

AS



---

Perceptual Content and Local Supervenience

Author(s): Martin Davies

Source: *Proceedings of the Aristotelian Society*, New Series, Vol. 92 (1992), pp. 21-45

Published by: [Blackwell Publishing](#) on behalf of [The Aristotelian Society](#)

Stable URL: <http://www.jstor.org/stable/4545144>

Accessed: 27/08/2011 14:15

---

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



*The Aristotelian Society* and *Blackwell Publishing* are collaborating with JSTOR to digitize, preserve and extend access to *Proceedings of the Aristotelian Society*.

<http://www.jstor.org>

## II\*—PERCEPTUAL CONTENT AND LOCAL SUPERVENIENCE

by Martin Davies

Is perceptual content locally supervenient? Is it preserved across duplicates? Like Tyler Burge (1986, 1988a, 1988b), I return a negative answer—an externalist, or anti-individualist answer—to this question. But before that answer can be defended, we need to be a little clearer both about local supervenience and about perceptual content.

### *Local supervenience*

To say that certain intentional mental properties of an individual subject are locally supervenient is to say (Burge, 1986, p. 4) that they

could not be different from what they are, given the individual's physical, chemical, neural, or functional histories, where these histories are specified non-intentionally and in a way that is independent of physical or social conditions outside the individual's body.

This is a claim of *local* supervenience, since it says that what goes on inside the individual's skin is enough to fix those intentional properties. If an intentional property F of an individual x is locally supervenient, then any other individual y that is a duplicate of x (is the same from the skin inwards) also has F.

To say that certain intentional properties supervene locally upon physical properties (say) is to make a much stronger claim than merely that those intentional properties supervene upon the total physical state of the universe. Supervenience claims vary in strength along a dimension determined by the spatial extent of the subvening basis. But, supervenience claims also vary in strength along modal dimensions, and what is at issue here is a *modally strong* local supervenience claim: If x has intentional property F in

\*Meeting of the Aristotelian Society, held in the Senior Common Room, Birkbeck College, London on Monday 21st October, 1991 at 8.15 p.m.

possible world  $w_1$ , and  $y$  is a duplicate in  $w_2$  of  $x$  (in  $w_1$ ), then  $y$  has  $F$  in  $w_2$ . In particular, for example, this claim extends to a counterfactual duplicate  $y$  of an actual individual  $x$ . It is important to distinguish this modally strong claim from a weaker claim that concerns only duplicates within the same possible world: If  $x$  has intentional property  $F$  in possible world  $w$ , and  $y$  is a duplicate in  $w$  of  $x$ , then  $y$  has  $F$  in  $w$ . (For a taxonomy of supervenience claims, and a map of their entailment relations, see McFetridge, 1985. In his notation, the modally strong claim concerns (XYWW') supervenience; and the claim about counterfactual duplicates of actual individuals concerns (XYAW) supervenience. The weaker claim is about (XYWW) supervenience.)

The externalist, or anti-individualist, about some class of intentional properties denies this strong supervenience claim. Consequently, the externalist's own claim is relatively modest. The externalist argues that there is at least one case in which duplicates  $x$  and  $y$ , embedded in possible circumstances  $w_1$  and  $w_2$  respectively, differ in the relevant intentional properties.

### *Perceptual content*

A subject's experiences present the world to her as being a certain way. Those experiences may be correct or incorrect—veridical or hallucinatory. In short, experiences have representational or semantic properties; they have content.

This perceptual content of experiences is a kind of non-conceptual content. A subject can have an experience with a certain content without possessing the concepts that would be used in specifying the content of that experience. Indeed, the philosophical category of perceptual content applies equally to the experiences of normal adult human beings, who are deployers of concepts, and to the experiences of human infants and certain other creatures (dogs and frogs, as it might be), who arguably are not deployers of concepts. Enjoying experiences with perceptual content does not require the possession of concepts; *a fortiori*, it does not require the employment of such concepts as may be possessed.

Because perceptual content is a kind of non-conceptual content, it must be distinguished from the content of judgements that may be made if an experience is taken at face value. An experience may present the world to a subject as containing something square in

front of her; and the subject may take that experience at face value and judge that there is something square in front of her. Making the judgement requires possession and employment of the concept of being square; but merely undergoing the experience does not.

There is, of course, a close connection between possession of observational concepts, such as being square, and the non-conceptual content of experiences. Thus, Christopher Peacocke (1989, p. 5):

We can consider the case of a possession condition for a relatively observational concept. It is plausible that such a possession condition will link mastery of the concept in question to the nonconceptual representational contents of the thinker's perceptual experience.

Possession of those concepts requires a certain answerability of judgements to the perceptual content of experiences. As Colin McGinn says (1989, p. 60), 'to have the concept *square* just is to apply it on the basis of experiences as of square things'. But it is the notion of perceptual content (of experiences *as of* . . .) that comes first in the order of philosophical explanation, and is then appealed to in an account of what it is to possess a concept such as being square.

Evans (1982, pp. 151–70) introduces the idea that perceptual experiences have content that is not conceptual. But the use that I am making of the idea does not quite preserve all the features of Evans's account. Evans also speaks of 'the non-conceptual content of perceptual information states' (p. 157); and distinguishes between mere perceptual information states and perceptual *experiences*. After classifying perceptual experiences as states of a conscious subject, he then, crucially, equates a conscious subject with a thinking subject. Consequently (p. 158):

we arrive at conscious perceptual experience when sensory input is not only connected to behavioural dispositions . . . but also serves as the input to a *thinking, concept-applying, and reasoning system*.

