skeptical argument, the parochialist has to say that all there is to the question of the identity of a particular quale is the question of the identity of its underlying physiological structure. But then the

¹⁴ Philosophical Essays, page 323.

¹⁵ See note #8 above.

¹⁶ In 'Materialism and Qualia: The Explanatory Gap', Pacific Philosophical Quarterly, (October 1983), I argue that, as a matter of fact, the strong intuitive resistance to any version of materialism deriving from the pro-qualia intuition, should be understood in terms of our inability to conceive of how there could be a theoretical explanation of just this sort.

question of why anyone should care becomes compelling indeed.

(By way of exemplifying the emptiness of the parochial version of a case of inverted qualia, imagine two pairs of figures like the ones described in the coloring book example above. The first pair is fully colored in, whereas the second pair is not. When you look at the first pair, you see what a spectrum inversion would look like. But when you look at the second pair, though there is an inversion of sorts because the two patterns of numbers are inverted, it's a purely formal, lifeless inversion. What's missing are the actual colors!)

To summarize, both the absent qualia hypothesis and the inverted qualia hypothesis hold philosophical interest in that they express a deep, underlying intuition about the nature of conscious experience—the proqualia intuition. Shoemaker's skeptical argument constitutes an attack on the coherence of the pro-qualia intuition itself. One can maintain a version of the absent and inverted qualia hypotheses that does not lead to skeptical doubts by adopting the parochial position, but this involves severing the two hypotheses from their foundation in the pro-qualia intuition. Once this is done, there seems little reason to hold on to them. One might as well become a pure functionalist.

4.

I have argued so far that one has no reason to prefer Shoemaker's position to pure functionalism on the grounds that it at least partially accommodates the pro-qualia intuition, since a parochial version of inverted qualia does not really answer to that intuition. Still, there is the argument that leads from the clear conceivability of an *intra*subjective inversion to the possibility of an *inters*ubjective inversion. Granted, the notion of qualitative inversion involved here is a parochial one. Nevertheless, the fact that even the functionalist must admit the coherence of imagining someone suddenly reporting that their experience has been systematically inverted, makes the case for identifying qualitative types with physical, as opposed to functional, types appear fairly strong.

In fact, I think this argument only appears to work if one ignores the crucial difference between cases of intrasubjective inversion and intersubjective inversion—namely, that in the former case the inversion is responsible for a functional difference, whereas in the latter case there is, by hypothesis, functional identity. To see how ignoring this difference between the two cases affects the argument, let's return to the case of Sally and Fred described above.

In the case in question, when Sally and Fred look at the clear sky they are both in functional state FB, and when they look at ripe bananas they are both in FY. Fred realizes FB with physical state PB and FY with PY, while Sally realizes FB with PY and FY with PB. Were Fred suddenly to go into the physical state Sally is in when she is looking at the clear sky,

he would claim that the clear sky now looks yellow. Sally would make the same claim were she suddenly to go into the physical state Fred is in. So, in the normal situation, where Fred is in PB and Sally in PY, it might seem reasonable to say that their qualia are inverted with respect to each other.

However, the pure functionalist could respond as follows. Qualia, like other mental states, are individuated in terms of their functional roles alone, and not in terms of the way these functional roles are physically realized. Since, by hypothesis, Fred and Sally are both in FB when looking at the clear sky, they are both experiencing the same quale, B. To have B is just to be in FB. Of course in Fred FB is realized by PB and in Sally by PY, but functionalists argue that the nature of the physical realization is irrelevant to the identity of the mental state. Now it is true that if Fred were suddenly to go into PY, the state Sally is now in as she looks at the clear sky, Fred would react as if his spectrum had been inverted, while for Sally things are as normal. But this is true of Fred because in him, as opposed to Sally, PY realizes FY, not FB. If Fred had always been in PY when looking at the clear sky, PY would have constituted a realization of FB, and then, when Fred was in PY, his experience would have been qualitatively similar to Sally's. But in the case described above, where PY realizes FY in Fred, and he suddenly goes into PY while looking at the clear sky, his experience is qualitatively different from either his earlier experiences or, more importantly, from Sally's experience right now.

