Intentionalism Defended

Alex Byrne

Traditionally, perceptual experiences—for example, the experience of seeing a cat—were thought to have two quite distinct components. When one sees a cat, one's experience is "about" the cat: this is the representational or intentional component of the experience. One's experience also has phenomenal character: this is the sensational component of the experience. Although the intentional and sensational components at least typically go together, in principle they might come apart: the intentional component could be present without the sensational component or vice versa.¹

Recently a number of philosophers have argued that this picture of perception is incorrect. According to them, the sensational component of a perceptual experience cannot vary independently of its intentional component: the phenomenal character of a perceptual experience is entirely determined by the experience's propositional content—that is, by what it represents. Usually this is supposed to hold also of "bodily sensations": experiences of pain, twinges, tickles, and the like. The phenomenal character of such experiences, it is claimed, is likewise entirely determined by their propositional contents.

This view comes in a number of variants, and also goes under a number of names: 'the intentionalist view', 'Intentional Theory', 'representationism', 'representationalism', 'the hegemony of representation', 'the Representational Thesis'. 'Intentionalism' carries the least

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¹See, in particular, Reid [1764] 1997, [1785] 1969. Reid called the sensational component a sensation and the intentional component a *perception*. For more on Reid, see section 7 below.

²The names appear in, respectively, Shoemaker 1990, Sturgeon 1998, Tye 1995, Block 1996, Lycan 1996b, and Dretske 1995. Armstrong (1968) is the founding father of the view, at least in the analytic tradition.

exegetical baggage from other authors, so I shall use that.

Intentionalism is controversial: indeed, Ned Block has called the division between its proponents and opponents "[t]he greatest chasm in the philosophy of mind" (1996, 19). Block himself has directed heavy fire against intentionalist positions, following an initial assault by Christopher Peacocke.³ It is easy to see why the stakes are high: if intentionalism is correct, then there is at least the prospect of a substantial "representational theory of consciousness."

This paper is a defense of intentionalism. Section 1 clarifies some key terms; section 2 distinguishes the principal versions of intentionalism, and identifies the one to be defended; section 3 gives the main argument. The rest of the paper considers a variety of objections.

1. Phenomenal Character and Propositional Content

The notion of the phenomenal character of an experience is hard to explain, but easy to understand. (At any rate everyone seems to understand it.) We can start with the stock phrase: "what it's like" for the subject to undergo the experience (Farrell 1950; Nagel 1974). We can give everyday examples of similarity and difference in phenomenal character: the experience of seeing purple is more like, in respect of phenomenal character, the experience of seeing blue than it is like the experience of smelling vanilla. And we can describe examples that can be antecedently and intuitively grasped, in terms of phenomenal character: the thought that you might be "spectrally inverted" with respect to me is the thought that the distinctive phenomenal characters of your experiences of colors might be reversed in me; the phenomenal character of the experience of your twin on Twin Earth is exactly the same as yours; and so on.

Nothing has been said about sense-data, privacy, ineffability, incorrigibility, or any other philosophical bugbear usually found prowling in the vicinity, and nothing needs to be, so phenomenal character ought to be relatively innocuous. Note that on the usage adopted

³See Block 1990, 1995a, 1995b, 1996, 1998, 1999, forthcoming; Peacocke 1983, 1984. Other philosophers with anti-intentionalist sympathies include Baldwin (1992), Boghossian and Velleman (1989, 1991), Burge (1997, forthcoming), Chalmers (1996), Levine (1997, 2001), Lowe (2000), Maund (1995), Pendlebury (1990), Perkins (1983), H. Robinson (1994), W. Robinson (1998), Rosenthal (1986), Searle (1983), Sturgeon (1998), G. Strawson (1994), Van Gulick (1995). Jackson (1982) and Shoemaker (1982) used to be anti-intentionalists, but converted.

here, the phenomenal character of an experience is a *property of* the experience; sometimes 'qualia' is used equivalently, but sometimes not (see, for example, Block forthcoming, 6; Lycan 1996, 69–70).

Introducing the propositional content—or, simply, content—of an experience is perhaps a more tricky matter. Here are three contemporary statements of the idea:⁴

In general, we may regard a perceptual experience as an informational state of the subject: it has a certain *content*—the world is represented a certain way—and hence it permits of a non-derivative classification as *true* or *false*. (Evans 1982, 226)

In having perceptual experience the world seems to us to be a certain way; it presents itself to our experience as containing various objects and properties. Experience, we may say, *represents* the states of affairs so presented (or apparently presented): perceptual representation is the converse of perceptual presentation. The way in which experience represents the world constitutes its *content*, the way it makes things seem. The content of an experience determines what it is *as of*—how the world *would* actually be presented *if* the experience were veridical. (McGinn 1989, 58)

Our experience of the world has content—that is, it represents things as being in a certain way. In particular, perceptual experience represents a perceiver as in a particular environment, for example, as facing a tree with brown bark and green leaves fluttering in a slight breeze. (Harman 1990, 34)

The notion that a subject's *perceptual experience* represents the world to be a certain way—the way the world *perceptually seems* to the subject—should be no more controversial than the notion that a subject's *belief state* represents the world to be a certain way—the way the subject takes the world to be.⁵

It should be emphasized that the content of a perceptual experience specifies the way the world appears or seems to the subject. Consider the

⁴See also, for example, Lewis 1966, 1980b; Peacocke 1983, chap. 1; Searle 1983, chap. 2; Burge 1986; Davies 1991, 1992.

⁵Not everyone agrees: for an assortment of doubts about the claim that experience has propositional content, in varying degrees of strength, see Alston 1998, Burge 1997, Johnston 1997 (and also 1998, 2000), and Vision 1997, chap. 4. Some of these doubts might be more terminological than substantive. For instance, it is possible that Burge's "reservations about taking visual experiences to have propositional form" (1997, 197) derive from a rather demanding conception of a proposition. I do not have anything especially demanding in mind: merely an abstract object that is a truth-bearer, that is the object of some propositional attitude-like psychological states, and that determines a possible-worlds truth condition. Dretske, I should add, often

fact that some visually guided motor behavior seems relatively impervious to illusions of size (Aglioti et al. 1995; Milner and Goodale 1995, chap. 6). In the "Titchener circles" illusion, two discs of equal size appear to the subject to be of different sizes. But when the subject reaches for the discs his fingers move the same distance apart for both, showing that his hand movements are controlled by (correct) information about the size of the discs. This information, despite being in the subject's cognitive system, is not part of the content of his visual experience. That specifies the way the discs appear to him—namely, to be of different sizes.

There are some hard questions about the content of an experience. Imagine someone with normal vision looking at an object that is shaped and colored exactly like a red tomato. She might characterize the scene before her eyes by saying that there seems to be a red ripe bulgy tomato before her. Presumably the content of her experience at least concerns the color and shape of the object. But does it also specify the object before her as *ripe*, or as a *tomato*? (Compare the above quotation from Harman.) Is her experience some kind of *illusion* if the object is a red but unripe tomato, or if the object is made of papier-mâché? Would the content of her experience be different if a qualitatively identical but numerically distinct object were before her eyes? Connectedly, would the content of her experience be the same, or at least importantly similar, if she were hallucinating a tomato? The content of the conten

And—granted some answers to these questions—what is the con-

writes as if experiences do not have propositional content, preferring to use such locutions as 'hearing the piano being played', 'being visually aware of the shirt's color', rather than 'hearing that there is a loud noise', 'being visually aware that it is blue', and so on (see, for example, Dretske 1995, 8–12; and 1999). I *think* this just reflects Dretske's recognition that that-clauses often do a very poor job of specifying the content of experience, rather than any antipathy toward experiences having propositional content in the thin sense I intend.

⁶For a negative answer, see McGinn 1996, 60; Davies 1991, 1992; Tye 1995, 138–39; 2000, 62. For a rebuttal, see Martin 1997.

⁷Disjunctivism is the view that (roughly speaking) a veridical experience and its corresponding "philosophical" hallucination have no mental state in common (Hinton 1967, 1973; Snowdon 1980–81; McDowell 1982; Martin 1997). Intentionalism as characterized in the following section is compatible with the view that a veridical experience shares no content with its corresponding hallucination. Intentionalism is therefore compatible with the view that no such mental state as perceptually appearing that p is common to both a veridical experience and its corresponding hallucination. And if no such mental state is common to both experiences, presumably no mental state is. So a disjunctivist could consistently be an intentionalist.

tent of the subject's experience, exactly? It could hardly *just* be the proposition that there is a red [ripe?] bulgy [tomato?/thing?] before her—that leaves out a wealth of visually apparent detail. But how should the detail be restored? And will the result be a proposition that could be believed, or expressed by a sentence of a natural language? Further, should the content of her experience be treated along Russellian, Fregean, or possible worlds lines?⁸ Or is some other approach required?

The main argument for intentionalism given here will not depend on resolving these controversies. In particular, it is not necessary to make the assumption that the content of perception exclusively concerns the physical environment of the perceiver—although this is highly plausible. If the main argument works at all, it will work for any view about the content and objects of perception: that we can perceive ideas in our own minds, or in the mind of God; that the content of a perceptual experience makes reference to the experience itself (Searle 1983, chap. 2); that the especially salient property tomatoes, strawberries, and cherries all appear to have is not redness (Shoemaker 1994a, 1994b; Thau forthcoming); or whatever.

For convenience, I will suppose that subjects enjoy successions of experiences that individually do not change in phenomenal character or content over time. For example, if a normal subject looks briefly at a tomato and then at a banana, we are to think of her as having two visual experiences e and e*, with different phenomenal characters and different contents. The phenomenal character of e (say) determines what it's visually like for the subject when e occurs (that is, when she looks at the tomato); the content of e specifies the way the world visually seems to the subject when e occurs.

⁸For these three approaches to the content of experience see, respectively, Peacocke 1992, McDowell 1994, Stalnaker 1998. One of the targets in Block forthcoming is the view that "the phenomenal experience as of red is a matter of visual experience representing something as red" (33) (where Block intends 'representing something as red' to be understood in a Russellian fashion). The conclusion of this paper is quite consistent with Block's anti-Russellianism.

⁹Suppose that when one looks at a tomato (say) at time *t*, it visually seems that the tomato is before one at *t*. Then no two experiences occurring at *different* times have the *same* content. This raises a minor but distracting complication for the forthcoming argument in section 3, which relies heavily on examples of consecutive experiences. The complication is ignored in the text; it is treated in note 25 below.

2. Intentionalism Formulated

Three recent books defending versions of intentionalism express the main thesis in somewhat different ways.

All mental facts are representational facts. (Dretske 1995, xiii)¹⁰

Phenomenal character (or what it is like) is one and the same as a certain sort of intentional content. (Tye 1995, 137)

[T]he mind has no special properties that are not exhausted by its representational properties, along with or in combination with the functional organization of its components. (Lycan 1996b, 11)

Despite their differences, there is a basic claim that all these philosophers wish to defend. It is that the propositional content of perceptual experiences in a particular modality (for example, vision) *determines* their phenomenal character. In other words: there can be no difference in phenomenal character without a difference in content. So if two (metaphysically possible) visual experiences differ in phenomenal character, then they differ in content. Expressing intentionalism this way, in terms of determination, or supervenience, avoids distracting issues about the individuation of properties and facts.

