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PROF. SHOEMAKER AND SO-CALLED 'QUALIA' OF EXPERIENCE

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I

In a number of papers, most notably in 'The inverted spectrum', Prof. Sydney Shoemaker has argued for what might be called a partially reconciliationist position between functionalists and anti-functionalists with regard to the nature of certain states of experience, typified by sensory experiences of color, sound, and the like, as well as by pain. The functionalist holds that such a state, like all psychological states, is defined by its causal role, vis-à-vis 'inputs' and 'outputs' and other states of the person or system. The antifunctionalist in question here, although perhaps accepting the functionalist view of 'intensional' states like belief, denies that an adequate functionalist definition can be given to the aforementioned kinds of states of experience. Let us call this sort of anti-functionalist, 'the partisan of inner experience', or sometimes just, 'the partisan'.

'Partisans of inner experience' sometimes invoke, in their attacks on functionalism, the possibility of cases like that of the 'inverted spectrum', or the IS. Functionalism is usually construed as the view that (in the words of Block and Fodor) "the type-identity conditions of psychological states refer only to their relations to inputs, outputs, and one another". Shoemaker puts it the same way, except for the addition of the word "causal" before the word "relations". Accordingly, the partisan maintains against this, for example, that no matter how exhaustive my knowledge might be of the causal relations of the psychological states to the circumstances and behavior of another, and no matter how strong are the grounds therein for thinking that the person would behave exactly as I do under the same circumstances (particularly those affecting the sensory organs), it may still be that the person's color spectrum is inverted with respect to mine, in this way: whereas I use a color-word, W, to report having a given color-experience, C, he uses W to report having, not C, but a different color-experience, C', where C and C' are

related by some such one-to-one mapping as the inversion of a color spectrum.³ If we regard the color-experience and the relations among them as invoked as part of an explanation of people's behavior, and its relation to their circumstances, then the case of the IS will seem just a special case of the general phenomenon of the underdetermination of theory by evidence, for which there are well-known independent arguments. But apart from these arguments, the IS seems to provide a particularly compelling illsutration, readily understandable without awareness of the general phenomenon.⁴ According to the partisan, the homely example of the IS lets us see vividly that functional role is insufficient to determine experiential state uniquely.

Let us now consider Shoemaker's treatment of the issue. First of all, he rightly emphasizes that there is a difference between intersubjective and intrasubjective versions of the IS, especially because it is more controversial that the notion of 'same (color) experience' is a well defined notion for the intersubjective case than that it is for the case where the experiences are experiences of the same person. Accordingly, he divides the question and treats the intrasubjective case first, and then tries thereby to clarify the intersubjective case. Since I think that difficulties arise in his treatment of the intrasubjective case, I shall not deal here at all with his account of the intersubjective case, though it is of considerable interest in its own right.⁵ His argument concerning the intrasubjective case is briefly as follows. First, he argues that cases of the IS type can intelligibly be said to occur. He here agrees with the partisan against some functionalists, who believe that IS cases can be shown to be incoherent. He then grants that there are ascribable to our experience certain 'qualities' or 'qualia' that are in a sense independent of causal role and indefinable in terms of it. But at the same time he wants to maintain that some very important things about these 'qualia' are functionally definable, namely, what he calls "similarity and identity conditions" of a certain sort.⁶ In addition, he maintains that the general property of "having qualitative character" is likewise functionally definable. 7 So the upshot (so far as the intrasubjective case is concerned) is that he grants something to the functionalist and something to the anti-functionalist partisan of inner experience: to the latter, certain functionally indefinable 'qualia' of experience; to the former, functionally definable "similarity and identity conditions" and the property of "having qualitative character". Shoemaker believes that this is a satisfying intermediate position.

