In this paper, I shall defend externalism for the contents of perceptual experience. A perceptual experience has representational properties; it presents the world as being a certain way. A visual experience, for example, might present the world to a subject as containing a surface with a certain shape, lying at a certain distance, in a certain direction; perhaps a square with sides about 30 cm, lying about one metre in front of the subject, in a direction about 20 degrees to the left of straight ahead.

There are two views that we might take about these representational, or semantic, properties of experiences. On the one hand, we might hold that the content of a perceptual experience is just the content of the judgement that the subject would make if he or she took the experience at face value. In that case, perceptual content is the same kind of content as the content of judgement and belief; and externalism about perceptual content is just the same as externalism about belief content. On the other hand, we might hold that perceptual content is a distinct kind of content, different from belief content. In that case, arguments for externalism about belief content cannot automatically be transposed into arguments for externalism about perceptual content.

I shall be adopting this second view: externalism concerning perceptual content requires separate argument. That argument comes in the fifth section of this paper. The first section offers a little more clarification of what is distinctive about perceptual content, while the second section characterises the externalist’s claim. The third section sets out in more detail what is required of an externalist argument, and the fourth section explains a dilemma that the externalist is liable to face—a dilemma that I try to avoid in the fifth section. The sixth and final section raises the question whether externalist perceptual content should be conceived of as a representational superstructure erected upon a sensational substrate.

1. Perceptual Content

On the view that I am adopting here, the perceptual content of an experience is a kind of non-conceptual content. What this means is that a subject can have an experience with a certain perceptual 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 a rich repertoire of concepts, and to the experiences of human infants and certain other creatures, who arguably are not deployers of concepts at all. 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 by the experiencer.

Because the perceptual content of an experience is a kind of non-conceptual content, it must be distinguished from the content of any judgement that might be made if the 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, indeed, 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.
This is not to deny that there is a close connection between the non-conceptual content of experiences, and possession of observational concepts, such as the concept of being square. Thus, Christopher Peacocke says (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 the concept of being square.

To help fix the idea of non-conceptual perceptual content, we can note here that Peacocke offers scenario content as just such a kind of content. Here is what he says to introduce scenario content (1992, pp. 61–2):

I suggest that one basic form of representational content should be individuated by specifying which ways of filling out the space around the perceiver are consistent with the representational content’s being correct. The idea is that the content involves a spatial type, the type being that under which fall precisely those ways of filling the space around the subject that are consistent with the correctness of the content.

And here is the point that scenario content is non-conceptual (1992, p. 63):

There is no requirement at this point that the conceptual apparatus used in specifying a way of filling out the space be an apparatus of concepts used by the perceiver himself. Any apparatus we want to use, however sophisticated, may be employed in fixing the spatial type, however primitive the conceptual resources of the perceiver with whom we are concerned.

We can also use the notion of scenario content to illustrate two further features of perceptual content. The first is that perceptual content abstracts from the identities of the particular objects that may be perceived: perceptual content is not object-involving. The second is that, despite the fact that it is not object-involving, perceptual content determines correctness conditions: perceptual content is fully representational. (We should note that, in Peacocke’s account, a further layer of perceptual content - protopropositional content – is introduced, to mark distinctions between perceived axes of symmetry, for example (1992, p. 77). Possession of the concept of being square then requires answerability of judgements – that a presented object is square – to the protopropositional content, rather than simply the scenario content, of experiences. This is an important complication. But protopropositional content retains the three features that we have noted: it is non-conceptual, it is not object-involving, and it is fully representational.)

Finally in this section, we can achieve some further clarification of the present use of the idea of non-conceptual perceptual content by looking back at the introduction of the notion by Gareth Evans (1982). In fact, Evans introduces the notion of non-conceptual content in two slightly different contexts: unconscious information processing, and perceptual experiences. In the first case, he says (1982, p. 104, n. 22):

When we attribute to the brain computations whereby it localizes the sounds we hear, we ipso facto attribute to it representations of the speed of sound and of the distance between the ears, without any commitment to the idea that it should be able to represent the speed of light or the distance between anything else.