Intentionalism is in a sense a weak doctrine. It is neutral on the question of what our perceptual experiences are about (see section 1 above). It does not take a stand on whether phenomenal character can be *explained in terms of*, or *reduced to*, intentionality—at least it doesn't if these claims don't follow from the mere fact of supervenience. And intentionalism is silent on physicalism, functionalism, psychosemantics, and other topics relevant to "naturalizing the mind." Dretske's, Tye's, and Lycan's defenses of intentionalism are worked in with these important issues, but for present purposes we need to separate them as far as possible.

One might worry that intentionalism is *too* weak to be the locus of a heated philosophical dispute. And certainly the three philosophers just mentioned agree on a package of which intentionalism is only one component: they also hold physicalism about the mind and phys-

¹⁰Dretske adds the qualification that "there are ... experiences—a general feeling of depression, for example—about which I do not know what to say" (xv). The quotation in the text states only one half of Dretske's "Representational Thesis"; the other half—"All "representational facts are facts about informational functions" (1995, xiii)—isn't relevant here.

¹¹This kind of supervenience formulation often occurs in the literature, for instance, in Harman 1990, 49; Block 1990, 58–59; Tye 1992, 160, and 2000, 45.

icalism about properties represented by perceptual experiences—in particular, they think that colors are physical properties. However, the many objections in the literature to be discussed later are directed at intentionalism, not these other doctrines. Block, for example, actually agrees with the rest of the package: he is a physicalist about both the mind and the colors.

The principal versions of intentionalism can be classified using two distinctions. The first is this: As noted above, all intentionalists agree that within a (paradigmatic) perceptual modality, if two possible experiences differ in phenomenal character, they differ in content. Intermodal intentionalists hold, while intramodal intentionalists deny, that the phenomenal difference between perceptual modalities—between visual and auditory experiences, for example—is determined by a difference in content. Dretske and Tye are intermodal intentionalists, whereas Lycan is an intramodal intentionalist: according to him, the phenomenal difference between sensory modalities is to be explained, not in terms of content, but functionally. 13

The second distinction concerns the scope of the intentionalist thesis. It at least includes (paradigmatic) cases of perception, like seeing a dagger or hearing a coach, but it can be more comprehensive. *Unrestricted* intentionalists hold, while *restricted* intentionalists deny, that intentionalism also applies to bodily sensations like headaches, itches, pinpricks, and orgasms.

Restricted intentionalism is hard to defend. Suppose that bodily sensations, like paradigmatic perceptual experiences, have propositional content. Then it is quite unclear how it could be simultaneously shown that the supervenience of character on content held in the case of, say, visual experiences, but failed in the case of, say, itches. If there were an argument for intentionalism about visual experiences, why couldn't it be adapted to the case of itches? Conversely, if a convincing counterexample to supervenience were produced for itches,

¹²For the distinction, see Block 1996, 37–38; forthcoming, 16. In his terminology, it is the distinction between *representationism* and *quasi-representationism*.

¹³In addition to Dretske (1995, 94–95) and Tye (1995), the intermodal intentionalists include (I would have thought) Shoemaker (1994a, 1994b) and Dennett (1991). Lycan (1987, 1996b) describes himself as an intramodal intentionalist "at best" (see 1996b, 134–35); other intramodal intentionalists include Harman (1996, 76), and Tye in his youth (1992, 165); Neander (1998) is a sympathizer. Rey (1993, 1998) gives a functional account of phenomenal differences even within a single modality, and therefore doesn't count as an intentionalist on my taxonomy.

that would raise the suspicion that counterexamples concerning other experiences with propositional content (visual experiences, as it might be) are waiting in the wings. Failure to find a counterexample would not allay the suspicion. To avoid these difficulties, a restricted intentionalist might maintain that bodily sensations are quite unlike perceptual experiences in having *no* representational content at all. But this is just to get impaled on another horn, because—as will be argued in section 7 below—the non-intentional conception of sensations is decidedly unattractive. Perhaps for these reasons, intentionalists generally are of the unrestricted kind, although there are exceptions. ^{14,15}

With this pair of distinctions in hand, the conclusion of the main argument to follow is this: intermodal unrestricted intentionalism.

3. An Argument for Intentionalism

Imagine the experiences of looking, on separate occasions, at three colored chips on a neutral background. The first two chips are blue, the third is red, and the subject has normal vision. All can agree that, as far as "what it's like" to undergo the experiences is concerned, seeing the first chip and seeing the second have something in common that seeing the third lacks. Saying that the first two experiences but not the third share a phenomenal character—the "B-character," we might call it—is simply a way of recording this fact.

Having been thus introduced to this bit of philosophical jargon, the subject can now make judgments about the phenomenal character of her experiences. "I am now having an experience with the B-character," she says, sitting comfortably in our lavishly equipped laboratory, eyeing a blue chip. After a few seconds the chip is replaced in an eyeblink with the red one. "Now my experience doesn't have the B-character; it has—wait a sec—the R-character!" She gets her five dollars, and we usher in the next undergraduate.

Our new subject is shown a blue chip, and he classifies his experi-

¹⁴Chiefly McGinn, who holds that "[w] hat fixes content fixes qualia" (1988, 30) and that "bodily sensations" are "non-representational" (35). Tye held intramodal restricted intentionalism in his 1992 (see 160, 165, and n. 1).

¹⁵It would be natural for an unrestricted intentionalist to give an intentionalist account of moods, feelings of anger and fear, acts of imagination, conscious thought, and so on, a position we might call *utterly* unrestricted intentionalism. Tye (1995, 2000) is an utterly unrestricted intentionalist, and Dretske, Harman, Lycan, and Shoemaker at least come close. For reasons of space, utterly unrestricted intentionalism is ignored here; this paper is therefore less than ideally inclusive.

ence as having the B-character. But this time the chip is not replaced. The subject reports that there is no change in the chip, or in anything else: the world continues to appear exactly the same to him. "However," he sincerely continues, "something weird has happened—the phenomenal character of my experience has suddenly changed. It now has the R-character." Surely he has not understood our patient instruction in philosophical terminology. No five dollars for him!

Doubtless some (although certainly not all) anti-intentionalists would agree that our new subject just has to be confused: at least in the setup as described, if the way the world seems to him hasn't changed, then it can't be that the phenomenal character of his experience *has* changed. And on the face of it, an anti-intentionalist could consistently make such a concession: perhaps the required difference in phenomenal character without a difference in content only occurs in other kinds of cases.

First, it will be argued that this concession is mandatory: more exactly, if a (suitably idealized) subject's consecutive experiences change in character, they change in content. Second, this argument will be extended to show that intentionalism is correct.

For the first part, two premises are required.

Premise A

Assume the following: A subject enjoys two consecutive experiences: e, that ends at t, and then e^* . e and e^* differ in phenomenal character. The subject is *competent*: if she tries to retrieve information (or *mis*information) in memory, then her attempt will be successful, and she has no other cognitive shortcoming. The subject tries to detect a change in phenomenal character after t. The subject's memory is perfect: all the (mis)information supplied to her by e is available to her when she later enjoys e^* . 17

¹⁶Notable dissenters are (probably) Peacocke and Chalmers. According to Peacocke, there are actual cases of sudden changes in phenomenal character with no change in content (see the discussion of his "two walls" example in section 5 and note 34, and his binocular vision example in note 33, below). So Peacocke may well think that our new experimental subject's experience could be a case of this kind, at any rate in principle. And Chalmers's treatment of "fading qualia" suggests that he would agree (see section 9 below, and note 54 for a complication).

 $^{^{17}}$ Suppose that the content of e is that an object is green, but it is actually blue. The subject's "memory" will then contain the falsehood that the object is green, and so 'memory' here should be construed loosely. Note that (A) does

Then, solely on the basis of her current experience e^* and the memory produced by her past experience e, the subject will notice a change after t if she gives an accurate verbal report when e^* is over, she will say that there was a change in phenomenal character after t.

Three constraints on the subject in (A) need comment. First, the subject is *competent*: if she is undertaking any cognitive task, like accessing (mis)information in her memory, she does it successfully. Obviously (A) is false with this stipulation subtracted: simply imagine that the subject fails to retrieve the memory produced by her past experience *e*.

Second, the subject tries to detect whether there is a change in phenomenal character after t (so, because she is competent, she retrieves any memories produced by her first experience e). (A) with this stipulation subtracted is false—even if we suppose that the subject has the concept of phenomenal character. Suppose someone in an art gallery is absorbed by a sculpture and is not attending to a security guard on the other side who leaves the scene at t. Offhand, she is inclined to say that there was no change in phenomenal character after t. However, when giving the matter additional thought she is able to remember the guard's presence, and concludes that her earlier experience differed in phenomenal character from her later experience. Here the subject did not notice a change spontaneously—careful recollection was required.¹⁸

Third, the subject in (A) has a perfect memory: all the (mis)information supplied to her by e is available to her when she later enjoys e^* . Again, (A) with this stipulation subtracted is false. To see this, it is not necessary to imagine a subject with an especially poor memory—an ordinary subject will do. Suppose we run the experiment described a few paragraphs back with chips that can be clearly discriminated from each other by color when presented simultaneously, but which differ in color only slightly. Then sometimes a competent subject will not notice when one chip is substituted for another, no matter how hard she tries—our visual memories are much poorer than our visual discriminations. She will therefore not notice a change in phenomenal character. Yet it seems both intelligible and plausible that, on such occasions,

not assume that the (mis)information supplied to the subject by *e* is *identical* with the content of *e*, although the former will of course include the latter.

¹⁸For other examples of "awareness without attention," see Block 1995a, 234; forthcoming, 7.

the phenomenal character of the subject's experience has changed.

Admittedly, if we make the chips so similar that a real-life subject cannot confidently discriminate them even when they are *simultaneously* presented, then her idealized counterpart with a perfect memory will be no better off. But since in such cases it is quite unclear whether there *has* been a change in phenomenal character—or, indeed, a change in content—we can afford to ignore them.¹⁹

According to (A), if there is a sudden change in phenomenal character then the (suitably idealized) subject will notice it. In this sense, changes in phenomenal character are self-intimating.²⁰ (As in effect noted two paragraphs back, we are not such subjects: changes in phenomenal character are not self-intimating to us.)

(A) is partly definitive of the notion of phenomenal character. If this is not immediately convincing, the following spatial analogue of the temporally successive experiences in (A) may help.

Suppose the color of chip c_1 clearly differs from the color of chip c_2 , so the experience of looking at c_1 differs in phenomenal character from the experience of looking at c_2 . Imagine a competent subject looking at c_1 with the left eye and chip c_2 with the right eye, and suppose that the left and the right visual fields do not overlap (like those of some fish), so no "fusion" of the left and right fields occurs. (This supposition makes it easier to think of the subject as simultaneously enjoying two visual experiences, one of c_1 , and another of c_2 , that dif-

²⁰Compare Block 1998: "it is a necessary feature of phenomenal character that if a change is big enough and happens fast enough, we can notice it" (668). (See the preceding note for an argument that Block's "big *enough*" qualification is needed.)