For Evans, then, we only have experiences with perceptual content where we also have a thinker. Where there is no thinker, there is no conscious experience; and the perceptual states with non-conceptual

content are like the information states that enable a blindsight patient to 'guess' correctly the direction of a light source (1982, p. 158).

Pending a much improved understanding of the notion of consciousness, I would not, myself, impose such a strict standard for perceptual experience. But, despite this difference from Evans, the key idea remains (p. 159):

It is not necessary, for example, that the subject possess the egocentric *concept* 'to the right' if he is to be able to have the experience of a sound as being to the right. I am not requiring that the content of conscious experience itself be conceptual content.

With so much by way of clarification, we can turn to the question what is involved in defending externalism concerning perceptual content.

## I

*Externalism and individualism: Arguments, examples and stances*  
The conceptual content of judgments and beliefs is one thing; the perceptual content of experiences is another. Externalist arguments about the one cannot necessarily be used to defend externalist claims about the other.

*1.1 Varieties of externalist argument* Some celebrated externalist arguments about belief content (e.g. Burge, 1979) are designed to show that the contents of certain beliefs—famously, beliefs about arthritis—are not locally supervenient because they depend in part upon the *social* context of the believer. (Again, it is modally strong local supervenience that is at issue in these arguments.) Whether or not those social externalist arguments about belief content are compelling, the social dimension does not figure at all in Burge's externalist arguments concerning perceptual content. In the case of perceptual content, the externalism for which Burge argues is a form of *environmental*, rather than social, externalism (1986, p. 25):

Ascription of intentional states and events in psychology constitutes a type of individuation and explanation that

carries presuppositions about the specific nature of the person's or animal's surrounding environment.

Social externalist arguments about belief content often seem to depend upon the social character of public language meaning—a dependence mediated by a presumed close tie between belief content and the linguistic meaning of reports and expressions of belief. So, it is unsurprising that there are no social externalist arguments about perceptual content; for perceptual content is reasonably assumed to be independent of public language (cf. Burge, 1986, p. 26).

But this independence of perceptual content from linguistic meaning has more widespread consequences, too. Many familiar 'Twin Earth' arguments for externalism in the case of belief content—environmental as well as social—go in step with arguments for the externalism of meaning. Indeed, the line of argument began with meaning (Putnam, 1975), and was then transposed to belief (see McGinn, 1989, p. 31). In the case of perceptual content, a different argumentative strategy is required.

Of course, in the case of belief content—particularly the contents of *de re* beliefs—there are environmental externalist arguments that proceed directly, rather than via externalism about meaning. But what is at stake in the case of perceptual content is not analogous to externalism about *de re* beliefs.

If I look at an apple, Fido, and think, 'teacher would enjoy that apple', and you look at a numerically distinct but qualitatively indistinguishable apple, Fifi, and think, 'teacher would enjoy that apple', then—be we ever so similar internally—our beliefs have different contents in virtue of our being related to different apples. My belief, concerning Fido, that teacher would like that apple is a belief whose correctness depends upon how things are with Fido: whether Fido is indeed an apple that the teacher would like. Your belief, in contrast, is one whose correctness is indifferent to how things are with Fido, but depends instead upon how things are with Fifi. In that sense, the contents of our beliefs are object-involving.

This is the familiar intuition about the (broad, truth conditional) content of *de re* beliefs; and the intuition carries over to the case of two beliefs held by a single subject. But in the case of perceptual content, it is plausible that if two objects are genuinely

indistinguishable for a subject, then a perceptual experience of the one has the same content as a perceptual experience of the other. The source of this plausibility is the thought that the perceptual content of experience is a phenomenal notion: perceptual content is a matter of how the world *seems* to the experiencer (Evans, 1982, p. 154; McGinn, 1989, p. 66). If perceptual content is, in this sense, 'phenomenological content' (McGinn, *ibid.*) then, where there is no phenomenological difference for the subject, there is no difference in perceptual content.

If perceptual content is phenomenological content then, it seems, it is not object-involving. But from this it does not follow that perceptual content is not truth conditional—not fully representational; for we can take perceptual content to be existentially quantified content. A visual experience may present the world as containing *an* object of a certain size and shape, in a certain direction, at a certain distance from the subject. It matters not at all to that existentially quantified content of a subject's experience whether, for example, it is Fido or Fifi that she is looking at.

If perceptual content is truth conditional, although not object-involving, then the individualist about perceptual content is in a very different position from the individualist about belief content.

In the case of object-involving belief content, there are familiar proposals to factor the content into two components. There is one component that the content of my belief about Fido has in common with the content of your belief about Fifi; and there is another component that is not shared—a component that determines the involvement of the particular apple Fido in the correctness conditions of my belief (e.g. McGinn, 1982). The first component is supposed to be locally supervenient, and so preserved across actual and counterfactual duplicates. But it does not, by itself, determine truth conditions. The second component is a matter of how things are in my environment. More specifically, the second component concerns causal relations between my brain and a particular object in my environment, namely Fido.

In the context of a dual component, or two factor, proposal of this kind, the individualist typically says that, for serious explanatory purposes, attention should be restricted to the first component. The individualist accepts that the truth conditional

content of beliefs is not locally supervenient, but says that for explanatory purposes beliefs should be classified by their *narrow* content, which is locally supervenient. Thus, the individualist about belief content recommends the employment of a kind of content that is locally supervenient, but is not fully representational; that is, not truth conditional, not semantically evaluable (Fodor, 1986; 1987, Chapter 2). For the narrow content of a belief does not itself specify how the world would have to be for the belief to be correct. The narrow content that my belief and your belief share does not itself specify whether the correctness of my belief turns upon how things are with Fido or upon how things are with Fifi, for example.