The point here is that when we talk about ‘the information-processing that takes place in our brains’ we attribute representational properties – contents involving speed and
distance, for example – to states of the brain, without any requirement that conditions for the possession of concepts should be met. In the second case, he says (1982, pp. 226–7):

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. . . .

The informational states which a subject acquires through perception are non-conceptual, or non-conceptualized.

And, in a remark that appears to apply to both cases, he recommends that we ‘take the notion of being in an informational state with such-and-such a content as a primitive notion for philosophy, rather than . . . attempt to characterize it in terms of belief’ (1982, p. 123).

Now, the notion of non-conceptual content does, indeed, have an important philosophical role to play in both these contexts. In the first case – that of unconscious information processing – it can figure in an account of tacit knowledge of rules, for example (Davies, 1989; Crane, 1992b, pp. 156–7). But it is, of course, the second case that primarily concerns us here; and the question that we need to ask is this. What, according to Evans, distinguishes the second case – the non-conceptual content of perceptual experiences – from the first case – the non-conceptual content of unconscious informational states?

We can see the answer to this question very clearly, if we consider what Evans says about the spatial element in the non-conceptual content of perceptual states. First, spatial content requires links to spatial behaviour: ‘we must say that having spatially significant perceptual information consists at least partly in being disposed to do various things’ (1982, p. 155). But the connections between informational states and appropriate behaviour could be in place even while there was no conscious subject, and so no perceptual experiences. So, for the non-conceptual content of perceptual experiences, something more is required (1982, 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.

Crucially, Evans equates a conscious subject with a thinking subject; he equates the consciousness of perceptual experiences with a kind of accessibility of the non-conceptual content of those experiences to the system of conceptualised judgement and belief formation (1982, p. 227):

In the case of [concept-exercising and reasoning] organisms, the internal states which have a content by virtue of their phylogenetically more ancient connections with the motor system also serve as input to the concept-exercising and reasoning system. Judgements are then based upon (reliably caused by) these internal states; when this is the case we can speak of the information being ‘accessible’ to the subject, and, indeed, of the existence of conscious experience.

For Evans, then, we only find 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 informational states that enable a blindsight patient to ‘guess’ correctly the direction of a light source (1982, p. 158).

This element of Evans’s account is not preserved in the use that I am making of the idea of non-conceptual perceptual content. I would not, myself, impose such a strict standard for perceptual experience, since it closes some questions about the notion of consciousness which I would prefer to leave open. In particular, it seems to be implicit in Evans’s account that the phenomenal consciousness of perceptual experiences is best understood as a kind of access consciousness. (For this distinction, see Block 1990, 1991, 1992, 1993, 1995; and for further discussion, see Davies and Humphreys, 1993.) As our
understanding of consciousness improves, we may come to regard that as the correct position. But, pending such an improved understanding, I would prefer to leave room for the possibility of a creature that does not attain the full glory of conceptualised mentation, yet which enjoys conscious experiences with non-conceptual content – experiences that play a role in the explanation of the creature’s spatial behaviour.

Despite this difference from Evans over the notion of conscious experience, however, the key idea about perceptual content remains (1982, 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 of the notion of perceptual content, we can now turn to a second preliminary matter: what is needed to establish externalism.

2. The Externalist Claim

My aim is to establish a modal externalist claim. I shall introduce that claim by contrasting externalist claims with corresponding individualist claims, and by drawing a distinction between modal and constitutive claims in each case.

Here, to begin with, is a statement of constitutive individualism (Burge, 1986, pp. 3–4):

Individualism is a view about how kinds are correctly individuated, how their natures are fixed. . . . According to individualism about the mind, the mental natures of all a person’s or animal’s mental states (and events) are such that there is no necessary or deep individuative relation between the individual’s being in states of those kinds and the individual’s physical or social environments.

I take this to mean that the most fundamental philosophical account of what it is for a person or animal to be in the mental states in question does not need to advert to that individual’s physical or social environment, but only to what is going on within the spatial and temporal boundaries of the creature.