¹⁹There is a connected complication. Because the subject in (A) may have limited powers of discrimination (like us), it is a mistake to hold that she will always know that there is a change in phenomenal character: if the change is sufficiently small, she won't. (For a compelling argument for this conclusion, see Williamson 1996; 2000, chap. 4.) And if noticing that p entails knowing that p, as it arguably does (Williamson 1995, 551–58; 2000, 33–41), then (A) is false. However, for present purposes this is more of an inconvenience than anything serious. Grant that (A) as officially stated is false because the subject might not know (and hence not notice) that there is a change in phenomenal character when this is not one that the subject can reliably discriminate for short, when the change is negligible. Then the argument of this section will in effect only show that if two experiences differ non-negligibly in phenomenal character, they differ in content. Because negligible differences are intuitively borderline cases of differences in phenomenal character, we may strike 'non-negligibly' and view the resulting supervenience thesis as true on a precisified but still perfectly reasonable sense of 'phenomenal character'.

fer in phenomenal character.) Surely, if she tries, the subject will notice that there is a "left-right" spatial change in phenomenal character.

Once it is admitted that the subject in the analogous case will notice a change, it is hard to deny (A). The subject in (A) successfully retrieves the perfect memory produced by her earlier experience e, thereby having access to all the information (and misinformation) she had access to when she enjoyed e. So as far as noticing a change is concerned, if she could somehow have e again, simultaneously with e^* , she would be no better off. That is, the subject in (A) appears just as capable of noticing a temporal change as the subject of the analogous case is of noticing a spatial one.

Now to the second premise:

Premise B

Assume that a subject enjoys an experience e that ends at t and then experience e^* , and that after t the subject notices a change in phenomenal character, solely on the basis of her current experience e^* and the (perfect) memory produced by her past experience e. Then the way things seem to the subject when she enjoys e differs from the way things seem when she enjoys e^* . That is, the content of e differs from the content of e^* .

In order to see that (B) is true, return to our first laboratory subject. How does she discover that her experience has a certain phenomenal character? Simple: she looks at the chip and determines its apparent color. Nothing else will do the job, and nothing more is needed. This is closely connected with one of Evans's insights:

[A] subject can gain knowledge of his internal informational states in a very simple way: by re-using precisely those skills of conceptualization that he uses to make judgements about the world. ... He goes through exactly the same procedure as he would go through if he were trying to make a judgement about how it is at this place now ... he may prefix this result with the operator 'It seems to me as though...'. This is a way of producing in himself, and giving expression to, a cognitive state whose content is systematically dependent upon the content of the informational state, and the systematic dependence is a basis for him to claim knowledge of the informational state. But in no sense has that state become an object to him: there is nothing that constitutes 'perceiving that state'. What this means is that there is no informational state which stands to the internal state as that internal state stands to the state of the world. (1982, 227–28)

Evans is not concerned here with knowledge of the *phenomenal character* of internal informational states, but parallel remarks apply. Our

subject gains knowledge of the phenomenal character of her experiences by reusing her ability to make judgments about the world—and in her circumstances she cannot gain this knowledge by any other method. She goes through exactly the same procedure that she would go through if she were trying to make a judgment about *the quality of the object that she perceives*. If she knows how they talk in the best philosophical circles, she may take note of the initial letter of the name for this quality, and announce that her experience has the R-character.²¹

Since the example of looking at colored chips might not be sufficiently representative, let us consider a very different sort of case. Imagine a variant of the experiment, where the colored chips are replaced by afterimages. We induce in our subject a red afterimage experience; how does she discover its phenomenal character? By essentially the same method as before: she determines the apparent quality of the (intentional) object of her experience—the afterimage. The subject attends to the world as it appears to her, just as she did in the initial experiment. Admittedly, any particular specification of the content of her afterimage experience will court controversy. According to some, it appears to the subject that a red filmy thing is some indeterminate distance from her eyes. According to others, it does not appear to the subject that the image is in her physical environment at all: instead it appears that the image is in some inner realm. However, this does not affect the point that the subject can only discover the phenomenal character of her experience by attending to the world (whether external or internal) as her experience represents it.

The argument for (B) is now straightforward. Suppose that *e* and *e** are the same in content. Then the world seems exactly the same to the subject throughout *e* and *e**. Concentrating on the world as it currently appears to her and recalling the way the world appeared a moment before, she will not notice a change in phenomenal character, because she has no basis for noticing one. Any *other* information she might extract from her experiences, if it is not information about the way the world appeared or appears, is not relevant. So, if the subject *does* notice a change in phenomenal character, *e* and *e** are *not* the same in content, which is to say that (B) is true.

There is a dispute about whether we are aware of *mental paint*: "the intrinsic properties of [an] experience by virtue of which it has the

²¹For other congenial accounts of self-knowledge, see Dretske 1995, 1999; Shoemaker 1994a, 1994b; Tye 2000, chap.3.

content it has" (Harman 1990, 38). Harman thinks we are never aware of mental paint; Block (1996, forthcoming) disagrees. Those who think we are might well hold that differences in phenomenal character can, at least sometimes, be noticed by detecting differences in mental paint. It is worth noting that a proponent of (B) need not deny this.

An analogy will help. Think of experiences as maps with differently colored regions. On the view just mentioned, the subject can notice a difference in phenomenal character by detecting a difference in mental paint—that is, a difference in the colors of two maps. And this might seem flatly inconsistent with (B), for surely the subject could notice a change in phenomenal character even if e and e^* have the same content (two maps might represent alike, and yet use different colors for cities, for example).

However, there is no inconsistency. Consider hearing speech in a language one understands. One hears the speaker saying that it's hot; but one also hears the speaker making the sound \its-hat\. In hearing speech, one has access to a vehicle of representation—the spoken words—as well as access to what the words represent—what the speaker said. Obviously this phenomenon is no threat to (B): the content of one's auditory experience concerns both what the words represent and the words themselves. For example, if experience e is of a speaker assertively uttering 'Jones is an ophthalmologist', and experience e^* is of a speaker assertively uttering 'Jones is an oculist', then although eand e* represent the speaker as saying the very same thing, they nonetheless differ in content: e and e* represent differently concerning the vehicle of representation. The mental paint view can be accommodated by taking some experiences to be akin to hearing speech, except that the vehicle the subject is aware of is not in the scene before the eyes (or ears), but is the experience itself. The content of these experiences is therefore partly reflexive (compare Searle 1983, chap. 2). Of course, someone who sides with Block on mental paint is not forced to accept this account; the claim is simply that she does not yet have a reason to reject (B).22

That completes the explanation and defense of the two premises. Now take a subject as described in (A). By (A), she notices a change

²²Partly because Harman 1990 is frequently cited in support of intentionalism (although Harman's main purpose was to defend functionalism), it can appear that the issue between intentionalists and their opponents turns on whether Harman is right about mental paint. It doesn't. The preceding dis-

solely on the basis of her current experience e^* and the memory produced by her past experience e. By (B), the content of e differs from the content of e^* . Therefore:

Conclusion C

If a competent subject whose memory is perfect and who tries to detect a change in phenomenal character enjoys consecutive experiences e and e* that differ in phenomenal character, then the content of e differs from the content of e*.

This conclusion is the advertised first result: that if a (suitably idealized) subject's consecutive experiences are the same in content, then they are the same in phenomenal character.

(C) is restricted to subjects of the sort described in (A), and they are stipulated to have perfect memories, to be competent, and to be trying to detect changes. Further, (C) is restricted to consecutive experiences. But all these restrictions can be dropped.

First, the restriction to consecutive experiences. This was little more than a device to simplify the exposition. At the cost of some additional complexity, equally plausible versions of (A) and (B) can be formulated with this restriction absent. For example, the temporally unrestricted version of (A), put briefly, is that if a suitably idealized subject enjoys e and e^* that differ in phenomenal character, then she will notice a change solely on the basis of her current experience e^* and the memory produced by her past experience e.

A concern might be raised about the temporally unrestricted version of (B). Suppose the earlier experience e is of a red chip, and before the much later experience e* the subject undergoes gradual

cussion in effect shows that intentionalism does not imply that we are never aware of mental paint. Neither does the converse implication hold, for the simple reason that the doctrine that there *is* any such thing as mental paint is disputable; in particular, plainly an anti-intentionalist may consistently deny it. (For some distinctions related to the independence of intentionalism and the mental paint view, see Block 1996, 26–31; forthcoming, 7–9.)

Harman's discussion of mental paint sometimes inspires arguments for intentionalism that appeal to the so-called "transparency" or "diaphanousness" of experience. This claim is formulated in slightly different ways in the literature; Tye puts it as follows: "None of the qualities of which you are directly aware" in perception are experienced "as qualities of your experience" (2000, 46; compare Harman 1990, 39; for Tye's overall argument see 2000, 45-51). Block (1996, forthcoming) and Burge (forthcoming) both deny that experience is always transparent. As should now be clear, the argument for intentionalism given here does not rely on transparency.

spectrum inversion with semantic accommodation (Shoemaker 1996). After the inversion is complete, then, the subject uses color vocabulary as she did before—she applies 'red' to tomatoes, 'green' to cucumbers, and so on. The later experience e^* consists in looking at the same red chip; the subject calls the chip 'red', but nonetheless notices a change in phenomenal character, solely on the basis of e^* and the (perfect) memory produced by e. (Let us grant that this case is possible.) It might be argued that, because of the accommodation, both e^* and e represent the chip as red: after all, the subject will say that the chip looked red both times. If this is correct, then presumably e^* and e are the same in content, and hence the temporally unrestricted version of (B) is false.

But recall the argument for the initial version of (B), which turned on the claim that the subject must attend to the world as it appears to her, in order to gain knowledge of the phenomenal character of her experience. Surely the spectrally inverted subject is in no *better* position: in order to notice a change in phenomenal character she has to determine the way the chip appeared earlier, and compare that with the way the chip appears now (just imagine that you are in her shoes). And so if e^* and e are the same in content, she will not notice a change. Does this mean that we must reject the thought that, because of the accommodation, e^* and e both represent the chip as red? No: for example, one might follow Shoemaker (1994a, 1994b), and take the lesson of the inversion story to be that visual experiences, in addition to representing objects as having colors, represent objects as having "phenomenal" or "color-like" properties. On this view, e^* and e both represent the chip as red, but e* represents it as having one of these "phenomenal" properties, and e represents it as having another; the experiences accordingly differ in content. Then again, rejecting the thought would not be unreasonable: what's so bad about insisting that the inverted subject perversely misdescribes the way things look to her?

With the temporally unrestricted versions of (A) and (B) in place, the argument for the temporally unrestricted version of (C) goes through just as before.

Second, the restriction to idealized subjects. Consider:

(I) If a (nonidealized) subject enjoys experiences *e*† and *e*‡, then there could be an *idealized* subject who enjoys experiences *e*† and *e*‡ with exactly the same content and character as, respectively, *e*† and *e*‡.

If (I) is true, then we may argue as follows. Suppose e^{\dagger} and e^{\dagger} differ in phenomenal character. Then e^{\dagger} and e^{\dagger} differ in phenomenal character. By the temporally unrestricted version of (C), e^{\dagger} and e^{\dagger} differ in content. Therefore, the experiences of the *non*idealized subject, e^{\dagger} and e^{\dagger} , also differ in content.

