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## REPRESENTATIONALISM, SUPERVENIENCE, AND THE CROSS-MODAL PROBLEM

**ABSTRACT.** The representational theory of phenomenal experience is often stated in terms of a supervenience thesis: as Tye has recently put it, “necessarily, experiences that are alike in their representational contents are alike in their phenomenal character”. Consequently, much of the debate over whether representationalism is true centres on purported counter-examples – that is to say, purported failures of supervenience. The discussion here focuses on one important representationalist response to a striking class of these, namely, perceptual states in different sensory modalities that, despite differing phenomenally, share at least some content – for example, the visual and tactile sensations of *motion*. Some representationalists reply to these cases, in effect, by widening the supervenience base of phenomenal experience to *clusters* of perceptual contents. However, I argue that this reply radically undermines the representational theory of experience by, among other problems, ruling out its construal as an identity thesis, and leaving the supervenience claim apparently ungrounded.

### I

The representational theory of phenomenal experience is often stated in terms of a supervenience thesis: Byrne recently characterises it as the thesis that “there can be no difference in phenomenal character without a difference in content”,<sup>1</sup> while according to Tye, “[a]t a minimum, the thesis is one of supervenience: necessarily, experiences that are alike in their representational contents are alike in their phenomenal character”.<sup>2</sup> Consequently, much of the debate over whether representationalism is true centres on purported counter-examples – that is to say, purported failures of supervenience. The refutation of putative counter-examples has been, it seems to me, by and large successful.<sup>3</sup> But there is a certain class of these for which

the representationalist response has been something less than completely convincing. These are the cross-modality cases. I will explain what I mean, and then argue that the response in question is not only unconvincing but actually undermines the representationalist position.

Note, firstly, that the *defence* of this supervenience claim is independent of, though complements, the argument from transparency or diaphanousness with which it is sometimes confused.<sup>4</sup> Whereas in the latter case the key premise is that phenomenal character is not introspectible distinctly from perceptual content, what we might call “the supervenience argument” has as its key premise that phenomenal character never varies independently of content, from which determination or identity are inferred. The issue in the transparency argument is our awareness of phenomenal character as distinct from perceptual content; the issue in the supervenience argument is the relative patterns of variation of character and content. Moreover, it is not just the *actual* pattern of variation that matters to the supervenience claim. Supervenience is always presented as a claim about what patterns of variation are *possible* with regard to its target phenomena. To Tye it is a claim about what experiences are *necessarily* like, while for Byrne it is a claim about the limitations on the difference there *can be* between any two experiences.

To establish the supervenience of the phenomenal on representational content, it is necessary to show that, of necessity, all groups of sensations with identical content are groups with identical phenomenal character, or conversely that all differences in phenomenal character are necessarily accompanied by some difference in content. Since it is certainly true that by and large in the *actual* world phenomenal character doesn't vary independently of content, there is perhaps some presumption in favour of supervenience holding. For this reason anti-representationalists have shouldered the burden of proof and depend on purported actual-world counter-examples to carry the day (it would of course be sufficient to demonstrate the mere *possibility* of a counter-example, but modal claims in this arena are so contested as to be rhetorically useless).

## II

Cross-modality cases are one class of purported counter-examples. A simple example is the apparent phenomenal difference between the visual sensation of shape and the tactile sensation of shape; or between the visual sensation of distance and the auditory sensation of distance. Here, you might think, are differences in phenomenal character accompanied by sameness of content, contra the supervenience claim.<sup>5</sup> One important representationalist reply is straightforward: in these cases there is, strictly speaking, no identity of content. The visual sensation of shape involves colours, while the tactile sensation of shape involves warmness and smoothness and so on. So the content of the visual sensation of shape *taken as a whole* does differ in content from the tactile sensation of shape taken as a whole. Or, as Dretske argues in the case of the sensation as of movement, when one has a *visual* experience of movement,<sup>6</sup>

[o]ne also experiences the object's shape, size, colour, direction of movement, and a host of other properties. That is why seeing and feeling [by touch] movement are much different even though the same thing (movement) is represented in both modalities. Even when the senses overlap in their representational efforts – as they do in the case of spatial properties – they represent different ranges of determinable properties. (p. 95)

What I will argue here, is that this particular manoeuvre widens the supervenience base of phenomenal character in a way undermines the representationalist position. For now it is not simply the content “blue” that determines the phenomenal character of the sensation of blue; it is the contents of the person's visual sensations at that time *taken as a whole* that determine the phenomenal character. To see how widening the supervenience base can undermine a supervenience claim, consider an astrologer's claim that personality supervenes on the circumstances of one's birth. To defend this claim – at least, as a claim about the actual world which we might extrapolate to a claim about all possible worlds – we need to show that, as a matter of fact, no two people differ in their personalities who do

not also differ in the circumstances of their birth. In a certain sense, this is relatively easy to defend, since for any two people with different personalities we will be able to show *some* difference in the *comprehensively understood* circumstances of their birth – a difference in the specific location or time of their birth, for example. But this is not the kind of claim from which we can infer that the circumstances of one's birth might genuinely supervene on one's personality. Here, the lack of a counter-example, while consistent with supervenience, does not *support* it. The reason it doesn't is simply that there is a good explanation of the lack of a counter-example that does not appeal to supervenience – the explanation being, of course, that since no two distinct people share the comprehensively understood circumstances of their birth, it follows from this fact alone that no two actual people will be alike with respect to the circumstances of their birth but different in their personalities.