Suppose for a moment that that were right – that constitutive individualism were correct – and imagine that some individual x is in some mental state S. Imagine, too, that y is a duplicate of x in the same, or in another, possible situation. Then, the constitutive account of what it is for x to be in mental state S will be satisfied equally by y, since that account adverts only to features that x and y have in common as duplicates. So, if the constitutive individualist claim were correct for mental state S, then that state would be preserved across duplicates, whether in the same, or in different, possible situations.

In short, the constitutive individualist claim about a family of mental states or properties entails modal individualist claims about those states or properties – claims to the effect (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.

Such a modal individualist claim is a claim about supervenience: the mental states or properties in question supervene upon physical, chemical, neural, or functional states or properties. More specifically, it is a claim of local supervenience, since it says that the mental states or properties of an individual are fixed by what goes on – physically, chemically, neurally, or functionally – within the boundaries of that individual’s body. If a mental state or property 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) shares that state or property.
I speak of modal individualist claims in the plural, because supervenience claims vary in strength along modal dimensions. What is principally at issue here is a modally strong local supervenience claim of the form: If x has mental property F in possible world w₁, and y is a duplicate in w₂ of x (in w₁), then y has F in w₂. It is important to distinguish this modally strong claim from a claim that is restricted to counterfactual duplicates of actual individuals, and also from a 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 claim about duplicates within the same possible world concerns (XYWW) supervenience.)

Just as the various modal individualist claims are entailed by constitutive individualism, so also the negations of those modal claims entail the following statement of constitutive externalism:

According to externalism about the mind, the mental natures of at least some of a person’s or animal’s mental states (and events) are such that there is a necessary or deep individuative relation between the individual’s being in states of those kinds and the individual’s physical or social environments.

I take this to mean that the most fundamental philosophical account of what it is for a person or animal to be in the mental states in question does advert to that individual’s physical or social environment, and not only to what is going on within the spatial and temporal boundaries of the creature.

Constitutive externalism is entailed by the negation of the modally strong local supervenience claim; and it is this relatively modest modal externalist claim for which I shall be arguing in the case of perceptual content. My aim is to provide an example in which duplicates x and y, embedded in possible circumstances w₁ and w₂ respectively, differ in respect of the non-conceptual contents of their perceptual experiences.

3. The Task for an Externalist Argument

Because the conceptual content of judgements and beliefs is different in kind from the perceptual content of experiences, externalist arguments about the one cannot necessarily be used to defend externalist claims about the other. In this section, I shall outline the task that confronts the externalist about perceptual content. The three main points that need to be made correspond to the three features of perceptual content that we noted in Section 1: it is non-conceptual, it is not object-involving, and it is fully representational.

First, some celebrated externalist arguments about belief content (e.g. Burge, 1979) are designed to show that the contents of certain beliefs depend in part upon the social context of the believer. In these arguments, a modal externalist claim is defended by way of examples in which the social environment differs as between the possible worlds w₁ and w₂.

Such 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, on the one hand, belief content itself and, on the other hand, the linguistic meaning of expressions and reports of belief. But, because perceptual content is non-conceptual content, it is not so plausible that it is dependent upon the subject’s membership in a speech community. Indeed, perceptual content is reasonably assumed to be independent of public language (cf. Burge, 1986, p. 26). So, we shall not expect to find social externalist arguments about perceptual content.
This independence of perceptual content from linguistic meaning has other 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 – this is the second point that needs to be made – because perceptual content is not object-involving, externalism about perceptual content cannot be established by arguments analogous to externalist arguments about de re beliefs.

If I look at an apple, Fido, and think, ‘That apple is rotten’, and you look at a numerically distinct but qualitatively indistinguishable apple, Fifi, and think, ‘That apple is rotten’, 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, to the effect that it is rotten, is a belief whose correctness depends upon how things are with Fido: whether Fido is indeed a rotten apple. 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. As a result, it is easy to generate a modal externalist example just by varying the object of belief as between the possible worlds w₁ and w₂. But this strategy is not available in the case of perceptual content.