It remains to establish (I). Suppose that a (nonidealized) subject enjoys experiences e^{\dagger} and e^{\dagger} . We need to show that there could be a competent subject with a perfect memory, who tries to detect a change, and who enjoys experiences with exactly the same content and character as e^{\dagger} and e^{\dagger} .

Take memory first. Because the subject is not idealized, he may have an imperfect memory. Moreover, it may well be that if the non-idealized subject *had* a perfect memory, he *would not* have enjoyed experiences with the same character and content as *e*† and *e*‡ (one's memory can of course have many influences on one's current experience). Still, surely the addition of a more comprehensive memory need not *necessarily* have any effect on the content and character of one's experiences—the extra information in memory might not be accessed by any other part of the cognitive system. So there could be someone with a perfect memory who enjoys two experiences with exactly the same content and character as *e*† and *e*‡.

In addition to lacking a perfect memory, the nonidealized subject may not be competent: for example, he might try and fail to access information in memory, or reason incorrectly. Further, the subject may not be trying to detect a change in phenomenal character. And various complications arise from both of these possibilities. For example, suppose that the nonidealized subject is *not* trying to detect a change during his later experience *eţ*. It is not at all clear that there could be a subject who enjoys an experience *eţ* with the *same* content and character as *eţ*, but who *is* trying to detect a change during it (for instance, perhaps the extra attention involved requires *eţ* to have a certain content that *eţ* does not have).

Fortunately, though, these complications can be finessed. The supposition that the subject is competent *throughout e* and e^* , and is trying to detect a change *during e**, is entirely inessential to the argument, although it served a rhetorical purpose. The supposition made the idealized subject's situation like that of our laboratory subjects described at the start of this section, and their situation is the easiest to imagine vividly. But we could just as well have supposed that the subject is competent, and that she tries to detect a change, *after e**, and

reformulated (A) and (B) accordingly, from which an amended version of (C) follows. (For example, the reformulation of (A) is that if a subject with a perfect memory enjoys e and e^* that differ in phenomenal character, and if *after* e^* the subject is competent and tries to detect a change, then she will notice a change solely on the basis of the memories produced by her past experiences e and e^* .)

So imagine that this new supposition was in place from the beginning, with the appropriate alterations to (A), (B), and (C). An idealized subject, then, is a subject with a perfect memory who, after e^* , is competent and tries to detect a change. Suppose that a (nonidealized) subject enjoys experiences e^{\dagger} and e^{\dagger} . He may not be trying to detect a change, or be competent, during or after these experiences. Still, it seems clear that there could be a subject who enjoys experiences e^{\dagger} and e^{\dagger} with the same content and character as e^{\dagger} and e^{\dagger} , and who is competent (perhaps: becomes competent) after e^{\dagger} , and who tries to detect a change after e^{\dagger} .

The points in the previous four paragraph establish that (I) is true. Hence, if a (nonidealized) subject enjoys $e\uparrow$ and $e\updownarrow$ that differ in phenomenal character, these experiences differ in content. Therefore, the temporally unrestricted version of (C) may be extended to:

Conclusion C+

If a subject enjoys experiences e and e^* that differ in phenomenal character, then the content of e differs from the content of e^* .

(C+) is a "within-subjects" supervenience thesis, which isn't quite what is required. Intentionalism is a "between-subjects" supervenience thesis: if two subjects enjoy e and e^* , respectively, and if the contents of e and e^* are the same, then so are their phenomenal characters.²³ But it is a relatively short step from the first supervenience thesis to the second. Suppose that subject S_1 enjoys experience e and subject S_2 enjoys experience e^* , with distinct phenomenal characters P and Q, and the same content that p. Given this supposition, it is very plausible that there could be some third subject S_3 , who enjoys experiences with, respectively, character P and content that p, and character Q and content that p. (This inference is an application of some sort of "principle

 $^{^{23} \}rm{The}$ within- and between-possible subjects formulations are analogous to weak ("within-worlds") and strong ("between-worlds") supervenience theses (see Kim 1984).

of recombination.") 24,25 But, if (C+) is true, there could be no such third subject. Therefore, there cannot be any such subjects as S_1 and S_2 either, and (C+) may be extended to:

Conclusion C++

For any two possible experiences e and e^* , if they differ in phenomenal character, then they differ in content.

Remember that it was not assumed that the experiences must be drawn from the same perceptual modality: e and e* could be, for example, visual and auditory experiences respectively, and the argument would work just as well. Further, with the assumption (defended in section 7 below) that bodily sensations are species of perceptual experiences, the present argument also works for sensations. Putting all these pieces together, the conclusion is that intermodal unrestricted intentionalism is true.

4. Objections to Intentionalism

To avoid an unsatisfactory antinomy, the principal objections to intentionalism now need to be defused; they can be divided into three classes. (Since the objections are almost always directed at in *tra*modal—and so also in *ter*modal—intentionalism, by 'intentionalism' is henceforth meant intramodal intentionalism, unless the context indicates otherwise.)

Class I Objections

These involve examples that are typically—although not always—sci-

²⁴See Lewis 1986, 87–92. This step assumes that comparisons of phenomenal character across persons make sense: according to the "Frege-Schlick view" (Shoemaker 1982, 368–78), they don't. Since the principal targets of this paper also accept the assumption, the Frege-Schlick view may fairly be ignored here (but for a defense of it, see Stalnaker 1999).

²⁵This is an appropriate point to return to the complication noted in note 9 above. Suppose that if e and e^* occur at e and e, then these times enter into the contents of e and e^* . Then the argument for (C+) is immediate. But the price is that the "relatively short step" just mentioned fails. The problematic bit is this: "it is very plausible that there could be some third subject S_3 , who enjoys experiences with, respectively, character P and content that p, and character Q and content that p." Since these experience occur at different times, they must differ in content. But the fix is simple. Say the contents of e and e^* are equivalent if and only if they only differ with respect to the represented times. Then, with a bit of fiddling, (B) can be rewritten without loss of plausibility to concern equivalent content. The "equivalent content" version of (C+) follows, and now the "relatively short step" is unimpeded.

ence-fictional. The distinctive feature of such examples is that turning them into (alleged) counterexamples involves appeal to some *sub-stantive theoretical assumption*.

As a paradigmatic instance, take the familiar intersubjective inverted spectrum scenario (see also the intrasubjective case discussed in the previous section). Invert and Nonvert are spectrally inverted with respect to each other, and are both looking a tomato. Their experiences therefore differ in phenomenal character. So far, many would agree that the case is possible. But to provide a counterexample to intentionalism it needs to be argued that their experiences are intentionally identical, and this is hardly evident. To get the desired result some theoretical assumption is required—say, oversimplifying a bit, that one's experiences represent their normal causes.²⁶ The type of experience Invert is enjoying is normally caused in him by the presence of red objects, and accordingly represents redness, and similarly for Nonvert. Since we may suppose that Invert and Nonvert's experiences are intentionally identical in all other respects, they are intentionally identical, period. If the theoretical assumption is right, the case is a counterexample to intentionalism. (For other Class I objections, see Block 1996, 1998, 1999, forthcoming.)

Class II Objections

These involve (typically actual) examples of experiences that—unlike the examples used in Class I objections—are supposed to present some difficulty for intentionalism with only minimal additional assumptions. Such examples come in three basic varieties:

Ordinary perceptual experiences. These examples are mainly due to Peacocke (1983), who has argued that many commonplace (visual) experiences pose serious problems for intentionalism.²⁷

Bodily sensations. Experiences of pain, for example, have often been held to lack content entirely. If that is right, then (unrestricted) intentionalism is false, since two pain-experiences can differ phenomenally.

²⁶See, for example, Block 1990, 64. Other examples of such theoretical assumptions are that phenomenological character is intrinsic, while content properties are all extrinsic (compare Block 1998, 663–64, on Dretske); or simply that a certain devilishly complicated case is really possible.

²⁷In addition to Peacocke's examples, there is one due to Block, of hearing and seeing, respectively, something overhead (Block 1995a, 234–35; the example is modified in Block 1996, 38; forthcoming, 16–17). In his 1995a, Block claims that these two phenomenally different experiences might well be

"Funny" perceptual experiences. For instance, visual experiences of "seeing" phosphenes, seeing an object with blurred vision, seeing "double," having afterimages, and the like.²⁸

Class III Objections

An objection of this type amounts to the claim that some sort of "zombie"-scenario is possible. A zombie, in this context, is a creature who is intentionally just the same as you or me, but whose inner phenomenological lightbulb is completely burnt out.²⁹ Block's "superblind-sighter" is afflicted with zombification in one perceptual modality: she enjoys visual experiences with the same contents as those of normal subjects, but with no phenomenology.³⁰

Let us take these three classes in turn.

A detailed investigation of Class I objections is too much for a single paper, but fortunately it is not necessary. Supposing that the argument just offered for intentionalism is on the right lines, I think it fair to say that the conclusion stands on firmer ground than any of the substantive assumptions required to generate a Class I objection. The proper reaction to such an objection is therefore to deny one of these assumptions. Class I objections have much to teach us, but the lesson is never that intentionalism is false.

Unlike Class I objections, those in Class II cannot be brushed under the carpet. The following section examines the first kind: Peacocke's attempt to refute intentionalism with examples of ordinary visual experiences. Section 6 examines a related issue: the connection between intentionalism and the sense-datum theory. Section 7 argues that bodily sensations are intentional after all, and section 8 explains why "funny" experiences do not present a difficulty.

intentionally identical. Hence, Block's example—unlike Peacocke's examples—is only directed against intermodal intentionalism. For critical discussion (which I won't add to), see Tye 2000, 93–94.

²⁸Phosphenes: Block 1996, 34–35; forthcoming, 14. Blurry vision: Boghossian and Velleman 1989, 94; Baldwin 1990, 257 (see also the former for seeing "double"). Afterimages: Boghossian and Velleman 1989, 93–94; Baldwin 1992, 179-80.

²⁹Often zombies are supposed to be creatures who are *physically* just the same as you or me, although all is dark within (for an early incarnation, see Nagel 1970, 401–2). This sort of zombie should not be confused with the one in the text: physicalism is not the issue.

³⁰Block 1995a, 233; given that there is nothing it's like for the superblindsighter to look at a tomato, perhaps it is wrong to say that she enjoys an *expenience* (compare Burge 1997), but let us speak loosely. Finally, Class III. It is of course controversial whether zombies, even partial ones, are possible, and so objections in this class don't carry much weight. Certainly Block doesn't think his example of superblindsight any more than a challenge. But zombies, whether possible or not, bring into focus a Common Worry, often expressed along the following lines. Undeniably, some mental states—at least some beliefs, for example—have content, but no phenomenal character. So content is not sufficient for phenomenal character. What's the difference between those content-bearing states that do have phenomenal character and those that don't? The intentionalist can hardly say, "Non-intentional qualia." So what is his explanation? These issues, and the possibility of zombies, are taken up in the final section.

5. Peacocke against Intentionalism

In a classic discussion in *Sense and Content*, Peacocke gives some examples that he takes to pose a problem for intentionalism—or at any rate something very like intentionalism. Peacocke's arguments have been valuably criticized by Lycan and Tye,³¹ but there are some fresh points to be made.