Because of the differences between perceptual content and belief content—especially, because perceptual content is not object-involving—it is open to the individualist about perceptual content, in contrast, to say that experiences have content that is both locally supervenient and fully representational. Indeed, I shall take it that this is just what the individualist says, and that this is what the externalist has to argue against.

In order to establish his case, the externalist is obliged to produce a persuasive example with the following structure. First, in some possible situation  $w_1$ —perhaps the actual situation—a subject  $x$  has an experience with a certain existentially quantified content. For example, it might be an experience as of a square object of a certain size (cf. McGinn, 1989), or an experience as of a shadow of a certain size and shape (cf. Burge 1986, 1988a). Second, a duplicate subject  $y$  in some other possible situation  $w_2$  has an experience which, despite everything being the same from the skin inwards, does not have that same content. This is all that is required to refute the modally strong claim of local supervenience. But the externalist may go further by trying to make it plausible, not merely that the duplicate's experience does not have the same content as the original subject's experience, but also that the duplicate's experience has some specific alternative content. It might be that the duplicate's experience is as of a round object, instead of as of a square object, or that the duplicate's experience is as of a crack, instead of as of a shadow.



*1.2 Two individualist stances* Given a putative externalist example with this structure, the individualist may adopt one of two possible stances. The individualist who adopts a *conservative* stance towards an example accepts the externalist's specification of the content of the experience in the original possible situation (say, the actual situation). But the individualist then rejects the externalist's claim that the experience of the duplicate in the alternative possible situation does not have that same content. Thus, for example, an individualist adopting a conservative stance may accept that an actual subject has an experience as of a shadow; but the individualist then insists that the duplicate subject's experience is also as of a shadow, despite the environmental differences.

The individualist who adopts a *revisionary* stance towards an example does not accept the externalist's specification of the content of the experience in the original possible situation. Thus, for example, an individualist adopting a revisionary stance might agree that, *if* an actual subject's experience is as of a shadow, then the experience of a duplicate may differ in content. But the individualist insists that the specification of the content of the actual subject's experience—as of a shadow—is unmotivated. The experiences of both the actual subject and the duplicate subject should be assigned some more inclusive content—perhaps: as of a shadow-or-crack.

Robert Matthews illustrates how to adopt each kind of stance in response to versions of Burge's (1986, 1988a) example of the shadows and cracks. In Burge's story, an individual P normally perceives Os (shadows of a certain small size) as Os, but occasionally misperceives a C (a similarly sized crack) as an O. In a counterfactual situation (1988a, pp. 75-6):

there are no visible Os . . . [and] . . . the visual impressions caused by and explained in terms of Os in the actual situation are counterfactually caused by and explained in terms of Cs—relevantly sized cracks. The cracks are where the shadows were in the actual case.

In the actual situation, the subject P sees shadows as shadows and occasionally sees a crack as a shadow. Concerning the counterfactual situation, Burge makes a bolder and a more cautious claim. The bolder claim is that, 'Counterfactually, . . . P sees Cs as Cs'

(1988a, p. 76); that is, the duplicate sees cracks as cracks. The more cautious claim is just that the duplicate does not see the cracks as shadows (1988b, p. 95):

[N]othing in the argument depends on attributing any specific perceptual states to the organism in the counterfactual situation. All that is important is that it be plausible that the counterfactual perceptual states are different from those in the actual situation. So the question about whether . . . the organism perceives cracks as cracks in the counterfactual situation is not directly relevant to the argument.

This latter claim reflects just how little is dialectically required of the externalist. He only has to make it plausible that the subject in the counterfactual situation differs from the subject in the actual situation to the extent of not seeing the cracks as shadows.

Matthews demonstrates a conservative individualist stance as follows. In Burge's illustration, 'we may imagine that the sort of entities being perceived are very small and are not such as to bear on the individual's success in adapting to the environment' (1988a, p. 75). But suppose instead, says Matthews (1988, p. 83):

that the shadows and cracks in question are important to the organism's adaptive success, e.g., that the shadows are important sources of shade for the organism during the heat of the day, and that the cracks are large enough that the organism risks injury if it should fall into them.

In the actual situation, then, the organism will go towards whatever is seen as a shadow, and avoid whatever is seen as a crack; the type of experience that is normally produced by shadows will be connected to dispositions to produce certain bodily movements. It is built into Burge's example that behavioural dispositions are the same in the counterfactual situation as in the actual situation. So, likewise in Matthews's variant, the same connections to bodily movements will be present in the duplicate in the counterfactual situation in which there are cracks where the shadows were.

Now, the externalist is supposed to make it plausible that the duplicate sees cracks as cracks, or at least not as shadows. But (Matthews, 1988, p. 83):

If in the counterfactual environment the organism repeatedly fell into the cracks when during the heat of the day it sought shelter from the sun, we would surely conclude that in this environment the organism perceives cracks as shadows, or at least not as cracks.

The behaviour consequent upon the organism's visual experiences in the counterfactual situation supports the attribution of the very same content as in the actual situation. (If the individualist is adopting a conservative stance then it is not adequate merely to argue that the organism does not see cracks as cracks; he must maintain that the organism sees cracks as shadows.)

Matthews shows how to adopt a revisionary stance in response to Burge's original version of his illustration in which no particularly adaptive behaviour is produced as a result of the type of experience that is normally caused in the actual situation by shadows. In this case (Matthews, 1988, p. 83):

Burge has provided no reason for supposing that in the counterfactual environment the organism perceives cracks as cracks. Of course, there is no reason to suppose that in the counterfactual environment the organism perceives cracks as shadows, but it hardly follows from this that it perceives cracks as cracks. Given that the organism does not discriminate cracks from shadows . . . one could as well argue that this organism perceives cracks and shadows as instances of one and the same type of entity.