We introduced the idea that perceptual content is not object-involving in the context of Peacocke’s account of scenario content in terms of ways of filling out the space around the subject. We can now connect the idea with the thought that the perceptual content of experience is a phenomenological 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. So, 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. This is in sharp contrast to the case of belief content, since the intuition about the content of de re beliefs concerning Fido and Fifi carries over to the case of two beliefs held by a single subject.

While perceptual content is not object-involving, it is still fully representational: the content of a perceptual experience determines a condition for correctness, or truth. One way to see how perceptual content can be truth conditional, although not object-involving, is to 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, lying at a certain distance from the subject, in a certain direction. 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.

The third point that needs to be made is that, because perceptual content is fully representational although not object-involving, 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 – the narrow content of the belief – is supposed to be locally supervenient, and so preserved across actual and counterfactual duplicates. But it does not, by itself, determine truth conditions, since what is in common between your belief and mine does not, by itself, specify whether the correctness of my belief turns upon how things are with Fido or upon how things are with Fifi. 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 concedes an externalist claim for the truth conditional content of beliefs, but says that, for serious explanatory purposes, attention should be restricted to narrow content. Thus, the individualist about belief content recommends the employment of a kind of content that is locally supervenient, but is not fully representational (Fodor, 1986; 1987, Chapter 2).

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 the individualist makes just this bolder claim, 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, and establish the modest modal externalist claim.

But the externalist may choose to 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.

4. Two Individualist Stances and a Dilemma for the Externalist
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 Tyler 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.)

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 behavourial 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 w₁ and w₂ – however thoroughgoing – that suffice for a difference of perceptual content between duplicates x in w₁ and y in w₂.

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.

5. Externalism Vindicated
In this section, my aim is to provide – at least in outline – a persuasive externalist example. I shall first 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).

5.1 A Schematic Example
First, in some possible situation w₁ – 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, say, being square, or a distance property, say, being one metre away, or a direction property, say, being 20 degrees to the left of straight ahead.) 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.

Even without a detailed theory of perceptual content, 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 w2 – 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 array 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, say, being round, or a different distance property, say, being 75 cm away, or a different direction property, say, being 30 degrees to the left of straight ahead.) 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; and this latter claim is all that is needed to rebut local supervenience.

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, a persuasive example of this form carries the day 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.

5.2 Percy

The example to which I shall, in the next sub-section, give a twist is actually used by McGinn (1989, pp. 58–94) to argue against what he calls strong externalism for perceptual content. McGinn’s target is the 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’ (1989, 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 (1989, 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 (1989, 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, of course, show that individualism is correct for perceptual content; it does not establish a modally strong claim of local supervenience. Nor does McGinn set out to defend individualism, as we have defined that doctrine. So, there is nothing inconsistent in adapting McGinn’s example in the service of externalism.
In fact, the issue of externalism – in the sense of the denial of local supervenience – lies somewhat off to one side from McGinn’s main concerns. For, in his thought experiments, McGinn includes behavioural dispositions among the internal factors that are to be held constant across actual and counterfactual scenarios (1989, 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. This point will be crucial when we come to give a twist to the example of Percy.

Before we move on, however, it is tempting to pause briefly and ask whether the example of Percy makes it plausible that perceptual content supervenes upon internal constitution plus behavioural dispositions. There are grounds for supposing that it does not. In the counterfactual situation we have Percy (or a duplicate) moving squarewise in response to round things; and McGinn makes it plausible that the character of the behaviour is more important for perceptual content than are the distal antecedents. This 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, sharing their behavioural dispositions, yet differing in that one has experiences with perceptual content and the other does not.

5.3 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; and this is all that the externalist argument strictly requires.