After telling us that the "content of a perceptual experience [is] given by a proposition, or set of propositions, which specifies the way the experience represents the world to be" (1983, 5), Peacocke explains that he will attack the view, held by the "extreme perceptual theorist," that "all intrinsic properties ["properties which specify what it is like to have the experience"] of mature human visual experience are possessed in virtue of their propositional content." This certainly seems to be intramodal intentionalism, restricted to "mature human visual experience." It follows from this view, Peacocke says, "that a complete intrinsic characterization of an experience can be given by embedding within an operator like 'it visually appears to the subject that ...' some complex condition concerning physical objects." Peacocke dubs this the "Adequacy Thesis" or "AT." An example of part of such a "complex condition" is "that there is a black telephone in front of oneself and bookshelf a certain distance and direction to one's left, above and behind which is a window" (8).

Now it seems that, by Peacocke's own lights, the view of the "extreme perceptual theorist" does *not* imply the Adequacy Thesis.

³¹See Lycan 1996a; 1996b, chap. 7; and Tye 1992; 1996; 2000, chap. 4. There is also a rewarding but brief discussion in Hill 1991, 197–99.

First, the extreme perceptual theorist—as officially described—does not restrict the content of experience exclusively to concern *physical* objects. It would be open to an extreme perceptual theorist to hold that sometimes it can visually appear to a subject that there is a *non*-physical object before her (an afterimage experience might be held to be an example). Second, the extreme perceptual theorist could consistently hold that the content of a visual experience *cannot* be exhaustively expressed by a sentence of a natural language, in which case there would be no appropriate embedding within Peacocke's operator. But it is clear enough how this tension in Peacocke's text should be resolved: take the extreme perceptual theorist at his word, and amend the Adequacy Thesis accordingly. That is, forget the restriction to physical objects, and cut the extreme perceptual theorist some slack if his perceptual contents resist precise linguistic expression.

Peacocke's most famous alleged counterexample against the Adequacy Thesis is the visual experience of seeing two trees, the same in size but at different distances from the subject. He comments:

Your experience represents these objects as being of the same physical height and other dimensions; that is, taking your experience at face value you would judge that the trees are roughly the same physical size. ... Yet there is also some sense in which the nearer tree occupies more of your visual field than the more distant tree. This is as much a feature of your experience itself as is its representing the trees as being the same height. The experience can possess this feature without your having any concept of the feature or of the visual field: you simply enjoy an experience which has the feature. ... It presents an initial challenge to the Adequacy Thesis, since no veridical experience can represent one tree as larger than another and also as the same size as the other. The challenge to the extreme perceptual theorist is to account for these facts about size in the visual field without abandoning the AT. We can label this problem 'the problem of the additional characterization'. (1983, 12)

Another example of "the problem of the additional characterization" is this:

Imagine you are in a room looking at a corner formed by two of its walls. The walls are covered with paper of a uniform hue, brightness and saturation. But one wall is more brightly illuminated than the other. In these circumstances, your experience can represent both walls as being the same colour: it does not look to you as if one of the walls is painted with brighter paint than the other. Yet it is equally an aspect of your visual

³²This is actually Peacocke's view in his 1992 (which represents a change of mind: see Peacocke 1983, 7).

experience itself that the region of the visual field in which one wall is presented is brighter that that in which the other is presented. (12–13)

Peacocke immediately goes on to remark, however, that although these examples are "in some way related to the duality of representational properties [i.e. "properties an experience has in virtue of its propositional content" (5)] and properties of the two-dimensional visual field," they are "not cases in which the additional characterization apparently omitted by representational properties was something which could vary even though propositional content is held constant" (13). He then attempts to supply a case of the required sort, "in which a pair of experiences in the same sense-modality have the same propositional content, but differ in some other intrinsic respect"; the example is, as Tye has noted, unconvincing, so we can skip it.³³

Given that the "two trees" and "two walls" examples are not even intended by Peacocke to be cases of phenomenal character varying despite sameness of content, it is not at all obvious why Peacocke supposes them to present an "initial challenge" to the Adequacy Thesis. Moreover, it seems easy to give a "complete intrinsic characterization" of the experiences in terms of their contents, at least at a first pass. In the two trees case, it visually appears to the subject that he's facing two similar-sized trees, one further away than the other, and in the two walls case, it visually appears to the subject that he's facing two adjoining walls, the same in color but one more brightly illuminated than the other.³⁴

So Peacocke's examples, unsupplemented by any theoretical gloss, do not pose a serious problem for intentionalism. Rather, the threat comes from Peacocke's positive description of the examples, as involv-

³³The example is this: "Suppose you look at an array of pieces of furniture with one eye closed. Some of the pieces of furniture may be represented by your experience as being in front of others. Imagine now that you look at the same scene with both eyes. The experience is different" (13). But is the content different? Surely it is; specifically: "When I view the situation with both eyes I see a little more of the objects and there is an increase in the determinacy of object distances" (Tye 1992, 174).

³⁴In fact, if Peacocke's treatment is correct, the two walls example *can* be readily adapted to supply a pair of experiences alike in content but different in phenomenal character. Imagine an experience just like Peacocke's two walls case, but where both walls are equally illuminated. Presumably according to Peacocke, this experience has exactly the same content as the first. Yet it is evidently different in its phenomenal character. (Note that the two trees case can't be adapted in this way: if we make the regions of the visual field the same size, the resulting experience will represent the trees differently, either in respect of location or of size.)

ing "regions of the visual field," which bear a close resemblance to sense-data, although he does not call them that.³⁵ (So, despite universal agreement that there is a visual field in some sense, it is highly controversial whether there is a visual field as Peacocke conceives of it.)³⁶

The visual field regions have properties Peacocke expresses with the predicates 'yellow'', 'elliptical'', and so forth. If a yellow circular plate is viewed at an angle, according to Peacocke the subject's visual field contains a yellow' elliptical' region.³⁷ And plainly the phenomenal character of such an experience is supposed to be explained, at least in part, by the presence of the yellow' elliptical' region in the subject's visual field. As Peacocke's use of the "primed" notation suggests, he does not think that yellow'ness, for instance, is yellowness.38 The connection is rather this: a yellow object in the scene before the eyes will normally cause the subject's visual field to have a yellow' region. Peacocke does not make explicit how all this helps with the examples, but it is clear what he has in mind: the two trees are represented to be the same in size, but the corresponding regions of the visual field are different in size; the two walls are represented to be the same in color, but the corresponding regions of the visual field are differently illuminated. (Strictly, we should add a prime to the last occurrence of 'size' in the previous sentence and also to 'illuminated', because Peacocke's regions of the visual field do not have spatial size, and are not bathed in light.)

 $^{^{35}}$ However, Peacocke's regions should not be taken to play the epistemic role sometimes reserved for sense-data.

³⁶In visual science, "the visual field" (of a normal human) is usually taken to be the region-type within which a visual stimulus can be detected, keeping the eye fixed, or the token such region for an individual subject at a particular time. Measured from central fixation, the monocular visual field is about 160 degrees in width and 135 degrees in height. Alternatively, the visual field (for a subject at a time) may be taken to be the scene before the subject's eyes at that time, or the scene-as-represented by the subject's visual experience at that time. None of these visual fields is at all problematic, and none is Peacocke's "visual field." For some useful discussion, see Clark 1996.

³⁷Although Peacocke does say that "the property of being red' is [a] property of the visual field" (21), he occasionally applies the primed predicates to *experiences*; moreover, his official explanation of this notation is that the primed predicates are *two-place* predicates, applying to pairs of regions of the visual field and experiences (20–21). Peacocke's view is best captured, I think, if the primed notation is given the explanation in the text.

³⁸As he says, "primed predicates should not be confused with their unprimed homonyms" (20), clearly meaning by this that the corresponding properties are not identical.

Now we might well find Peacocke's positive description unmotivated, because Peacocke has not shown that the proper treatment of his examples requires the introduction of the apparatus of a visual field and its sensational properties. For instance, in the two walls example, surely the walls *look* differently illuminated, and so there is no need to say that there is a "visual field" that *is* differently illuminated'. But something much stronger can be said. Suppose Peacocke's positive description is correct—in effect, that there are sense-data. Importantly, this *wouldn't* refute intentionalism, as I shall now explain.

6. Intentionalism and Sense-Data

Consider the typical veridical visual perception of a red tomato, on the one hand, and the corresponding "philosophical" hallucination, on the other. By stipulation, the two experiences are exactly the same in phenomenal character, but in the hallucinatory case there is no red physical object before the subject. What explains the sameness of phenomenal character? According to the thought behind the "argument from illusion," the explanation is that there *is* something red' (or, more traditionally, red) of which the subject is aware as such, both times. This red' sense-datum is thus an *object* of the subject's experience, not the experience itself.³⁹

As it is the subject's awareness of a red' sense-datum as such that is supposed to explain the phenomenal character common to both experiences, the sense-datum theorist should say that sense-data are as they appear. For suppose that sense-data illusions are possible—a green' sense-datum can appear just as a red' one does, for instance. The phenomenal sameness of *these* cases cannot be explained by invoking a common property of sense-data, and so the sense-datum theorist has just exchanged one problem for another (compare Broad 1965, 93–94).

It is true that defenders of intentionalism are no friends of sensedata and, moreover, sometimes they give the impression that an intentionalist cannot also be a sense-datum theorist.⁴⁰ But intentionalism

³⁹Of course, the sense-datum might somehow constitutively depend on the experience as well as being its object. In fact, the claim in the text is stronger than is necessary: what is important is that the sense-datum *is the object* of the experience, not that it's *not the experience* (compare the discussion of mental paint in section 3 above).

⁴⁰See, for example, Tye 1992, 161–62; 2000, 45–46 (I am not suggesting that Tye actually holds that intentionalism and the sense-datum theory are incompatible). In explanations of the basic positions in the philosophy of per-

and the sense-datum theory are perfectly compatible. A red' sense-datum seems or appears red'. So it is represented as red'. The sense-datum theorist simply has a strange view about the content of experience—and any view about the content of experience is compatible with intentionalism.

It might be objected that where there is representation, there is the possibility of *mis*representation. But there is no room for error about a sense-datum: it cannot *mistakenly* appear to one that a sense-datum is red'. Hence a (mere) sense-datum experience is not representational or intentional. There is no obvious reason, though, to accept the claim about the possibility of misrepresentation. Many have thought that one cannot mistakenly *believe* that one is in pain, without taking the strange position that such a belief is not an intentional state; the *cogito* and beliefs in necessary truths provide other examples. Therefore, even if the experience as of a red' sense-datum is infallible, the experience still has content—namely, that the sense-datum is red'. Of course, it might be that some developed and credible theory of mental representation implies that no perceptual experience can be infallible. But that would be an argument that either sense-datum illusions are possible after all, or that there are no sense-data.

There is a second objection to the claim that the sense-datum theory and intentionalism are compatible, for a sense-datum theorist may well argue as follows. First, the phenomenal character common to visual experiences as of ripe tomatoes is explained by the subjects' awareness of—or acquaintance with—a red' sense-datum. So, all there is to having an experience with this phenomenal character is to be in a

ception, the sense-datum theory is often contrasted with the view that perceptual experiences have propositional content, and so is implicitly contrasted with intentionalism (see, for example, Martin 1994). However, it is usually built into the view that experience has content (and is, in the article just cited) that the content exclusively concerns the way the perceiver's environment might be.