An organism may perceive O's in the actual environment and C's in the counterfactual environment, not as O's or C's, but rather as instances of an objective type that includes both O's and C's.

If the behaviour that is consequent upon a type of experience is equally appropriate to a shadow and to a crack then we have no compelling reason to say that the experience is as of a shadow or that it is as of a crack. Just as we now lack a reason to say that the duplicate's experience is as of a shadow, so also we lack a reason for claiming that the experience of the organism in the actual situation is as of a shadow. Rather, we should say that both actual and counterfactual experiences are as of a shadow-or-crack. Thus

the revisionary individualist stance. (For a detailed development of this revisionary stance, see Segal, 1989. For a rejection of adopting the stance towards Burge's example, see Davies, 1991; and for a rejoinder, see Segal, 1991.)

*1.3 Causal covariance theories and a dilemma for the externalist*  
 What lesson should we draw from the individualist's adoption of one or the other of these stances towards the externalist's examples? One lesson concerns causal covariance theories of perceptual content.

Externalism is easy to establish if we take as a premise a covariance theory of content. For, according to such a theory, if the (predominant) causal antecedents of a type of experience are changed as between the actual and counterfactual situations, then the content of experiences of that type is changed, too.

But, causal covariance theories do not merely entail externalism. Covariance theories are pure input-side theories that nowhere advert to output factors such as behaviour. Consequently, they impose constraints upon putative externalist examples; particularly, upon pairs of examples that differ only in the behavioural consequences of experiences, and not in the causal antecedents of experiences. If two examples differ in that way, then they should agree in the content they assign to the organism's actual experience and in the content they assign to the duplicate's experience in the counterfactual situation.

Matthews's adoption of a conservative individualist stance exploits this consequence, and thereby casts doubt upon covariance theories. For Matthews's variant of the example of the shadows and cracks differs from Burge's own version of his illustration only in the causal consequences of experiences. Yet, it is markedly less plausible to say that the duplicate sees cracks as cracks in Matthews's variant than it is in Burge's original version.

This certainly counts against causal covariance theories of perceptual content. But it does not count straightforwardly against externalism unless the externalist is committed to a covariance theory; that is, unless the externalist is committed to saying that a difference in causal antecedents is sufficient for a difference in content. Is the externalist so committed?

Matthews seems to see such a commitment in Burge: 'we consider a modification of Burge's example that *should*, but does not, *leave his conclusion intact*' (1988, p. 82; emphasis added). But Burge himself stresses that he is not committed to any sufficient condition for an experience to have a particular content (1988b, p.93); and, so far from opting for a covariance theory, he regards evolutionary factors, for example, as relevant to the attribution of perceptual content (e.g. 1986, p. 40). In any case, it is clear that a causal covariance theory of content is not an essential requirement in an externalist argument. For, to rebut the modally strong claim of local supervenience, all that the externalist has to show is that there are some environmental differences between situations  $w_1$  and  $w_2$ —however thoroughgoing—that suffice for a difference of perceptual content between duplicates  $x$  in  $w_1$  and  $y$  in  $w_2$ .

Objections to covariance theories of content are not automatically objections to externalism. But still, the inadequacy of covariance theories serves to highlight the fact that attributions of perceptual content—particularly, contents involving shape and distance properties—are partly answerable to the subject's behaviour; and this fact presents the externalist with something of a dilemma.

For, either the subject in the actual situation produces behaviour that is particularly appropriate to the supposed content of her experience, or else she does not. If she does, and that behaviour perseveres into the counterfactual situation, then the individualist may adopt a conservative stance, insisting that the duplicate subject's experience has that same content. If she does not, then the individualist may adopt a revisionary stance, maintaining that the specification of content for the actual subject's experience is unmotivated.

This dilemma is particularly pressing for the externalist who sets out to show just what Burge aims to show with his example of the shadows and the cracks; namely, that perceptual content does not supervene upon internal constitution *plus behavioural dispositions* (1986, p. 39; 1988a, p. 69). But it is important to notice that this is strictly speaking more than the externalist is obliged to demonstrate. The externalist is allowed to have the duplicate's behavioural dispositions differ from those of the actual subject, to the extent that this is consistent with the two being duplicates.

This may appear to be a negligible degree of freedom for the externalist since, surely, the basis of behavioural dispositions is to be found inside the skin. But, if behaviour is itself characterised externalistically, then the production of behaviour of a certain type depends both upon what happens inside the skin—nerve firings, muscle contractions, and the like—and upon environmental factors. In principle, behaviour—externalistically characterised—can be varied even while everything inside the skin remains the same.

The externalist carries the day if, taking advantage of this freedom, he can construct a persuasive example against which neither a conservative nor a revisionary individualist stance can plausibly be adopted.

## II

### *Externalism vindicated*

In this section, my aim is to provide—at least in outline—a persuasive externalist example. I shall present the example in schematic form, and then sketch an instantiation of the schema by giving a twist to an example of McGinn's (1989, pp. 63–8).

*2.1 A schematic example* First, in some possible situation  $w_1$ —let us say, the actual situation—a subject  $x$  enjoys experiences with perceptual content. On the input side, perceptual states of intrinsic type  $T$  covary with the distal occurrence of visual property  $O$ . (We might think of  $O$  as a shape property—being square—or a distance property—being four feet away.) On the output side, the behaviour of type  $B$  that is consequent upon internal states of type  $T$  is particularly appropriate to  $O$ 's occurrence. Thus, the input side—distal antecedents—and the output side—behavioural consequences—are in harmony; and we can suppose that evolutionarily this is no accident.