Unfortunately, it seems to me that the position turns out not really to

be an intermediate one, but leaves out precisely what the partisan of inner experience believes in. The difficulty is that the "identity and similarity conditions" that Shoemaker holds to be functionally definable go much less far than one might hope toward providing functional explanations of states of experience as conceived by the partisan. I shall set this difficulty forth in Part II. My other point, to be explained in Part III, is not so much a difficulty in Shoemaker's position as it is a problem about the notion of a psychological state's "having qualitative character", which Shoemaker holds, as we just saw, to be functionally definable.

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The difficulty that I wish to point out in Shoemaker's view can best be introduced by focusing on the use, in discussions of experience, of the term 'quale', which tends wrongly to suggest that the aspects of experience that might be peculiarly 'inner' are never relations, but are always properties expressible (if at all) by one-place predicates. Philosophers talking of 'qualia' usually think of features like greenness, which can be thought of as introspectible and as attaching to a single experience, or pain, which, though seemingly a more complicated feature than greenness, also tends to be thought of as a property attaching to single experiences. No doubt the terms 'quale' and 'quality', traditionally contrasted in logic with 'relation', were chosen with this idea in mind, though it is difficult to know whether the choice of term was influenced by the idea or vice versa (I suspect that it was a bit of both).8 But in spite of the prevalence of this idea, it seems clear on reflection that the features of experience that can be introspectively apprehended, or that are describable as 'experienced' or 'inner', include relations just as surely as they include monadic properties. Within one's visual field at a single moment, for example, one can distinguish some parts as darker green and others as lighter green, and there seems no reason to take these relations of darkerness and lighterness as being on a different footing from the property of greenness, as far as being an inner or experienced feature of experience is concerned.9 I am not saying that the idea of 'inner' experience is clear or unproblematic. I do not even think that it is plain how we tell, or can be confident, that a certain feature is 'inner' or not. But to whatever degree we are entitled to be confident that there are monadic experienced features like greenness, and the other typical examples of "qualia" in the philosophical literature, I think we are equally

entitled to be confident that there are also experienced relational features, such as darkerness of a particular color (related to the idea of saturation), or (so to speak) the rougherness or smootherness that we experience between parts of a single tactile experience, and other relations of this kind.

To say this is not to settle, nor shall I attempt to settle, how large the class of such relations may be, how high the orders of such relations may run (experienced relations among experienced properties and relations, and so on), or how many relata they may have (howmanyadic they are). It may be, for example, that we do not have the capacity to experience relations beyond the triadic or tetradic, say, though probably people differ in this regard. Accomplished musicians, for instance, can probably experience many-place relations involving tone and timbre, but plainly we can all detect at least two-place relations in experience, such as the ones mentioned. I shall also avoid the question whether the point I am making in any way conflicts with the idea that there are in any sense 'atoms' of experience. Obviously it all depends on what you mean by 'atom' here, and whether - a point often left unclear you think that atomism of this sort requires that the basic features of experience must all be monadic and that all the relations among experiences, even those among simultaneous parts of a single experiential 'field', must in some sense arise from the *monadic* properties of the atoms. If the point I am making conflicts with such a view, then it seems to me that we have powerful reason against adopting that view. At any rate, I am simply maintaining, as I have said, that our confidence in the existence of at least two-place experienced relations deserves, on the basis of straightforward introspection, to be neither more nor less great than our confidence in the existence of monadic experienced properties.

For this reason it seems plain that philosophers would do well to discontinue the misleading use of the term 'quale', with its suggestion of a restriction to non-relational characteristics of experiences, in discussing the present issues. Accordingly in what follows I shall use the phrase 'experienced feature' instead, to cover both non-relational and relational experienced characteristics of experiences, except where unambiguous reference to Shoemaker's account of his views requires the term 'quale'.