Some terminology will help to straighten this out. *Propositionalism* is the view that perceptual experiences have propositional content. *Environmental* propositionalism is the view that the content of perception exclusively concerns the perceiver's environment. Then some relations between these and other theses are as follows. Intentionalism implies propositionalism, and is compatible with the denial of environmental propositionalism. As argued above (see note 22), intentionalism is compatible with the view that we are aware of mental paint. Lastly—as is about to be argued—intentionalism is compatible with the sense-datum theory, and the sense-datum theory is incompatible with environmental propositionalism.

state of *thing*-awareness, not *propositional*-awareness (being aware that p). Further, one could *merely* be aware of a red' sense-datum—that is, with no accompanying propositional-awareness of any sort. Hence—the sense-datum theorist concludes—mere awareness of, respectively, a red' and green' sense-datum provides a counterexample to intentionalism: a pair of experiences that differ in phenomenal character but have exactly the same content, namely none.⁴¹

This reasoning is not evidently coherent. When the sense-datum theorist talks of "awareness of a red' sense-datum," should we understand this as not implying awareness of the datum as red'? That would be the natural way of taking it: in ordinary parlance, if x is F, one can be aware of x without being aware of it as F. If this is what the sensedatum theorist means, then clearly the common phenomenal character in the examples of seeing and hallucinating a tomato is explained, not just by the subjects' awareness of a red' sense-datum, but by their awareness, of a red' sense-datum, that it is red' (their awareness of the red' sense-datum "as such"). Alternatively, the sense-datum theorist might take his notion of awareness to license the implication from 'awareness of a red' sense-datum' to 'awareness, of the datum, that it is red'', in which case no correction would be necessary. 42 Either way, the sense-datum theory provides no support for the view that mere thing-awareness of a sense-datum has phenomenal character. What has phenomenal character is an experience with content: that it (the sense-datum) is red'.

Once it is seen that sense-data are compatible with intentionalism, one might well wonder what work they could possibly be doing. A *mere* seeming that there is a red' sense-datum will do just as well as a *veridical* seeming to explain the similarity between seeing and hallucinating a tomato.⁴³ (And, once this is recognized, perhaps redness will do just as well as red ness.) But this is an aside: for present purposes we simply need to note the compatibility.

The upshot of the last two sections is that intentionalism has nothing to fear from ordinary perceptual experiences—whether or not

⁴¹This line of argument is also suggested by the contemporary defenses of "the given" in Moser 1989 and Fales 1996 (although both Moser and Fales are neutral on the existence of sense-data).

⁴²For these two ways of reading 'awareness of a red' sense-datum', see Sellars 1997, part I.

⁴³For some similar lines of thought (made independently), see Johnston 1998 and Thau forthcoming, chap. 1.

there are sense-data. The next two sections address the other two kinds of objections in Class II.

7. Bodily Sensations Are Intentional

The view that bodily sensations are not intentional at all remains fairly popular. For example, McGinn writes:

[B]odily sensations do not have an intentional object in the way perceptual experiences do. We distinguish between a visual experience and what it is an experience of; but we do not make this distinction in respect of pains. Or again, visual experiences represent the world as being a certain way, but pains have no such representational content. (1996, 8–9)⁴⁴

The assumption that McGinn is incorrect was deployed earlier at the end of section 3, to allow the step from restricted (intermodal) intentionalism to unrestricted (intermodal) intentionalism.

There is a common objection to McGinn's view, namely, that it cannot accommodate the *felt location* of pains. When one stubs a toe, the pain seems to be *in the toe*. But if stubbing a toe merely results in a non-intentional sensation, there should be no *seeming* at all—in particular, no seeming to be in the toe. So pain sensations are intentional after all.

This objection is hardly new: it is discussed by Thomas Reid, whose view of pain is more or less exactly the same as McGinn's. Rather ironically, the reason why the objection is correct comes out particularly clearly in Reid's response to it.

To account for the felt location of a pain in the toe, Reid thinks a threefold distinction is needed, between the *sensation*, the *cause* of the *sensation*, and an "immediate conviction of some hurt or disorder in the toe" ([1785] 1969, 271). The *sensation* is a *non*-intentional mental state (or event), and so is "in the mind." The *cause* of the sensation is a "disorder," not in the mind, but in the toe. The "immediate conviction" is an *intentional* mental state. Reid explains the fact that the pain seems to be in the toe by the presence of the "immediate conviction of some hurt or disorder *in the toe*," which is a contingent accompaniment of the non-intentional sensation.

But why do we have *two* states here—the sensation and the "immediate conviction"? Reid suggests that the sensation can be present without the conviction in cases of phantom limb pain without illusion:

⁴⁴This passage is quoted in Tye 1995, 93. See also Kraut 1982, 291; Lowe 2000, 102; Peacocke 1983, 5, 24–25; Rosenthal 1986, 332–44; Strawson 1994, 177; Searle 1983, 39 n. 1, and 1992, 84 (but see the endnote).

A man who has had his leg cut off, many years after feels pain in a toe of that leg. The toe now has no existence; and he perceives easily, that the toe can neither be the place, nor the subject of the pain which he feels; yet it is the same feeling he used to have from a hurt in the toe; and if he did not know that his leg was cut off, it would give him the same immediate conviction of some hurt or disorder in the toe. (270–71)

The man has the same sensation, but no conviction that any kind of disorder is in his toe, for he knows there is no toe. That seems right. However, Reid's own example shows that the conclusion that the sensation is not intentional is erroneous. Even though the man knows he has no toe, he feels something where his toe used to be. His present sensation and his previous experiences of pains in the toe, before he lost his leg, have objects in exactly the same sense.

Actually, Reid almost sees that the amputee's sensation has content. In the next paragraph he observes that we can properly speak of the man's having a "deceitful feeling, when he felt a pain in his toe after the leg was cut off." What's deceitful about it? "I answer, it lies not in the sensation, which is real, but in the seeming perception he had of a disorder in his toe. This perception, which nature had conjoined with the sensation, was in this instance fallacious" (271). But if the man in this paragraph is the knowledgeable amputee of the previous one, as he appears to be, the "deceitful feeling" or "seeming perception" is not going to last very long. Officially, Reid has no room for any "deceitful feeling" that is not a false "immediate conviction"; and presumably the knowledgeable amputee will soon lose his immediate conviction of a disorder in the toe. Yet he will still feel something where his toe used to be.

Reid's error here is a result of his general conflation of the content of perception with the content of perceptual belief.⁴⁵ He distinguishes between the experience of having a pain in the toe, and the belief or conviction that there is "some hurt or disorder in the toe," and observes that they can come apart, but fails to see that the experience must involve a *seeming* that there is some hurt in the toe, in order to make sense of the phantom limb case.

Experiences of pain, then, have content: when one has a pain in the toe, the world seems a certain way, namely, that there is "some hurt or disorder" in the toe—in other words, that there is a pain in the

 $^{^{45}}$ The conflation is noted by Hamlyn (1961, 196–97) and Peacocke (1983, 6).

toe. 46 Moreover, exactly the same considerations apply to other bodily sensations. The experience or sensation of a twinge in the knee must be distinguished from any beliefs one might have about the condition of one's knees. Whenever the experience or sensation is endured, the world seems a certain way, namely, that there a twinge in the knee, even if one believes that there is no such twinge in the knee or anywhere else. Therefore, bodily sensations are intentional.

Although Reid thought the vulgar innocent of confusion, the evidence is very much against them. 47 I have been following Reid in taking a "sensation" to be an experience, and that sometimes does correspond to ordinary usage: as Reid says, there is no difference between the sensation and the feeling of it; they are one and the same thing. However, we often think of sensations as being the objects of experiences, not the experiences themselves: "I feel a odd sensation in my elbow/a churning sensation in my stomach/a painful sensation in my toe." Specific sensation words are no better off. On the one hand: "Pain is a feeling. Surely that is uncontroversial. To have pain and to feel pain are one and the same."48 On the other hand: pain is not a feeling—one's feeling of the pain in the toe is a mental event, and so is in the head, or in the mind, while the pain felt is (presumably) in the toe. If the distinction between pains-as-experiences and pains-asobjects-of-experiences was explicitly recognized then it would be evident that there was some question about whether pains-as-objects exist, or are as they seem to be. But almost everyone appears to be convinced that the question makes no sense at all: there are no illusions of pain—phantom limb pain is pain!⁴⁹

Since an experience of pain has content, just like a visual or tactile experience, experiences of pain, and bodily sensations generally, may be regarded as species of perceptual experiences. This thesis was defended by Armstrong (1962, 1968) and Pitcher (1970), although their great

⁴⁶Many others have deployed the phantom limb example to similar ends, for instance, Armstrong (1962, 108–9), Graham and Stephens (1985), and Tye (1995, 111–16).

⁴⁷Here I am agreeing with Harman (1998, 606). Tye, though, joins Reid in putting all the blame on the philosophers (1995, chap. 4).

⁴⁸Lewis 1980a, 222 (note omitted).

⁴⁹Part of the explanation might be that what we really care about is (the absence of) pain-as-experience—whether the experience is veridical is of little importance (Pitcher 1970, 385–86). Another part of the explanation might be that there are typically no independent ways of checking whether an experience of pain is veridical (Thau forthcoming, chap. 1).

advance was somewhat obscured by the presence of additional doctrines that are considerably less plausible, notably that the content of perception can be analyzed in terms of the acquisition of beliefs.⁵⁰

8. "Funny" Perceptual Experiences

Although many accept that "funny" perceptual experiences such as having afterimages and "seeing" phosphenes have content, there is a lot of intuitive resistance to the claim that *intentionalism* holds of such experiences. And similarly with bodily sensations: many will agree with the previous section, but still view intentionalism about bodily sensations with grave suspicion.

However, "funny" perceptual experiences and bodily sensations (conceded to have content) do not pose any special difficulty for intentionalism.⁵¹ The temptation to think otherwise can be removed by drawing on some points made previously.

First, remember that the intentionalist is under no obligation to give a precise specification of the content of a certain experience in words—any more than an anti-intentionalist is expected to describe exhaustively the alleged non-intentional phenomenal residue of an experience in words. To convey the content of an ordinary visual experience, it is sufficient to say that it seems to the subject that a red bulgy tomato is on the table; likewise, to convey the content of an afterimage experience, or an experience of pain, it is sufficient to say that it seems to the subject that there is a red circular afterimage before her, or that it seems to the subject that there is a throbbing pain in her toe.

Second, just as the intentionalist is not obliged to give any account of tomatoes or their apparent properties like redness or bulginess, she may resist giving any account of afterimages, phosphenes, pains-as-objects, or the properties that they appear to have. It would certainly be nice to know more about pains-as-objects, if indeed there are such things, and the nature of the property of *throbbing* that some of them appear to have. Perhaps a pain-as-object is a bodily disturbance of some sort, or alternatively an irreducible mental entity. Then again,

⁵⁰For Armstrong's version of this theory, see Armstrong 1968, chap. 10; for Pitcher's, see Pitcher 1971, chap. 2.

⁵¹In fairness to Block, he doesn't think examples of "funny" perceptions or bodily sensations are conclusive. He does think they provide a prima facie case against intentionalism, however, which is what I am denying.

perhaps pains-as-objects don't exist, just as many hold (following Smart 1959) that there are no afterimages. But the intentionalist need not take sides.