For Shoemaker, qualitative similarity is a functional notion. When two states can be functionally distinguished, as they clearly can in the intrasubjective inversion case, they can be qualitatively distinguished as well. The problem for Shoemaker is to extend the notion of qualitative difference to the intersubjective inversion case, where there is functional identity. He proposes to do this by pinning qualitative difference on physical difference. We see what physical difference is responsible for the qualitative difference intrasubjectively, and then assume we have the qualitative difference when we find the same physical difference intersubjectively. But there is no reason to believe that from the fact that two physical states play different functional roles within one subject, and therefore are qualitatively different, one can infer that they are also qualitatively different when they play the same functional role in two different subjects.

The argument just presented leans heavily on the fact that in the case of an intrasubjective inversion there is a functional difference between the subject's visual states before and after the inversion. However, in 'The Inverted Spectrum,' Shoemaker describes a hypothetical situation that calls this assumption into question. He imagines that Fred, who has suffered a spectrum inversion, slowly learns to accommodate himself to the change in his visual experience. Not only does he learn to describe

¹⁷ Philosophical Essays, page 330f.

things using the same color terms as everyone else, but he loses the sense that things look odd. Lest one claim that this accommodation means that there has been a 'reinversion'—a return to the pre-inversion state—Shoemaker imagines that at no point during the course of accommodation is he inclined to say that things look different than they did a moment before. One might argue that Fred after the accommodation is functionally identical to Fred before the inversion, yet his qualia are still different. Therefore, qualia cannot be identical to functional states, and so Shoemaker's position, on which qualia are identical to physiological states, is to be preferred.

Shoemaker attributes to David Lewis and Gilbert Harman the objection that his description of the case is compatible with there having been a very gradual change in Fred's experience, so that eventually it returned to normal, even though at no point was the change back to normalcy detectable. Shoemaker replies that '...we could have reason to discount this possibility if we had evidence that...there had not occurred in Fred any physiological change such that, if it occurred suddenly rather than gradually, it would produce noticeable behavioral manifestations of intrasubjective inversion'. 18

However, given what I have argued above—that pinning qualitative similarity/dissimilarity on physiological similarity/dissimilarity begs the question against the pure functionalist—Shoemaker's reply to Lewis and Harman loses its force. We have no more reason to take physiological dissimilarity as a sign of qualitative dissimilarity when the comparison involves two functionally identical intrasubjective stages, as in the case of Fred-before-the-inversion and Fred-after-the-accommodation, than we do when the comparison involves two different subjects altogether. In both cases the pure functionalist will maintain that the fact that the two different physiological states in question realize the same functional state is reason enough to consider them qualitatively identical. It's just that in the intersubjective case, the two states always played the same functional role, whereas in the intrasubjective accommodation case, the one state came to play the same role as the other over time.¹⁹

I have argued in this section that there is no clear line of argument from the behavioral detectability of an *intra*subjective qualia inversion to the

¹⁸ Philosophical Essays, page 331, footnote 7.

possibility of a full-fledged, *inter*subjective qualia inversion. Only the latter possibility poses a challenge to the pure functionalist position. I am not arguing that there is no reason at all to believe in the possibility of inverted qualia, and therefore to doubt the adequacy of a functionalist account of qualia. Both absent and inverted qualia seem eminently possible to me, and to that extent I find the pro-qualia intuition compelling. It is only that by divorcing his grounds for believing in inverted qualia from the proqualia intuition, Shoemaker loses any basis for choosing his position over pure functionalism.²⁰

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There is also the other side to consider. That is, no matter how well Fred seems to accommodate to the change in his experience, so long as he has any memory that his experience was once quite different—and some idea of what it was like when it was different—there is reason to deny that his visual states now are functionally identical to his visual states before the inversion. Of course one can imagine a situation where in fact Fred doesn't even remember that an inversion took place; or, if he does, he still can't recall at all what it was like before the inversion. In cases of such complete accommodation, perhaps the case for functional identity is quite strong. But then it seems to me that the pure functionalist's case for a gradual process of 'reinversion' is also quite strong.

²⁰ I would like to thank Louise Antony, Ned Block, Christopher Hill, Hilary Putnam, Georges Rey, Sydney Shoemaker, and Susan Wolf for their comments on earlier drafts of this paper. A version of this paper was presented at the 1984 NEH Summer Seminar, held at Indiana University and directed by Hector-Neri Castaneda. I thank Prof. Castaneda and the Seminar participants for their comments on that occasion.