What we have here is, of course, just an instantiation of our schematic example, with the shape properties of being square and being round now playing the roles of O and C. And what goes for shape properties surely goes equally – or even more so – for distance and direction properties. But, perhaps some individualist critic 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, ‘Since examples usually involve shifts in optical laws, they are hard to fill out in
great detail’ (1986, p. 42). 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 plausible 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 duplicate’s experience is as of a round thing. A fortiori, the
duplicate’s experience is not as of an ellipse; and this is all that the externalist argument
strictly requires.

It is as well to enter two clarificatory comments about this example. The first
concerns axes of symmetry. Since an ellipse has just two axes of symmetry while a circle
has infinitely many, someone might ask how many axes of symmetry Percy’s duplicate
sees circles as having. This is a question about the representational properties of the
duplicate’s perceptual experiences. (It is a matter of protopropositional content: Peacocke,
1992, p. 77.) So, it would be begging the question against externalism if
someone were to insist that the duplicate must see circles as having just two axes of
symmetry. Nevertheless, it is open to the externalist to allow that Percy’s duplicate sees
circles as having only vertical and horizontal axes of symmetry, just as Percy sees
ellipses as having only two axes of symmetry. For it is not uncommon for subjects to see
shapes as having fewer axes of symmetry than they really have. For example, a square
has four axes of symmetry, but when seen as a square it is seen as having two axes of
symmetry (intersecting the sides), and when seen as a diamond it is seen as having a
different two (intersecting the corners).

The second clarificatory comment concerns the simplifying assumptions that are
implicit in the example. The duplicate’s behaviour is supposed to be squashed along the
(gravitational) vertical axis, in virtue of some environmental difference in, say, gravity or
friction. But, there is an implicit assumption here, to the effect that the range of Percy’s
behavioural interactions with ellipses is very limited. This does not undermine the
dialectical purpose of the example of Percy and his duplicate. But it does suggest that it
will be difficult to provide an externalist example relating to the experiences of shape that
are enjoyed by creatures whose interactions with the world are as complex and
sophisticated as ours are (see Davies, 1993).

So much, then, for what I claim to be (a sketch of) a simple but persuasive externalist
example involving shape properties. (It is a straightforward matter to produce similar
examples involving distance or direction properties.) Can either a conservative or a
revisionary individualist stance be adopted towards the example of Percy and his
duplicate? 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 leaves us with a puzzle about the phenomenology of perceptual experience. This puzzle is the topic of my final section.

6. Perceptual Content and Phenomenology
Our externalist conclusion that perceptual content is not locally supervenient – that it does not strongly modally supervene upon the internal state of the subject – appears to be inconsistent with the conjunction of two antecedently plausible propositions about phenomenology.

The first of these two propositions 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.

The second proposition is that experience has a phenomenal character that is supervenient upon the internal state of the subject. The intuition here 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 nature – the ‘what it is like’ – of sensory experience. According to this second proposition, what it is like, phenomenally, to be Percy is just the same as what it would be like to be Percy’s duplicate.

If perceptual content is a phenomenological notion – as the first proposition says – then the inescapable conclusion appears to be that perceptual content supervenes upon whatever the phenomenal character of the subject’s experience supervenes upon. But then, by the second proposition, perceptual content turns out to supervene upon internal constitution – in contradiction with our externalist conclusion.

The first proposition says that the way the world is presented to the subject is a matter of phenomenology; perceptual content supervenes on phenomenal character. The second proposition says that phenomenology is locally supervenient: phenomenal character supervenes upon internal constitution. The clash with externalism then appears to be a consequence of an undeniable principle: the transitivity of supervenience.
But, we can see our way to one possible resolution of the puzzle if we are more careful about the notion of supervenience that is at work in the first proposition about phenomenology.

6.1 A Resolution: Kinds of Supervenience
In Section 2, we noted that supervenience claims vary in strength along modal dimensions, and we distinguished ‘across worlds’ (XYWW) supervenience – which has been our principal concern in this paper – from, for example, ‘within a world’ (XYWW) supervenience. So, the question to ask is: What kind of supervenience is involved in the first plausible proposition about phenomenology (perceptual content supervenes upon phenomenal character)?