Though Shoemaker himself does not intend to restrict the notion of a quale to non-relational features of experience, I feel sure that the general neglect of the incorrectness of such a restriction makes it harder for philosophers to notice what I shall now argue is a mistake in Shoemaker's

claim of the functional definability of 'similarity and identity conditions' of 'qualia'. Since Shoemaker explains identity conditions in terms of similarity conditions, we can ignore the former and take up the latter. 10 His way of reaching his conclusion, that similarity conditions of 'qualia' are functionally definable, is first to accept the view that similarity between two of a single person's experiences is behaviorally detectable, and then to infer that if this is so, there is no reason to deny that it is "behaviorally definable" as well. 11 Now my first point is that even if we accept that this argument shows the functional definability of a certain kind of similarity between one experience and another, Shoemaker in the end gives us no reason to think that this similarity is the sort of experienced relation whose existence I have just pointed out, rather than a kind of functionalist doppelgänger of an experienced relation of similarity, and standing to it as a functionally definable monadic feature of experience stands to the monadic 'quale' that it is an attempt (unsuccessful, as Shoemaker recognizes, 12 to catch). My second point is that if Shoemaker's argument shows the functional definability only of such a functionalist doppelgänger, and not of a relation of similarity that is itself part of 'inner' experience, then Shoemaker's purposes in advancing that argument are seriously undermined.

The first point can be seen as follows. When the partisan of inner experience advances the IS as an illustration of his point against the functionalist, he holds that even if it is possible to define, in terms of behavior and other aspects of causal role, some state of perceiving green, for example, it is still possible that that state might be different in the experience of different people. But what can be said here about a monadic property like greenness can, as we have seen, equally be said about relational attributes. For example, the fact that Titian and Tintoretto both use the word 'darker' in the same way under the same circumstances, corresponding to a state identically specifiable in terms of its causal role, can equally well be held by the partisan to fail to show that the 'inner' experience of the relation of darkerness is the same. 13 And what holds for this intersubjective case holds equally for intrasubjective cases. Nothing rules out shifts of relational features of experience parallel to the diachronic inversions of the spectrum within a single person, for the intelligibility of which Shoemaker argues. The next step is to say that if the point holds for relational features of experience in general, there is nothing against its holding for similarity. Although the notion of similarity is notoriously problematical, the partisan holds, nevertheless the experienced similarity of one part of my present visual field to another seems, so far as anything that Shoemaker has said can show, to be no more fixed by the functional definition that he suggests than is the experienced greenness of one part of my visual field by the sort of functional definition that he rightly (from the partisan's point of view) rejects as inadequate.

This last step, though correct, is nevertheless more complicated than it first appears. For although it may seem clear that in principle experienced similarity must be underdetermined by functional role as much as any other experienced feature is, nevertheless I have given no compelling illustration, comparable to illustration provided by the IS in the case of experiences of color, to help show the underdetermination. After all, one might ask, what relation can one imagine similarity switching with, as one can imagine green switching with some other color in the IS?

To see why this response to the partisan's argument does not succeed, it is necessary to look a little more closely at the notion of similarity. It is a commonplace (quite apart from Goodman's problem about "grue" and the like) that similarity is not a single relation, because - to put it colloquially - similarity comes in different 'respects'. 14 Without further explanation, therefore, there is no clear sense in asking what relation experienced similarity might switch with in the way experienced green might switch with some other monadic experienced feature. On the other hand, given an intuitive notion of different 'respects' in which similarity may hold, i.e., of (so to speak) different similarity relations, there is relatively clear sense in asking whether similarity in one respect might switch with similarity in another. But the answer to this question seems evidently affirmative. Once the general possibility of switches in experienced features is granted, there seems to be no reason why there could not be a switch in color-experience between, for example, similarity in hue and similarity in saturation. Such switches are less tidy to describe than the IS, because the color spectrum seems to be an especially (though not completely) self-contained manifold within experience (cf. n. 13). But no one who accepts the possibility of the IS seems prepared to assert that less tidy cases, like a switch among different pain-experiences or between certain pains and certain tickles, could not possibly arise. So the lack of tidiness cannot be reason for denying that such switches of similarityrelations are possible. But if such switches are possible, then we have all that we could require by way of a switch of experienced similarity with some other experienced relation, there being no other way of construing a 'single'

relation of similarity. Indeed, we can even conceive in principle of what we could describe as a simultaneous switch of many different similarity-relations, i.e., similarities in different 'respects', though of course the details would be enormously complicated (even on a naive view of what 'respects' there are). The complication rules out literal *imagination* of it, for purely contingent psychological reasons, but it does not affect the issue. The answer, then, to the question what relation experienced similarity might switch with is simply that, similarity being what it is, the switch has to be thought of as involving similarity in respects, more or fewer of them at a time.