We may assume that in securing covariation between  $T$  and  $O$ , the subject's visual system is doing just what it is supposed to do. Aspects or components of the visual system have been selected for their having the consequence that internal states of type  $T$  covary with occurrences of property  $O$ .

It does not seem illegitimate to suppose that, by elaborating these input-side, output-side, and teleological factors, we can make it plausible that the subject sees Os as Os; that is, that in the actual situation the perceptual states of type T are experiences as of an O.

Second, in some other possible situation  $w_2$ —a counterfactual situation—there is a duplicate  $y$  of  $x$ . This counterfactual situation is different from the actual situation in respect of the environment and perhaps also the laws of nature. As a result of these differences, distal occurrences of visual property C produce just the same retinal arrays as do occurrences of O in the actual situation. Consequently, perceptual states of the intrinsic type T covary with the occurrence of C, rather than of O. (We might think of C as a different shape property—being round—or a different distance property—being three feet away.)

Because  $y$  has the same internal constitution as  $x$ , states of type T have just the same internal consequences, such as nerve firings and muscle contractions, as in the actual situation. But, environmental differences in—as it might be—gravity or friction conspire to produce trajectories for  $y$ 's body that are quite different from those carved out by  $x$ 's body in the actual situation. Thus, input-output harmony is preserved: the behaviour of type D that is counterfactually consequent upon internal states of type T is distinctively appropriate to C's occurrence, rather than to O's.

Furthermore,  $y$ 's visual system is doing just what it is supposed to do. The ancestors of  $y$  have led full and happy lives and had lots of babies in part because internal states of type T covary with occurrences of C.

Once again, even without a constitutive theory of perceptual content to hand, it seems reasonable to suppose that we can make it plausible that the duplicate subject sees Cs as Cs; that is, that in the counterfactual situation the states of type T are experiences as of a C. *A fortiori*, we can make it plausible that those states are not experiences as of an O.

An example of this form cannot, of course, be used to demonstrate that perceptual content fails to supervene on internal constitution *plus* behavioural dispositions. For although we can plausibly vary perceptual content as between the actual and the counterfactual situation, we also vary behavioural dispositions if these are externalistically characterised in terms of bodily

trajectories. But, just as it stands, an example of this form tells against individualism. For it presents a difference of perceptual content between duplicates; and that is enough to establish all that the externalist is dialectically obliged to establish, namely that (Burge, 1986, p. 4):

A person's intentional states and events could (counterfactually) vary, even as the individual's physical, functional (and perhaps phenomenological) history . . . is held constant.

Whether it is possible to modify such an example so as to vary perceptual content while keeping the behavioural dispositions the same is a subsidiary question that is not my main concern here.

*2.2 Strong externalism rejected* McGinn (1989, pp. 58-94) argues that *strong externalism* is false for perceptual content. In general, strong externalism is (1989, p. 7):

the thesis that a given mental state requires the existence in the environment of the subject of some item belonging to the nonmental world.

In the case of perceptual content, McGinn's target is the strong externalist thesis that the difference between an experience of something looking square and an experience of something looking round is 'a matter of a difference in how those experiences relate to instantiations of squareness and roundness' (p. 63). In essence, what McGinn aims to rebut is a causal covariance theory of perceptual content.

To this end, McGinn constructs an example. In the actual situation, internal state S1 of the subject Percy is caused by square things and internal state S2 is caused by round things. In the counterfactual situation, Percy's internal constitution and behavioural dispositions are just as in the actual situation, but as a result of environmental differences, state S1 is produced by round things and state S2 is produced by square things. On a particular occasion in the counterfactual situation, Percy is in state S1. Is the perceptual content of his experience that there is a square thing before him or that there is a round thing before him? Is the experience as of something square or as of something round?

The strong externalist must say that the content of the experience in the imagined case is individuated in terms of the distal causes of



state S1 in the counterfactual situation; thus the content of Percy's experience is that there is a round thing before him. McGinn, in contrast, argues that in the counterfactual situation Percy is doomed to misperceive round things as square. In support of this view, McGinn points to the fact that Percy's behaviour, consequent upon his being in internal state S1, is appropriate to the presence of a square thing—for behavioural dispositions are preserved across the actual and counterfactual situations. He makes it plausible that, where there is dislocation between the facts of covariance on the input side and the facts of behaviour on the output side, output-side factors should dominate in the ascription of perceptual content (p. 66):

So when it comes to a competition between action and environment, in the fixation of perceptual content, action wins.

Furthermore, McGinn points out, this judgement about the content of Percy's experiences is backed up by teleological elements that plausibly belong in a theory of perceptual content (pp. 66–7):

We naturally want to say that the *purpose* of his moving in a square path is to negotiate square objects successfully, that this is the *function* of his moving like that.

. . . if Percy's functional properties are preserved [in the counterfactual situation], so too will be the content of . . . his perceptual states. That is, if his squarewise movements have the function precisely of negotiating square things, then the perceptual states that lead to these movements will partake of this function and have their contents fixed accordingly.

We shall surely agree with McGinn in rejecting strong externalism here. In effect, he is adopting a conservative individualist stance towards a particular example; and his attitude towards Percy in the counterfactual situation is much like Matthews's attitude towards the creatures who keep falling into the cracks. But, McGinn's argument does not at all establish individualism; it does not show that perceptual content is locally supervenient. (Nor does McGinn say that his argument does establish that conclusion. In fact, I claim (Section 3.2) that McGinn is committed to externalism about perceptual content.)