Third, although the intentionalist has to acknowledge logical space for the view that afterimage-, phosphene-, and pain-experiences are sometimes (or even always) illusory, or that afterimages, phosphenes, and pains-as-objects may exist unperceived, she is free to deny both outright. As was in effect noted in the earlier discussion of intentionalism and the sense-datum theory, intentionalism is perfectly compatible with afterimages, phosphenes, and pains-as-objects being exactly as they appear to be, or with their *esse* being *percipi*. For similar reasons, an intentionalist may consistently concede that the right account of blurry vision demands a Peacockean visual field with a blurry' region. (For myself, I do not think that such additions to intentionalism are at all motivated. But this is to enter a debate that is not the topic of this paper.)

Undeniably the questions raised in the previous three paragraphs are interesting and important, but intentionalism can be defended without answering them. If the anti-intentionalist demands more, it is a dialectical error to try to accommodate him.

9. Zombies and the Common Worry

Suppose that the argument so far is correct. Intentionalism is true, and so the yet-to-be examined Class III objections involving zombiestyle cases don't work. But isn't a flat denial a mite unsatisfactory? Doesn't it at least *seem* as if zombies are possible? No: not if zombies are properly understood.

If zombies are possible, then surely something strictly stronger is possible, namely, that one become a zombie.⁵² What would it be like? Chalmers describes a kind of zombification taking place gradually in a hapless Joe who is "functionally isomorphic" to Chalmers himself. They are both at a basketball game when tragedy strikes:

What is it like to be Joe?... He says all the same things about his experiences as I do about mine. At the basketball game, he exclaims about the glaring bright red-and-yellow uniforms of the basketball players.

 $^{^{52}}$ Obviously the general principle—Fs are possible, therefore it is possible to become an F—is mistaken. But there seems no especially motivated reason only to hold the weaker claim in the zombie case. And in any event, the stronger claim is not essential to what follows: having it in place merely helps the rhetoric.

By hypothesis, though, Joe is not having bright red and yellow experiences at all. Instead, perhaps he is experiencing tepid pink and murky brown....

For specificity, then, imagine that Joe sees a faded pink where I see bright red, with many distinctions between shades of my experience no longer present in shades of his experience. Where I am having loud noise experiences, perhaps Joe is experiencing only a distant rumble. Not everything is bad for Joe: where I have a throbbing headache, he only has the mildest twinge. (1996, 256)⁵³

Chalmers takes this to be a case of "fading qualia": Joe's inner light-bulb is getting dimmer, while the external world seems to Joe as bright as ever. But this description is plainly wrong: instead, the external world seems faded to Joe (so, for example, it visually appears to Joe that the uniforms are tepid pink—and earlier it visually appeared to him that they were bright red). Since the world doesn't seem that way to Chalmers, the content of Chalmers's experience differs from the content of Joe's, and therefore Joe is not on the way to being Chalmers's zombie twin. In fact, it doesn't matter whether it is the scene on the court, or Joe's sense-data, or even Joe's experience, that seems faded. Provided something seems faded to Joe, the content of his experience differs from Chalmers's, thus preventing zombification from occurring. The absurdity of fading qualia is even brought out by some of Chalmers's own phrasing (Joe "sees a faded pink," "is experiencing only a distant rumble," etc.). ⁵⁴

⁵³Chalmers is describing this case in order to argue that it is *nomologically* impossible. He thinks it is metaphysically possible, however. For a similar example, see Searle 1992, chap. 3; an interesting recent discussion is in Levine 2001, chap. 6.

⁵⁴A couple of points in partial defense of Chalmers. First, when Chalmers says that Joe "sees a faded pink," he clearly doesn't mean what this phrase ordinarily means in English. So it would be quite unfair to accuse Chalmers of describing the "fading qualia" scenario inconsistently by his own lights. Nonetheless, no matter what special philosophical terminology Chalmers chooses to describe the scenario, it's clear how it is supposed to be imagined, and equally clear (to me, at any rate) that this is not a case of zombification.

Second, Chalmers's view is actually more subtle and complex than the previous two paragraphs in the text suggest. On his use of 'zombie', I and my zombie twin might differ with respect to a special kind of intentional state, a "phenomenal belief," an instance of which is the belief that I am having a "red experience" (that is, an experience with a certain phenomenal character) (see 1996, 203–9). Chalmers, then, has the resources to describe Joe as differing from Chalmers in phenomenal beliefs, while remaining the same in all other intentional respects (and he is certainly not using the basketball scenario to argue otherwise). Chalmers could therefore agree that Joe does not

"Suddenly disappearing qualia" are no less absurd, although perhaps fading qualia make the absurdity easier to see. If the apparent scene before Joe's eyes instantly blinks out, then the content of his experience changes in the most drastic way possible: the world now doesn't seem any way to Joe, and so he is not enjoying an experience with any content. Therefore, it is not possible to become a zombie. If zombies are possible, becoming a zombie is possible; hence, zombies aren't possible. ⁵⁵

Now to the Common Worry. That was, remember, the rather vague complaint that the intentionalist has no account of the difference between those intentional states that have phenomenal character and those that don't. There are a number of separate issues here that need to be teased apart.

There is no difficulty in explaining why *some* intentional states lack phenomenal character. No state can have phenomenal character unless it involves *(occurrent) awareness* (understood non-factively), and not all do. For example, there need be nothing it's like to believe that Cambridge is next to Boston. This is simply because one may have this belief without being aware that Cambridge is next to Boston, as happens when one is otherwise preoccupied, or asleep.

However, there are two genuine problems. First, take perceptual experiences. According to intermodal intentionalism, if two such experiences have the same content, then they are alike in phenomenal character. And this is perfectly consistent with some—or even all—perceptual experiences *lacking* phenomenal character. Of course, we know that perceptual experiences—for instance, the experience of looking at a tomato—*have* phenomenal character, but that is no thanks to the argument of section 3. And although there do not appear to be any *actual* cases of perceptual experiences that lack phenomenal character, perhaps there could be such cases. That is, perhaps there is a content such that a (non-actual) perceptual experience with that con-

become Chalmers's zombie twin in the sense of sharing *all* Chalmers's intentional states. However, there would seem to be no obvious reason why we must suppose that Chalmers in the basketball scenario has any beliefs about his experiences at all, and so no obvious reason why he has any phenomenal beliefs. And if we may suppose that Chalmers in the basketball scenario has no phenomenal beliefs, then (according to Chalmers) Joe's "fading qualia" won't produce any change in his intentional states.

⁵⁵Remember that the issue isn't physicalism. For all I've said, there could be a physical duplicate of Chalmers who is not in any states with phenomenal character. See note 29 above.

tent lacks phenomenal character. Or perhaps not. In any event, nothing that has been said helps us decide one way or the other.⁵⁶

Second, if we widen the focus to include all states that involve occurrent awareness, arguably there are some *actual* examples that lack phenomenal character. Consider, for instance, realizing that one has locked oneself out, or remembering the date of an appointment, or wondering what to have for lunch. Why is there nothing it's like to realize that one has locked oneself out, and something it's like to see one's keys? The answer is not in this paper.

So there is something to the Common Worry: intentionalism leaves us with some hard questions. But of course this is only to be expected—similar questions arise in connection with other supervenience theses, for instance the supervenience of the evaluative on the descriptive, or the psychological on the physical. The Common Worry is not an *objection* to intentionalism, but rather a reminder of its limitations.⁵⁷

Intentionalism, then, isn't much of a theory of consciousness. But it is true—or so I've tried to argue—and therefore is a point from which theorizing about consciousness should start.

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⁵⁶The content of the perceptual experiences creatures like us enjoy is, on anyone's account, severely limited. For instance, intuitively the content of a visual experience is silent on the interior of an opaque object like a tomato. Mathematical, counterfactual, and ethical propositions provide more extreme cases. Although such propositions can of course be believed, they are on most views poor candidates to be the contents of some actual perceptual experiences. But might they be the contents of some *possible* experiences? And if so, would such experiences have phenomenal character?

⁵⁷Dretske, Lycan, and Tye all attempt to tackle the hard questions, although they sharply disagree about how intentionalism is best supplemented. For critical discussion of the various supplements, see Levine 1997 (Tye), McGinn 1997 (Dretske), and Neander 1998 (Lycan and Dretske).

Bibliography

- Aglioti, Salvatore, Joseph F. X. DeSouza, and Melvyn. A. Goodale. 1995. "Size-Contrast Illusions Deceive the Eye but not the Hand." *Current Biology* 5:679-85.
- Alston, William. 1998. "Perception and Conception." In *Pragmatism, Reason, and Norms*, ed. Kenneth R. Westphal, 59–87. New York: Fordham University Press.
- Armstrong, David M. 1962. *Bodily Sensations*. London: Routledge and Kegan Paul.
- . 1968. A Materialist Theory of the Mind. London: Routledge and Kegan Paul.
- Baldwin, Thomas. 1990. G. E. Moore. London: Routledge.
- ——. 1992. "The Projective Theory of Sensory Content." In *The Contents of Experience*, ed. Tim Crane, 177–95. Cambridge: Cambridge University Press.
- Block, Ned. 1990. "Inverted Earth." In *Philosophical Perspectives*, vol. 4, ed. James E. Tomberlin, 53–79. Atascadero, Calif.: Ridgeview.
- ——. 1995a. "On a Confusion About a Function of Consciousness." Behavioral and Brain Sciences 18:225–47.
- . 1995b. "How Many Concepts of Consciousness?" *Behavioral and Brain Sciences* 18:272–84.
- ——. 1996. "Mental Paint and Mental Latex." In *Philosophical Issues*, vol. 7, ed. Enrique Villanueva, 19–49. Atascadero, Calif.: Ridgeview.
- ——. 1998. "Is Experiencing Just Representing?" *Philosophy and Phenomenological Research* 58:663-70.
- ——. 1999. "Sexism, Racism, Ageism and the Nature of Consciousness." In *Philosophical Topics*, vol. 26, nos. 1–2: *The Philosophy of Sydney Shoemaker*, ed. Richard Moran, Alan Sidelle, and Jennifer E. Whiting, 39–70. Fayetteville: University of Arkansas Press.
- ——. Forthcoming. "Mental Paint." In *Others on Burge: 10 Essays With Responses From Tyler Burge*, ed. Martin Hahn and Bjørn Ramberg. Cambridge: MIT Press. (Available online at www.nyu.edu/gsas/dept/philo/faculty/block/papers/mentalpaint.pdf.)
- Boghossian, Paul A., and J. David Velleman. 1989. "Colour as a Secondary Quality." *Mind* 98:81–103.
- ——. 1991. "Physicalist Theories of Color." Philosophical Review 100:67–106.
- Broad, C. D. 1965. "The Theory of Sensa." Excerpt from *Scientific Thought*, in *Perceiving, Sensing, and Knowing*, ed. Robert J. Swartz, 85–129. Berkeley: University of California Press.
- Burge, Tyler. 1986. "Cartesian Error and the Objectivity of Perception." In