Once this point is clear, we can for the remainder of the discussion go back to our loose talk of similarity simpliciter. If we do, the point that I am urging against Shoemaker can be put by calling attention to an ambiguity in the phrase "qualitative similarity", which Shoemaker often uses in discussions of 'qualia'. The phrase can mean simply, 'similarity holding between qualia'. This is what Shoemaker's functional definitions might be adequate to capture, since they might define a kind of similarity of causal role holding between the sorts of states that he calls 'qualia'. But the phrase can also mean 'similarity between experiences (or parts thereof) that is experienced as similarity'. This is not captured by Shoemaker's functional account, or at least it is no better captured than 'experienced greenness' is by the functional account that he rejects. If we use "qualitative similarity" in the former way. as simply 'similarity holding between qualia', then we have to recognize 'functional qualitative similarity' and also 'qualitative qualitative similarity', of which Shoemaker deals only with the former. As I have said, however, it would be better to describe the latter as 'experienced similarity among experiences'.

My second point is simply that Shoemaker's reconciliationist purposes are underminded by the first point. If there are experienced relations, including similarity, as well as experienced monadic properties, there is considerably more that is not caught by functional definitions than there appeared to be, and Shoemaker is further away than he appeared to be from showing the accessibility of the 'inner' to functionalist explanation. While he agrees with the partisan that 'individual qualia' are not themselves definable in functionalist terms (cf. refs. in Note 12), his contention that their "similarity and identity conditions" are functionally definable seemed intended to suggest that functional accounts can say all there is to say about similarity and identity of qualia. But it turns out that on Shoemaker's showing, functionalist

accounts can say about these conditions only what there is to say, so to speak, from the functionalist point of view, not what there is to say about similarity and identity of experiences from the viewpoint of the partisan. The partisan recognizes experienced similarity, which is untreated by Shoemaker's functionalist account. And just as Shoemaker defines a functionalist notion of identity of 'quale', on the basis of the idea that similar experiences share an identical 'quale', so too the partisan may wish to try to define a parallel notion of the identity of a feature of experience, but using the notion of experienced similarity rather than Shoemaker's functionalist substitute. Thus it appears that we are as far away as ever from the goal of explicating the identity of features of experience in functionalist terms. One's response to this may be, 'So much the worse for the partisan's view'. And Shoemaker's response might be that he was after all trying to reconcile with functionalism a belief in 'inner' experience much less extreme than that of the partisan whom I have portrayed. Still, I think that my partisan accurately reflects the views of many who have believed in 'inner' experience, and that examining his views helps us see more clearly what the functionalist must either cope with or dismiss as not worth trying to cope with.

Ш

Another part of Shoemaker's reconciliationist efforts is interesting to compare with what we have just seen, because it enables us to realize further just how inaccessible to functional explanation 'inner' experience can be held to be, at least by a partisan of inner experience who is willing to carry out his view consistently. In other papers, Shoemaker takes up what has come to be known as the problem of 'absent qualia'. The problem, as directed against a functionalist account of experience, is supposed to be that if experiential states consisted simply in their roles in a causal network, then it would be possible for a person or being to exist in whom the same behavior was produced by a causal mechanism with the same structure as in a normal human being, but in whom the states responsible for the behavior lacked all 'qualitative character'. Shoemaker argues in this paper that such a case is not possible, by arguing that if a state is functionally identical with a state having qualitative character, then it must itself have qualitative character. His argument is that if this were not so, then qualitative character would be 'irrelevant'

to all knowledge of minds, even to introspective knowledge of one's own state of mind. For he holds that we must say that a state's having qualitative character must cause the belief that one is in a state having qualitative character, and if this belief has behavioral effects, then the qualitative character of that state clearly has a role in a causal network including some behavioral output, and this (Shoemaker supposes) will be enough to yield a functional account of the state.