We are certainly committed to the claim that perceptual content is a phenomenological notion. Indeed, we have already used that claim (in Section 3) to support the idea that perceptual content is not object-involving. As McGinn says (1989, 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. Supervenience is surely in the offing here. But, in order to honour the phenomenologicality of perceptual content, we only need this supervenience to apply within an individual subject, in a single possible world. If there is no phenomenal difference between two experiences in the life of a given subject, then those experiences have the same perceptual content.

From this ‘within a subject, within a world’ (XXWW) supervenience claim – however modally strong may be the supervenience claim in the second 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 first proposition about phenomenology and the modally strong supervenience that is at issue in the debate between individualism and externalism.

The distinction between kinds of supervenience claim yields a resolution of the puzzle about externalism and phenomenology by trading upon another distinction; namely, that between the perceptual content of an experience and its intrinsic phenomenal character. Perceptual content is a matter of representational properties of experience, while intrinsic phenomenal character is conceived of as being non-representational.

Given the distinction between perceptual content and phenomenal character, the externalist about perceptual content can accept both the propositions about phenomenology. He accepts the first proposition by saying that, for the experiences of a given subject, a difference of perceptual content requires a difference in intrinsic phenomenal character. Within a subject, and within a world, a representational difference requires a non-representational difference. He accepts the second proposition by saying that the (non-representational) intrinsic phenomenal character of an experience really is strongly modally locally supervenient: it is preserved across actual and counterfactual duplicates.

His externalism then commits him to the possibility of a difference of perceptual content between the experiences of (actual and counterfactual) duplicates; that is – by the second proposition – to the possibility of a difference of perceptual content even while intrinsic phenomenal character is preserved. Across subjects, and across worlds, a representational difference does not require a non-representational difference. Indeed,
this possibility is explicitly recognised in Burge’s expression of modal 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.

But, before we rest content with this resolution of the puzzle, we should ask ourselves whether we want to take on this commitment to the intrinsic phenomenal character of experience.

6.2 Sensational Properties of Experience
The idea of a level of intrinsic phenomenal character, intermediate between internal physical constitution and perceptual content, is the idea of perceptual experience as having a sensational (non-representational) substrate upon which the representational superstructure of perceptual content is erected. Appealing to this intermediate level so as to resolve the puzzle about externalism and phenomenology commits us to there being a sensational difference corresponding to every representational difference within the experience of a given subject. That commitment goes well beyond the mere acknowledgement that perceptual experiences have sensational as well as representational properties.

Certainly some who reject the idea of a sensational substrate take the further step of rejecting sensational properties altogether. Thus, McGinn points out (1989, p. 75) ‘obscurities and problems’ that beset the view that recognises (1989, p. 73):

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

and accompanies this with the strong claim that ‘perceptual experience has none but representational properties (at least so far as consciousness is concerned)’ (1989, p. 75).

But, it is surely an option to acknowledge the existence of some non-representational properties of experience without embracing the idea of a sensational substrate.

The distinction between representational and sensational (intrinsic but not representational) properties of experience is the focus of earlier work by Peacocke (1983, Chapter 1). There, he offers examples that are intended to show that there could be pairs of experiences with the same sensational properties but different representational properties, and other examples that are intended to show the converse – that there could be pairs of experiences with the same representational properties but different sensational properties. Now, one of the background assumptions of that earlier work is that perceptual content is conceptual content (1983, p. 19):

[N]o one can have an experience with a given representational content unless he possesses the concepts from which that content is built up.

As a consequence, many of the lessons drawn from the examples do not carry over into the framework of Peacocke’s own later work, and of this paper, where non-conceptual content is recognised. (See Crane, 1992a, for a helpful discussion of these differences.)

For example, in the earlier work, grouping phenomena are described in terms of sensational properties (1983, pp. 24–5); in the later work, they are described in terms of protopositional content (1992, p. 79), which is a kind of non-conceptual content, cutting somewhat more finely than scenario content.