There are two issues here. First, in his thought experiments, McGinn includes behavioural dispositions among the internal factors that are held constant across actual and counterfactual scenarios (p. 2). But, as we have seen, if behavioural dispositions are characterised externalistically in terms of bodily trajectories, then they can vary even while all that is inside the skin stays the same. We shall make use of this point when we give a twist to the example of Percy in the next subsection.

Second, in the counterfactual situation we have Percy (or a duplicate) moving squarewise in response to round things. McGinn makes it plausible that the character of the behaviour is more important for perceptual content than are the distal antecedents; and the intuition is particularly strong when the function of the behaviour is preserved along with its spatial character. Nevertheless, it does seem possible that, where there is a sufficiently hopeless breakdown of harmony between input-side and output-side factors, we may be entitled to withhold all attributions of perceptual content (Fricker, 1991, p. 141). Consequently, there could be an example of duplicates that differ in that one has experiences with perceptual content and the other does not. And that is already enough—strictly speaking—to establish the externalist's case.

*2.3 Percy with a twist* Let us slightly vary McGinn's example. In the counterfactual situation we now find, not Percy himself, but a duplicate with a very different evolutionary history. This creature's ancestors survived to reproduce in part because their behaviour was appropriate to the distal causes of their perceptual experiences. In this imaginary scenario, internal state S1 is produced by distal round things, as in McGinn's example; but the behaviour consequent upon the creature's being in S1 is now appropriate to the presence of round things, and not to the presence of square things.

What is being imagined here is not that walking a square trajectory is the best way of avoiding a round object. Rather, we suppose that environmental differences have the consequence that the same nerve firings and muscle contractions as in the actual situation result in a quite different bodily trajectory. In particular, the goings-on inside the skin which in the actual situation lead to a

square trajectory now have a round trajectory as their upshot. This happy agreement of input-side, output-side, and teleological factors makes it plausible that, when Percy's duplicate is in state S1, he has an experience as of a round thing. *A fortiori*, it is implausible that the duplicate misperceives round things as square.

What we have here is, of course, just an instantiation of the schematic example of Section 2.1, with the shape properties of being square and being round playing the roles of O and C. And what goes for shape properties surely goes equally for distance properties. But, perhaps some individualist critics will deny that this is a persuasive externalist example, on the grounds that the departures from actuality required by the substitution of circles for squares are wildly science fictional.

It is unclear that this is an effective individualist response, since the whole discussion has been carried out in the domain of thought experiments; and, in the face of the individualist's modally strong claim of local supervenience, it is surely legitimate to consider counterfactual situations that are also counternomic. Certainly Burge is explicit that (1986, p. 42), 'since examples usually involve shifts in optical laws, they are hard to fill out in great detail'. But, perhaps we can do something to reduce the wildness.

Instead of considering squares in the actual situation, let us consider ellipses. In particular, let us consider ellipses that are slightly elongated along the (gravitational) vertical axis. Our perceiver Percy sees these ellipses as ellipses—as witness input-side, output-side, and teleological factors surrounding his internal state S1. In addition, in the actual situation, Percy sees round things as round (and is then in internal state S2).

In the counterfactual situation, we imagine that the retinal arrays—and consequent internal state S1—that are actually produced by these vertically elongated ellipses are instead produced by circles; and behaviour is squashed along the vertical axis so that input-output harmony is preserved. Furthermore, we imagine all this to be the result of evolution. Percy's duplicate is as well adapted to this counterfactual situation as Percy is to the actual situation.

The externalist claim about this example is that, when Percy's duplicate is in the same internal state S1 that Percy is in when he has an experience as of a vertically elongated ellipse, the dupli-

cate's experience is as of a round thing, and *a fortiori* not as of an ellipse.

So much, then, for what I claim to be (a sketch of) a persuasive externalist example involving shape properties. (It is a simple matter to produce a similar example involving distance properties.) Can either a conservative or a revisionary individualist stance be adopted towards the example? Neither looks plausible.

The individualist who adopts a conservative stance towards the example accepts the externalist's specification of the content of the experience that Percy enjoys when he is in internal state S1. It is an experience as of a vertically elongated ellipse (or as of a square, in the first version of the example). But the individualist then insists that the experience of Percy's duplicate has that same content; that the duplicate misperceives round things as elliptical, despite producing behaviour that is distinctively appropriate to the occurrence of roundness. Given the convergence of input-side, output-side, and teleological factors in the example, the conservative individualist stance appears quite unmotivated.

But a revisionary individualist stance looks even less attractive. To adopt this stance is to deny that Percy's actual experience is as of an ellipse, and to say that the experiences of both Percy—in the actual situation—and his duplicate—in the counterfactual situation—should be assigned some more inclusive content, such as: as of an ellipse-or-circle. But, if that is the content of Percy's actual experience when he is in state S1, then why does he execute behaviour that is particularly appropriate to vertically elongated ellipses? And what is the content of his experience when he is in state S2 (produced by round things)? In short, the adoption of a revisionary individualist stance is problematic for the intentional explanation of Percy's behaviour (see Davies, 1991).

Thus is externalism concerning perceptual content vindicated. But the vindication seems to create a puzzle about phenomenology. The apparent puzzle and its resolution are the themes for my brief final section.

## III

*Perceptual content and phenomenology*

Our externalist conclusion that perceptual content is not locally supervenient appears to be inconsistent with the conjunction of two antecedently plausible propositions about phenomenology.

The first of these two propositions is that experience has a phenomenal character that is locally supervenient upon the internal state of the subject. The intuition is that neither the nature of the distal antecedents, nor the shape of the consequent trajectory, nor the course of evolutionary history, is a determinant of the subjective character—the ‘what it is like’—of sensory experience. According to this first proposition, what it is like, phenomenally, to be Percy is just the same as what it would be like to be Percy’s duplicate.