Aside from the fact that this argument, like others among Shoemaker's arguments, relies on a so-called "causal theory of knowledge", 17 we should notice that it could be taken in two ways, of which the latter is the important one for our present purposes. On the one hand, it could be taken to hold that a state's having a particular qualitative character must be causally responsible for one's belief that it has that particular character, in which case it would purport to argue for the possibility of functional accounts of particular qualia. But since this is not what Shoemaker has in mind at this point, and is clearly repudiated by him, I shall pass over it here. Here he means that a state's having some qualitative character or other must be causally responsible for one's belief that it has some qualitative character or other. In this case, the argument is defending the possibility of a functional account of the property of having qualitative character.

Presented with Shoemaker's belief in the possibility of a functional account of the property of 'having qualitative character', it is natural to want to know more about the property of which the account is being offered. It is especially interesting to ask whether it is a property that one might take to be what I have in Part II called an experienced property of experience. If it were, then of course by defining it functionally we would gain something that has so far eluded us, namely, a functional account of a genuinely 'inner' feature of experience. Now although some of Shoemaker's remarks might be taken to suggest that he thinks of 'having qualitative character' as itself a 'qualitative' or experienced character, he never says that it is so. Others, however, seem to have taken such a view. For instance, in reading Thomas Nagel's paper, 'What is it like to be a bat?' one has the strong impression that things like 'having qualitative character', or 'being a conscious experience', or the like, are being treated as being a single property of experience, which property is itself a 'qualitative' or experienced property. 19 Parallel, then, to the attempted subjection of my experienced greenness to some functional account, we might think (even if Shoemaker does not) that Shoemaker provides an attempted subjection of my experienced experiencedness to another, more general, functional account.²⁰

Although I do not propose here to enter deeply into the horrendously difficult problems about consciousness and self-consciousness that this idea raises, I want to suggest that it is wrong, on one of two counts. First, I think that it is highly doubtful that there is an experienced feature of experience, that of being experienced, or in other words, a feature of having 'qualitative' character that is itself a 'quale', and so I do not think that a functional account of having 'qualitative' character is itself a functional account of something 'inner', on a par with a functional account of something like the 'inner' greenness of an experience. Second, if there were, or should turn out to be, such an experienced feature, I see no reason why a functionalist account of it should not fall prey to just the same difficulty that I pointed out earlier, namely, that the functionalist account does not catch the 'inner' feature that the partisan wants, but only a functionalist doppelgänger thereof.

In arguing that being experienced is not an experienced feature of experiences, it is a little difficult to know what one has to go on beyond introspection. Perhaps all that I can give is an analogue to Hume's claim that when he looked for his self he could not find it, and say that when I consider my experiences, I do not find an experienced feature of being experienced that attaches to them all, or indeed any experienced feature, qualitative or relational, that attaches to them all. Nor have I ever heard a description by anyone else of such a feature that strikes me as at all apt, as - for whatever this fact is worth - I have heard descriptions by others of other experiences of mine that have struck me as apt. It might be suggested, for example, that the feature in question is simply what visual, auditory, and other sensory experiences, along with non-sensory experiences like pains, tickles, etc., 'have in common'. But my response is that although I can certainly make some sort of sense of this use of the 'has-in-common' abstraction operator, it does not yield, in my mind, anything that I could describe as an experienced feature. Rightly or wrongly, I doubt that such a feature exists. This is not to deny that the notion of being an experience, the notion of being a conscious experience, or the notion of having experienced or 'qualitative' character, is a good or clear notion. Nor is it to assert that such a notion must be a 'theoretical' notion, in the sense of being derived from efforts to theorize about the external world or one's empirical observation. This might be true, or the notion might be developed in some other way. Nevertheless, whatever the

status of the notion, it does not seem to me to be a notion of an experienced or 'qualitative' feature.