Nevertheless, there is still enough in those examples to make it plausible that perceptual experiences have sensational, as well as representational, properties. In particular, the example of monocular and binocular viewing of the same scene – in a case where the scene provides sufficiently many cues that there is no loss of depth information when only one eye is used (1983, p. 13) – seems to provide a pair of experiences that
present the space around the subject as being filled out in just the same way. Yet the two experiences are phenomenologically different. What it is like to have the monocular experience is not just the same as what it is like to have the binocular experience, even though the experiences have the same perceptual content.

Certainly, not everyone is persuaded by this example (e.g. Tye, 1991, p. 130; 1992, p. 174). Further discussion would be warranted. But the important point for present purposes is that acknowledging the existence of some sensational properties, on the basis of examples such as this one, is very far from embracing the idea of a sensational substrate. It would take a massive leap to move from a modest non-representational difference between monocular and binocular viewing of the same scene to a host of non-representational properties subvening under the myriad representational properties of every perceptual experience.

6.3 A Question About Phenomenal Character
If we do make that leap then, as we have seen, we can resolve the puzzle about externalism and phenomenology. That is, we can accept the modal externalist claim, along with the two plausible propositions about phenomenology. (We might even take the possibility of resolving the puzzle in this way as an argument for making the leap; see Davies, 1992, pp. 42–4.) But, we then face a further problematic question. For, if perceptual content can vary – as between duplicates in different possible worlds – while intrinsic phenomenal character remains the same, then we are bound to ask whether the correlation between sensational and representational properties is relatively constrained or relatively unconstrained. Just how different might be the representational superstructures erected upon one and the same non-representational substrate?

If the correlation between sensational substrate and representational superstructure is relatively constrained, then it must be governed by some theoretical principles. But, it is far from obvious where the required constraining principles might issue from. On the other hand, to the extent that the relation is unconstrained, we are left entertaining scarcely intelligible hypotheses, along the lines that I, or a duplicate, might enjoy an experience with just the same intrinsic phenomenal character as my visual experience now, yet with utterly different representational properties. Neither option is very inviting.

I do not say, definitively, that there is no way to answer this question about the correlation between sensational substrate and representational superstructure. Perhaps some constraining principles will be forthcoming, for example. But, I do say that the question is problematic; that the problem it poses is no less daunting than the original puzzle concerning externalism and the two propositions about phenomenology. Confronted with the problematic question, we should hesitate over a commitment to a sensational substrate – to the intrinsic phenomenal character of experience.

As a result, we should reconsider the second proposition about phenomenology; namely, the proposition that there is a level of phenomenal description of perceptual experience that is (modally strongly) supervenient upon the internal state of the subject. We can accept that perceptual experiences have some sensational properties (on the basis of such examples as monocular and binocular viewing of the same scene); and, indeed, we can suppose that these non-representational properties are strongly modally locally supervenient. But, it is at best an open question whether such sensational properties constitute a subvening basis upon which the representational properties of experience are variously supported in actual and counterfactual situations.

Suppose that we give up the idea of a non-representational underpinning for every representational property of experience. Then we can still make something of the first
proposition about phenomenology: perceptual content is a phenomenological notion. We no longer say that perceptual content supervenes (within a subject, within a world) upon something that is supposed to be more fundamentally phenomenal: the non-representational intrinsic phenomenal character of experience. Instead, we say that perceptual content is itself irreducibly an aspect of what it is like to have a perceptual experience. But the second proposition about phenomenology has to be given up. Given externalism, what it is like to have a perceptual experience – now regarded as shot through with perceptual content – is not wholly independent of causal antecedents, consequent trajectory, and evolutionary history. It is not supervenient (across subjects, across worlds) upon the internal state of the subject. If we give up the idea of a sensational substrate, then there is an important difference here between externalist and individualist conceptions of the subjective nature of sensory experience.

In the first five sections of this paper, I argued in favour of externalism about perceptual content. Now, in this final section, we see that, once externalism is accepted, we may well have to give up the idea that experience has any (strongly modally) locally supervenient level of phenomenal description.

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References