The second proposition is that perceptual content is a matter of how things seem to the conscious subject. Thus, for example, McGinn insists (1989, p. 63):

Let us be clear that we are considering a phenomenological notion here: conscious seemings, states there is something it is like to have. . . .

So we are considering properties of organisms that determine the form of their subjectivity, . . .

Perceptual content is a matter of how the world is presented to the conscious subject as being arranged.

If perceptual content really is a phenomenological notion, then the inescapable conclusion appears to be that perceptual content supervenes upon whatever the phenomenal character of the subject’s experience supervenes upon. Consequently, by the two propositions, perceptual content is locally supervenient—in contradiction with our externalist conclusion.

Let us look more closely at the role of the two propositions in creating this apparent puzzle. The first proposition says that phenomenal character is locally supervenient: phenomenology supervenes upon internal constitution. The second proposition says that how things seem to the subject is a matter of phenomenology; perceptual content supervenes on phenomenal character. The clash

with externalism then appears to be a consequence of the transitivity of supervenience.

The way to resolve the puzzle is to be more careful about the notion of supervenience that is at work in the second proposition about phenomenology.

*3.1 Varieties of supervenience* It is not uncommon for apparent puzzles to be generated by a failure to distinguish between different kinds of supervenience. Consider a familiar analogy. Distinct material objects of the same kind cannot occupy exactly the same space at the same time. So, at a given time, the identity of material objects of a given kind supervenes upon their location. On the other hand, although my pencil occupies a particular location right now, a different pencil could have occupied that space: there are counterfactual situations in which a numerically distinct object of the same kind occupies the very location that my pencil actually occupies. So, at a given time, the identity of material objects of a given kind does not supervene upon their location.

For a moment, this may seem to be a puzzle. But really there is no contradiction, since two different notions of supervenience are being used. At a time, ‘within a world’ supervenience of identity on location holds; but ‘across worlds’ supervenience does not hold. (In the notation of McFetridge, 1985, we have (XYWW) supervenience but not (XYWW’) supervenience.)

Now, what kind of supervenience is involved in the second proposition about phenomenology: perceptual content supervenes upon phenomenal character? As McGinn says (p. 63), ‘Looking square is subjectively distinct from looking round’: where there is a difference of perceptual content, there must be some difference in the phenomenal character of the experiences. But, in order to honour the phenomenologicality of perceptual content, we only need this supervenience to apply within individual subjects. If there is no difference between two experiences for a given subject, then those experiences have the same perceptual content. Indeed, we have already used just this claim to argue that perceptual content is not object-involving (Section 1.1).

From this ‘within a subject, within a world’ (XXWW) supervenience claim—however strong the supervenience claim in the first proposition about phenomenology—no amount of transitivity

will take us to the denial of our externalist conclusion. In short, the apparent puzzle is generated by a failure to distinguish between the modally modest supervenience that is used in the second proposition about phenomenology and the modally strong supervenience that is at issue in the debate between individualism and externalism. Indeed, no genuine puzzle would be created even if the second proposition involved ‘within a subject, across worlds’ (XXWW’) supervenience. For the crucial externalist examples involve a difference of evolutionary history, and so, plausibly, a difference of identity, between the duplicates.

Someone might reply that this solution is just a little too neat. The imagined response has two components. On the one hand, it might be said that, if the argument for externalism works at all, then it should be possible to construct an example in which the duplicates that differ in their perceptual contents inhabit the same world. So—the first component says—externalism is committed to failures of ‘across subjects, within a world’ supervenience. On the other hand, it might be said, we cannot imagine that the experiences of two human beings could be phenomenologically just the same and yet present the world differently to the respective subjects. So—the second component says—the second proposition about phenomenology licenses a claim of ‘across subjects, within a world’ supervenience. Consequently—the response concludes—there really is a clash between our externalist conclusion and plausible propositions about phenomenology.

It is very unclear whether we should grant both components of this response. But, even if we do grant them, it is still possible to avoid the clash. On the side of phenomenology, the alleged intuition of ‘across subjects, within a world’ supervenience concerns human beings: members of a single species. Consequently, it involves ‘across subjects, within a world, within a species’ supervenience. But the externalist examples involve creatures with different evolutionary histories. Even if externalism is committed to failures of ‘across subjects, within a world’ supervenience, it is only committed by those examples to failures of ‘across subjects, within a world, across species’ supervenience.

*3.2 Externalism and phenomenal character* The externalist can accept both the plausible propositions about phenomenology,

provided that he recognises a distinction between the perceptual content of an experience and its intrinsic phenomenal character (cf. Peacocke, 1983, on the *sensational* properties of experience). He accepts the first proposition by saying that an experience has an intrinsic phenomenal character, which really is locally supervenient: it is preserved across actual and counterfactual duplicates. He accepts the second proposition by saying that, for the experiences of a given subject, a difference of perceptual content requires a difference in intrinsic phenomenal character. His externalism commits him to the possibility of a difference of perceptual content between the experiences of (actual and counterfactual) duplicates; that is—by the first proposition—to the possibility of a difference of perceptual content even while intrinsic phenomenal character is preserved. Indeed, this latter possibility is explicitly recognised in Burge's expression of his externalism (1986, p. 4; emphasis added):

A person's intentional states and events could (counterfactually) vary, even as the individual's physical, functional (*and perhaps phenomenological*) history . . . is held constant.