To turn to my second point about this matter, suppose that, contrary to what I have said, there really is a single experienced feature of the experiences of a single person which is the feature of being experienced, and consider the attempt to capture this feature in a functionalist account. Shoemaker's account in 'The inverted spectrum' is briefly this: for a state to have 'qualitative character' is for it to bear the relation of 'qualitative similarity' (or 'qualitative difference') to some other state. ²¹ Now as we have seen in Part II, Shoemaker's 'qualitative similarity' is not the same as the experienced similarity that the partisan believes in. Rather, 'qualitative similarity' is a certain very general sort of similarity of causal role. It follows that 'having qualitative character', as Shoemaker defines it, is not an experienced feature, but is rather a property, which an experience may have, of bearing that very general similarity of causal role to some other thing.

As I have said, however, this is not to maintain either that Shoemaker tries to give a functional account of an experienced feature but fails, since he does not regard 'having qualitative character' as itself a 'qualitative' or experienced feature. As I have also said, it seems to me that he is quite correct here. Introspection, at least, seems to indicate that being experienced is indeed not an experienced feature. So it seems possible enough that it is, even in our ordinary way of thinking of it, a functional notion. If that were so, then Shoemaker's account of it, if otherwise satisfactory, could perfectly well be a functionalist account of what was all along a functionalist notion.

We have also seen, however, that some philosophers appear to think that being experienced is an experienced feature. Nagel seems to be among them, inasmuch as he holds that "the fact that an organism has conscious experience ... means, basically, that there is something it is like to be that organism ... – something it is like for the organism". ²² Although Nagel says nothing fully explicit on the point, his manner of writing suggests, I think, that he believes that this phrase, "something it is like to be", points to a single experienced something running through, so to speak, all of the experience that a particular organism, or type of organism, has. As I have said, I think that this is highly doubtful. I doubt that my own experiences share any experienced features that could be either (what Nagel concentrates on) "what it is like to be human", or "what it is like to be me", or "what it is like to be conscious (or, so to speak, to have some what-it-is-like)". But rather than enter here into a

discussion of Nagel's line of thought, let me simply point out that, so far as I can see, nothing else in his paper depends on holding that there is a such a single experienced feature. On his view, there is a sense in which I cannot conceive what it is like to be a bat, but this need not be because on his view there is a single experienced "what it is like" that a bat has and I cannot have, but need only be because a bat's experience has certain particular experienced features that mine does not have, and that I am unable imaginatively to call up because of my great dissimilarity to a bat. ²³ So what I am denying here is simply a suggestion (sometimes a fairly strong one) ²⁴ but not a thesis, of his paper. I think that this point is revelatory if only in that it shows that even an anti-functionalist as extreme as Nagel is not committed by his very antifunctionalism to a belief in the experienced feature that I am calling into question.

What are the consequences of the claim that being experienced is itself not an experienced feature of experience? (1) For one thing, it would be especially interesting to discuss its consequences for the so-called 'absent qualia argument', or AOA, but doing that would require a full-scale treatment of that argument, which is not possible here. I shall limit myself to the following observation. To most people, the consequence that the AOA tries to draw from functionalism - viz., that on functionalism a person might be adequately described by the same psychological theory as anyone else but still have no 'qualitative states' - seems bizarre. Indeed, part of the whole problem of understanding our psychology is to understand why it seems so bizarre. Clearly, one element of its bizarreness is one's sense that it is just obvious in some strange way that one does have experiences, with experienced features. If what I have said is right, then although it comes nowhere near solving the whole problem, it at least shows that that sense of obviousness does not arise from the fact that being experienced is a feature that one experiences one's experiences to have. (2) A second consequence of the claim bears on Shoemaker's contention, which I have not had space to treat (cf. nn. 1 and 16), a state's having 'qualitative character' is part of what causes in one the belief that it has 'qualitative character'. As I have said, Shoemaker rests this claim on a quite general form of the "causal theory of knowledge" (cf. n. 17), and does not go into how this causation works. Nor shall I do so here. But at least we can see that if one's belief that one's states have experienced features is caused in part by their having them, it is not caused by one's experiencing that that is so.