- Subject, Thought, and Context, ed. Philip Pettit and John McDowell, 117–36. Oxford: Oxford University Press.
- ——. 1991. "Vision and Intentional Content." In *John Searle and His Critics*, ed. Ernest Lepore and Robert Van Gulick, 195–213. Oxford: Blackwell.
- ——. 1997. "Two Kinds of Consciousness." In *The Nature of Consciousness*, ed. Ned Block, Owen Flanagan, and Güven Güzeldere, 427–33. Cambridge: MIT Press.
- ——. Forthcoming. "Reply to Block." In *Others on Burge: 10 Essays With Responses From Tyler Burge*, ed. Martin Hahn and Bjørn Ramberg. Cambridge: MIT Press.
- Clark, Austen. 1996. "Three Varieties of Visual Field." Philosophical Psychology 9:477–95.
- Chalmers, David J. 1996. The Conscious Mind. Oxford: Oxford University Press.Davies, Martin. 1991. "Individualism and Perceptual Content." Mind 100:461–84.
- ------. 1992. "Perceptual Content and Local Supervenience." *Proceedings of the Aristotelian Society* 92:21–45.
- Dennett, Daniel C. 1991. Consciousness Explained. Boston: Little, Brown.
- Dretske, Fred. 1995. Naturalizing the Mind. Cambridge: MIT Press.
- -----. 1999. "The Mind's Awareness of Itself." *Philosophical Studies* 75:1–22.
- Evans, Gareth. 1982. The Varieties of Reference. Oxford: Oxford University Press.
- Fales, Evan. 1996. A Defense of the Given. Lanham, Md.: Rowman & Littlefield.
- Farrell, B. A. 1950. "Experience." *Mind* 59:170–98.
- Graham, George, and G. Lynn Stephens. 1985. "Are Qualia a Pain in the Neck for Functionalists?" *American Philosophical Quarterly* 22:73-80.
- Hamlyn, D. W. 1961. Sensation and Perception. London: Routledge and Kegan Paul.
- Harman, Gilbert. 1990. "The Intrinsic Quality of Experience." In *Philosophical Perspectives*, vol. 4, ed. James E. Tomberlin, 31–52. Atascadero, Calif.: Ridgeview.
- ——. 1996. "Qualia and Color Concepts." In *Philosophical Issues*, vol. 7, ed. Enrique Villanueva, 75–79. Atascadero, Calif.: Ridgeview.
- ——. 1998. "Intentionality." In *A Companion to Cognitive Science*, ed. William Bechtel and George Graham, 602–10. Oxford: Blackwell.
- Hill, Christopher. 1991. Sensations. Cambridge: Cambridge University Press.
- Hinton, J. M. 1967. "Visual Experiences." *Mind* 76:217–27.
- ——. 1973. Experiences. Oxford: Oxford University Press.
- Jackson, Frank. 1982. "Epiphenomenal Qualia." *Philosophical Quarterly* 32:127–36.

Johnston, Mark. 1997. "Postscript: Visual Experience." In Readings on Color, vol. 1: The Philosophy of Color, ed. Alex Byrne and David R. Hilbert, 172–76. Cambridge: MIT Press. ——. 1998. "The Manifest." -----. 2000. "The Obscure Object of Hallucination." Kim, Jaegwon. 1984. "Concepts of Supervenience." Philosophy and Phenomenological Research 45:153-76. Kraut, Robert. 1982. "Sensory States and Sensory Objects." Noûs 16: 277-93. Levine, Joseph. 1997. "Are Qualia Just Representations? A Critical Notice of Michael Tye's Ten Problems of Consciousness." Mind and Language 12:101-13. —. 2001. Purple Haze. Oxford: Oxford University Press. Lewis, David K. 1966. "Percepts and Color Mosaics in Visual Experience." Philosophical Review 75:357-68. ——. 1980a. "Mad Pain and Martian Pain." In Readings in the Philosophy of Psychology, vol. 1, ed. N. Block, 216-22. Cambridge: Harvard University Press. —. 1980b. "Veridical Hallucination and Prosthetic Vision." Australasian Journal of Philosophy 58:239-49. —. 1983. "Knowing What It's Like: Postscript to 'Mad Pain and Martian Pain'." In Lewis, Philosophical Papers, vol. 1, 130-32. Oxford: Oxford University Press. -----. 1986. On the Plurality of Worlds. Oxford: Blackwell. Lowe, E. J. 2000. An Introduction to the Philosophy of Mind. Cambridge: Cambridge University Press. Lycan, William G. 1987. Consciousness. Cambridge: MIT Press. -----. 1996a. "Layered Perceptual Representation." In Philosophical Issues, vol. 7, ed. Enrique Villanueva, 81-100. Atascadero, Calif.: Ridgeview. —. 1996b. Consciousness and Experience. Cambridge: MIT Press. Martin, Michael G. F. 1994. "Perceptual Content." In A Companion to the Philosophy of Mind, ed. Samuel Guttenplan, 463-71. Oxford: Blackwell. —. 1997. "The Reality of Appearances." In Thought and Ontology, ed. Mark Sainsbury, 81–106. Milan: FrancoAngeli. Maund, Barry. 1995. Colours. Cambridge: Cambridge University Press. McDowell, John. 1982. "Criteria, Defeasibility and Knowledge." Proceedings of the British Academy 68:455-79. —. 1994. Mind and World. Cambridge: Harvard University Press. McGinn, Colin. 1988. "Consciousness and Content." Proceedings of the British Acadamy 74:219-39. Reprinted in McGinn, The Problem of Consciousness

—. 1989. Mental Content. Oxford: Basil Blackwell.

(Oxford: Blackwell, 1991).

- ——. 1996. The Character of Mind, 2d ed. Oxford: Oxford University Press.
- ——. 1997. "Critical Study of Dretske's Naturalizing the Mind." Noûs 31:528–37.
- Milner, A. David, and Melvyn. A. Goodale. 1995. *The Visual Brain in Action*. Oxford: Oxford University Press.
- Moser, Paul K. 1989. *Knowledge and Evidence*. Cambridge: Cambridge University Press.
- Nagel, Thomas. 1970. "Review of Armstrong's A Materialist Theory of the Mind." Philosophical Review 79:394–403.
- . 1974. "What Is It Like to Be a Bat?" Philosophical Review 83:435–50.
- Neander, Karen. 1998. "The Division of Phenomenal Labor: a Problem for Representational Theories of Consciousness." In *Philosophical Perspectives*, vol. 12, ed. James E. Tomberlin, 411–34. Oxford: Blackwell.
- Peacocke, Christopher. 1983. Sense and Content. Oxford: Oxford University Press.
- ——. 1984. "Colour Concepts and Colour Experience." Synthese 58:365-82.
- -----. 1992. A Study of Concepts. Cambridge: MIT Press.
- Pendlebury, Michael. 1990. "Sense Experiences and Their Contents: a Defence of the Propositional Account." *Inquiry* 33: 215–30.
- Perkins, M. 1983. Sensing the World. Indianapolis: Hackett.
- Pitcher, George. 1970. "Pain Perception." Philosophical Review 79:368-93.
- . 1971. A Theory of Perception. Princeton: Princeton University Press.
- Reid, Thomas. [1764] 1997. An Enquiry into the Human Mind. Edinburgh: Edinburgh University Press.
- ——. [1785] 1969. Essays on the Intellectual Powers of Man. Cambridge: MIT Press.
- Rey, Georges. 1993. "Sensational Sentences." In *Consciousness*, ed. Martin Davies and Glyn W. Humphreys, 240–57. Oxford: Blackwell.
- ——. 1998. "A Narrow Representationalist Account of Qualitative Experience." In *Philosophical Perspectives*, vol. 12, ed. James E. Tomberlin, 435–57. Oxford: Blackwell.
- Robinson, Howard. 1994. Perception. London: Routledge.
- Robinson, William S. 1998. "Intrinsic Qualities of Experience: Surviving Harman's Critique." *Erkenntnis* 47:285–309.
- Rosenthal, David. 1986. "Two Concepts of Consciousness." *Philosophical Studies* 94:329–59.
- Searle, John R 1983. Intentionality. Cambridge: Cambridge University Press.
- ——. 1992. The Rediscovery of the Mind. Cambridge: MIT Press.
- Sellars, Wilfred. 1997. Empiricism and the Philosophy of Mind. Cambridge: Harvard University Press. (Originally published in Minnesota Studies in the Philosophy of Science 1, ed. Herbert Feigl and Michael Scriven, 1956.)

- Shoemaker, Sydney. 1982. "The Inverted Spectrum." *Journal of Philosophy* 79:357–81.
- ——. 1990. "Qualities and Qualia: What's in the Mind?" *Philosophy and Phenomenological Research* 50 (supp.): 109–31.
- ——. 1994a. "Self-Knowledge and 'Inner Sense'. Lecture III: The Phenomenal Character of Experience." *Philosophy and Phenomenological Research* 54:219–314.
- ——. 1994b. "Phenomenal Character." Noûs 28:21–38.
- ——. 1996. "Intrasubjective/Intersubjective." In Shoemaker, *The First-Person Perspective and Other Essays*, 141–54. Cambridge: Cambridge University Press.
- Smart, J. J. C. 1959. "Sensations and Brain Processes." *Philosophical Review* 68:141–56.
- Snowdon, Paul F. 1981. "Perception, Vision, and Causation." *Proceedings of the Aristotelian Society* 81:176–92.
- Stalnaker, Robert. 1998. "What Might Nonconceptual Content Be?" In *Philosophical Issues*, vol. 9, ed. Enrique Villanueva, 339-52. Atascadero, Calif.: Ridgeview.
- ——. 1999. "Comparing Qualia Across Persons." In *Philosophical Topics*, vol. 26, nos. 1–2: *The Philosophy of Sydney Shoemaker*, ed. Richard Moran, Alan Sidelle, and Jennifer E. Whiting, 385–405. Fayetteville: University of Arkansas Press.
- Strawson, Galen. 1994. Mental Reality. Cambridge: MIT Press.
- Sturgeon, Scott. 1998. "Visual Experience." *Proceedings of the Aristotelian Society* 98:179–200.
- Thau, Michael. Forthcoming. *Consciousness and Cognition*. Oxford: Oxford University Press.
- Tye, Michael. 1992. "Visual Qualia and Visual Content." In *The Contents of Experience*, ed. Tim Crane, 158–76. Cambridge: Cambridge University Press.
- ——. 1995. Ten Problems of Consciousness. Cambridge: MIT Press.
- ——. 1996. "Perceptual Experience is a Many-Layered Thing." In *Philosophical Issues*, vol. 7, ed. Enrique Villanueva, 117–26. Atascadero, Calif.: Ridgeview.
- -----. 2000. Consciousness, Color, and Content. Cambridge: MIT Press.
- Van Gulick, Robert. 1995. "How Should We Understand the Relation Between Intentionality and Phenomenal Consciousness?" In *Philosophical Perspectives*, vol. 9, ed. James E. Tomberlin, 271–89. Atascadero, Calif.: Ridgeview.
- Vision, Gerald. 1997. Problems of Vision. Oxford: Oxford University Press.
- Williamson, Timothy. 1995. "Is Knowing a State of Mind?" Mind 104:553-65.

	1996.	"Cognitive Homelessness." Journal of Philosophy 93:554-73.
 .	2000.	Knowledge and its Limits. Oxford: Oxford University Press.