This conception of the phenomenology of experience conflicts with a doctrine that McGinn commends, namely that 'perceptual experience has none but representational properties (at least so far as consciousness is concerned)' (McGinn, 1989, p. 75). McGinn's commendation of this doctrine arises in the context of his pointing out 'obscurities and problems' (p. 75) that beset the kind of view that I have just sketched—a view that recognises (p. 73):

a prerepresentational yet intrinsic level of description of experiences: that is, a level of description that is phenomenal yet noncontentful . . .

And the difficulties to which McGinn draws attention are not to be underestimated (see also Dennett, 1988). But there is also a price to be paid for occupying his own position.

If there is no 'prerepresentational yet intrinsic level of description of experiences'—no 'level of description that is phenomenal yet noncontentful'—then phenomenal character is equated with perceptual content. In that case, the second proposition about phenomenology becomes trivial, and the first proposition becomes



the claim that the perceptual content of experience is locally supervenient. Consequently, the occupant of McGinn's position on the phenomenology of experience must choose between denying externalism and denying that experiences have any phenomenal character that is preserved across duplicates.

But, McGinn can scarcely deny externalism. The externalist argument of Section 2 is not intended to depend upon acceptance of a teleological theory of perceptual content. But, the vindication of externalism is certainly heavily supported by teleological elements that are present in McGinn's preferred theory of content (1989, Chapter 2). Consequently, McGinn must deny that experiences have a phenomenal character that is locally supervenient. That is the price of his position.

Doubtless, many will be willing to pay. But, to the extent that we find the denial of locally supervenient phenomenal character implausible (as I do), we can take the argument for externalism about perceptual content to be an argument, also, for the recognition of intrinsic properties of experience that are phenomenal but not representational.<sup>1</sup>

*Department of Philosophy*  
*Birkbeck College*  
*Malet Street*  
*London WC1E 7HX*

#### REFERENCES

- Burge, T. 1979: 'Individualism and the Mental'. In P.A. French, T.E. Uehling and H.K. Wettstein (eds.), *Midwest Studies in Philosophy Volume 4: Studies in Metaphysics*, Minneapolis: University of Minnesota Press, pp. 73–121.
- Burge, T. 1986: 'Individualism and Psychology'. *Philosophical Review* vol. 95, pp. 3–45.
- Burge, T. 1988a: 'Cartesian Error and the Objectivity of Perception'. In R.H. Grimm and D.D. Merrill (eds.), *Contents of Thought*, Tucson, AZ.: University

<sup>1</sup> Some of the early work towards this paper was carried out at the Australian National University and at MIT. I am grateful to ANU, the British Academy, MIT, and the Radcliffe Trust for financial support. Thanks to Ned Block, Tyler Burge, Frank Jackson, Christopher Peacocke, Gabriel Segal, and Tom Stoneham for comments and conversations.

- of Arizona Press, pp. 62–76. Also in P. Pettit and J. McDowell (eds.), *Subject, Thought, and Context*, Oxford: Oxford University Press, 1986.
- Burge, T. 1988b: 'Authoritative Self-Knowledge and Perceptual Individualism'. In R.H. Grimm and D.D. Merrill (eds.), *Contents of Thought*, Tucson, AZ.: University of Arizona Press, pp. 86–98.
- Davies, M. 1991: 'Individualism and Perceptual Content'. *Mind* vol. 100, pp. 461–84.
- Dennett, D. 1988: 'Quining Qualia'. In A.J. Marcel and E. Bisiach (eds.), *Consciousness in Contemporary Science*, Oxford: Oxford University Press. Reprinted in W.G. Lycan (ed.), *Mind and Cognition: A Reader*, Oxford: Basil Blackwell, 1990, pp. 519–47.
- Evans, G. 1982: *The Varieties of Reference*. Oxford: Oxford University Press.
- Fricker, E. 1991: 'Content, Cause and Function' (Critical Notice of McGinn, *Mental Content*), *Philosophical Books* vol. 32, pp. 136–44.
- Fodor, J. 1986: 'Individualism and Supervenience'. *Proceedings of the Aristotelian Society Supplementary Volume* 60, pp. 235–62.
- Fodor, J. 1987: *Psychosemantics*. Cambridge MA.: MIT Press.
- McFetridge, I.G. 1985: 'Supervenience, Realism, Necessity'. *Philosophical Quarterly* vol. 35, pp. 246–58. Reprinted in *Logical Necessity and Other Essays*, London: Aristotelian Society, 1990, pp. 75–90.
- McGinn, C. 1982: 'The Structure of Content'. In A. Woodfield (ed.), *Thought and Object*, Oxford: Oxford University Press, pp. 207–259.
- McGinn, C. 1989: *Mental Content*. Oxford: Basil Blackwell.
- Matthews, R.J. 1988: 'Comments (on Burge 1988a)'. In R.H. Grimm and D.D. Merrill (eds.), *Contents of Thought*, Tucson, AZ.: University of Arizona Press, pp. 77–86.
- Peacocke, C. 1983: *Sense and Content*. Oxford: Oxford University Press.
- Peacocke, C. 1989: 'What Are Concepts?' In P.A. French, T.E. Uehling and H.K. Wettstein (eds.), *Midwest Studies in Philosophy Volume 14: Contemporary Perspectives in the Philosophy of Language II*, Notre Dame: University of Notre Dame Press, pp. 1–28.
- Putnam, H. 1975: 'The Meaning of "Meaning"'. In *Philosophical Papers Volume 2: Mind, Language and Reality*, Cambridge, Cambridge University Press, pp. 215–71.
- Segal, G. 1989: 'Seeing What Is Not There'. *Philosophical Review* vol. 98, pp. 189–214.
- Segal, G. 1991: 'Defence of a Reasonable Individualism'. *Mind* vol. 100, pp. 485–94.