My main point throughout this paper, however, has been to show something about a substantial and influential notion of 'inner' experience, and something about what in that notion — whether misguided or not — makes it so difficult for functionalist accounts to catch.²⁵

NOTES

- ¹ Sydney Shoemaker, 'The inverted spectrum', Journal of Philosophy 79 (1982), pp. 357-381. See also Shoemaker, 'Functionalism and qualia', Philosophical Studies 27 (1975), pp. 291-315; and 'Absent qualia are impossible - a reply to Block', Philosophical Review 90 (1981), pp. 581-599. The positions advocated in these papers differ somewhat from each other, but most of the crucial issues can, I think, be best brought out by focusing on the first-mentioned. Some other crucial issues, which I shall not be able to treat directly here, emerge in Shoemaker's 'Phenomenal similarity', Critica VII (1975), pp. 3-37, which he has kindly brought to my attention. Those interested in Shoemaker's views should know that in some ways this article is the clearest expression of them, and will wish that it were more widely available in this country. In particular, it contains a full exposition of an important argument, described only briefly in his other papers, for saying that either 'phenomenal similarity' must be functionally definable, or else one will be unable ever to know of one's own experiences that they are 'phenomenally similar' to each other. If successful, this argument would refute what I claim in Part II of the present paper (given that 'phenomenal similarity' is equivalent to my term, 'experienced similarity'). I myself do not think that the argument is successful (given that equivalence), but I do not have space to deal with it here.
- ² See N. J. Block and J. A. Fodor, 'What psychological states are not', *Philosophical Review* 81 (1972), pp. 159–181, on p. 172; and Shoemaker, 'The inverted spectrum', p. 370. (Further complications are explored in Shoemaker, 'Some varieties of functionalism', *Philosophical Topics* 12 (1981), pp. 93–119.) There is room for debate about whether the addition of the word 'causal' makes a difference to the points at issue, but I shall here assume that it does not.

It should be noted that although Block and Fodor advance the IS against functionalism, it would be wrong to infer that they are partisans of inner experience in the strong sense used in this paper.

- ³ The formulation given, though typical, is loose. For example, the phrase, 'used to report', is problematical in various respects. So is the specification of the kind of mapping, partly for reasons given by Shoemaker.
- ⁴ It is obviously an important problem how we can claim to tell, independently of general arguments about the underdetermination of theory by evidence (here, underdetermination of theory involving ascription of experiences by evidence of behavior and circumstances and perhaps other features of structure), that the IS is an illustration of the phenomenon. The partisan will of course hold that introspection is crucially involved in so doing, and then the question arises what introspection is.
- ⁵ See 'The inverted spectrum', pp. 372-381. The pages prior to p. 372 also bear importantly on intersubjective cases, but I shall in general try to confine myself to issues affecting the intrasubjective cases primarily.
- ⁶ See $i\overline{b}id$., pp. 370-371 (cf. pp. 372-373), and 'Functionalism and qualia', pp. 301, 306.
- ⁷ See 'The inverted spectrum', p. 371, and 'Functionalism and Qualia', pp. 293-297.
- ⁸ In Mind and the World Order (New York, 1929), C. I. Lewis uses the term 'quale' in such a way that it seems confined to non-relations, as on pp. 60-66, 124, but on pp.

- 125-126 it looks as though he is allowing a relational 'quale' involved in what he calls 'immediate comparison', though he does not develop the idea. Schlick shows a similar vacillation in 'Positivism and realism,' originally published in *Erkenntnis* III (1932-3), and cited here from A. J. Ayer, ed., *Logical Positivism* (Glencoe, 1959), pp. 82-107. On pp. 92-93 he seems to allow (intrasubjective) subjective 'likeness' of experiences, as well as subjective darkerness, yellowerness, bluerness, 'etc.', but immediately after that he uses the terms "order", "system", and "relations" so as to suggest that only non-relations are experienced (pp. 93-95), without, however, exploring the matter. In *The Structure of Experience* (Cambridge, Mass., 1951), Nelson Goodman explains the term 'quale' in a way that strongly suggests a restriction to non-relations (p. 130), but other passages suggest that he might not impose it (e.g., pp. 147-149, 200-208).
- ⁹ It is implicit in this and what follows that an experience may have both features that are experienced, i.e., that it is experienced to have, and features that it has but are not experienced, i.e., that it is not experienced to have. This seems to me basically the correct view to hold, in spite of difficulties remarked by Goodman, *ibid.*, pp. 138–140.
- ¹⁰ See 'The inverted spectrum', p. 370, and 'Functionalism and qualia', pp. 301, 306. The actual explanation introduces complications not relevant here.
- 11 'The inverted spectrum', p. 370. Shoemaker frequently switches without notice from "functional(ly)" to 'behavioral(ly)" and back again. The difference does not affect my argument; cf. 'Absent qualia are impossible', pp. 582 ff.
- 12 'The inverted spectrum', pp. 364-365, 371-372; cf. also 'Functionalism and qualia', pp. 308-309, where Shoemaker denies that 'qualitative beliefs', i.e., beliefs that one is in a particular qualitative state, are functionally definable. (Notice that although I use the convenient word 'doppelgänger', the point is emphatically not that there is one-to-one correlation of functional relation and experienced relation. Rather, the point is that there may be a plurality of experienced relations corresponding to a single functional one.)
- ¹³ Conceivably, for example, we might have inversions of darkerness and lighterness, a bit like inversions of the spectrum. Notice, for example, that the point does not depend on holding that it is *easy* to 'visualize' or otherwise 'imagine' a particular inversion or alteration.
- ¹⁴ See Goodman, op. cit., passim, esp. pp. 145-149, 169-187, 267ff.; and also 'Seven strictures on similarity', L. Foster and J. W. Swanson, ed., Experience and Theory (Amherst, 1970), pp. 19-29, reprinted in Goodman, Problems and Projects (Indianapolis and New York, 1972), pp. 437-446, esp., in the latter pagination, pp. 441-443, 444-446. As remarked (cf. n. 1), Shoemaker treats similarity more extensively in his paper, 'Phenomenal similarity'.
- 15 See the citations in note 1.
- ¹⁶ 'Functionalism and qualia', pp. 293, 294ff., 296-297.
- ¹⁷ *Ibid.*, pp. 297-298; cf. 'Phenomenal similarity', pp. 19-20, 22-25.
- ¹⁸ It is repudiated also in the passage from 'Functionalism and qualia' cited in note 12, but the repudiation is even clearer in 'The inverted spectrum', as we saw in Part II.
- ¹⁹ Thomas Nagel, 'What is it like to be a bat', *Philosophical Review* 83 (1974), reprinted in Nagel, *Mortal Questions* (Cambridge, England, 1979), pp. 165–180. I shall cite from the latter version.
- ²⁰ In a private communication Prof. Shoemaker makes explicit that he has never held that 'having qualitative character' is itself an experienced feature, and this can be seen from 'Functionalism and qualia', pp. 306, 309.
- ²¹ 'The inverted spectrum', p. 371.
- ²² Nagel, p. 166.
- ²³ *Ibid.*, p. 172, note 8.
- ²⁴ Particularly so, it seems to me, on p. 170.
- ²⁵ Thanks go to Jaegwon Kim and Stephen L. White for helpful conversations about

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