We can, in general, therefore accept that there is no failure of supervenience in the actual world without accepting supervenience as such, as long as we have a plausible explanation. In the case of sensations, there does exist a good explanation for the lack of a counter-example to supervenience if we widen the supervenience base of phenomenal character to all of the contents of the relevant modality. There are, it seems to me, very good evolutionary reasons why different modalities detect different sorts of properties: when you have one sense that picks out properties X, Y, and Z, there is very little advantage to be had by evolving another sense that also picks out X, Y and Z. There may be *some* advantage – if, for example, the second sense picks out X, Y and Z more reliably, etc. – but these are at least good grounds for thinking that the perceptual contents of one modality will *always* differ from the perceptual contents of another. Consequently, the lack of counter-example to supervenience *in this sense* of the phenomenal on the intentional gives no particular grounds for believing that the phenomenal really does supervene on the intentional.

What this means, is that in refuting the purported cross-modal counter-example by adverting to the differences taken as a whole between the contents of different modalities,

the representationalist position is nevertheless far weaker since there is a good explanation for these differences that does not involve supervenience.

### III

Nevertheless, this supervenience claim is in better shape than the corresponding claim by our imagined astrologer, since the alternative explanation in the cross-modal case is just that – an alternative – and might be disputed. So it is worth examining some further consequences of what is, in effect, the widening of the claimed supervenience base of the phenomenal character of the visual sensation of blue, from the content “blue” to the content “stationary blue square” or “moving blue oblong”. It should be clear that this is what the strategy entails. If content other than shape is required to explain the apparent phenomenal difference between the tactile sensation of shape and the visual sensation of shape, then that further content must partly determine the phenomenal characters of the respective sensations of shape. That is to say, the phenomenal character of shape sensations must be determined by shape content plus some further content, the further content being always within this same modality. The character of visual shape sensation is thus determined by, or more strongly just is, visual content as a whole.

At this point it is at least possible to see that the “identity” thesis – that phenomenal character is the very same as perceptual content – is self-defeating. If the phenomenal character of the visual sensation of square *just is* the visual content taken as a whole, it follows that the phenomenal character of the sensation of blue is sometimes distinct from the phenomenal character of the sensation of square, and sometimes not. If the phenomenal character of the visual sensation of square is identical to visual content taken as a whole when “square” is part of that content, then since “blue” will sometimes be part of that content and sometimes not, the *phenomenal character* of the sensation of blue will sometimes be identical to the

phenomenal character of the sensation of square and sometimes not. This is so simply by virtue of the transitivity of identity: if the phenomenal character of the sensation of blue is, on some occasion, identical to the content “moving, blue, square”, the phenomenal character of squareness will, on those occasions, also be identical to the content “moving, blue, square” – and, therefore, the respective phenomenal characters will (according to the theory) be identical to each other on those occasions, which is a contradiction.

Note that it is not really open to the identity theorist to insist that his phenomenal character of the sensation of blue, unlike that of square, is simply the content “blue”, since this would render the strategy we are discussing far too ad hoc. The widening of the supervenience base in response to the cross-modal counter-example cannot be limited in scope to the sorts of content that can be cross-modal, since no independent justification has been given, or is seemingly available, for such a limitation.

It seems that the only way out of this difficulty is for the identity theorist to deny that for any visual sensation there *is* any distinction between the phenomenal characters of shape sensation and colour sensation. But, firstly, there *is* a very clear distinction between colour and shape *content*. This shows that content and phenomenal character cannot be the very same thing. Secondly, it undercuts one of the best motivations for making the representationalist move in the first place. The traditional view had it that there is a phenomenological difference between the visual sensation as of blue and the visual sensation as of, say, square. The representationalist insight was that our awareness of this difference is not an awareness of an intrinsically mental difference, but rather an awareness of the difference between *blueness* and *squareness*. Now according to the representationalism under consideration here, the visual perception of squareness feels different to the tactile perception of squareness by virtue of the difference between (say) *blue squareness* and *cold squareness*. It isn't possible, on this account, to compare *just* the visually perceived squareness with the tactually perceived squareness; the comparison can only be made between modal *clusters* of contents (Tye 2000 (p. 94)

seems to be making just this claim). But this denies the idea that was originally to be explained, that there is a phenomenal difference between the perception of the blueness and the perception of the squareness, since if (visual) squareness and (tactile) squareness can't be phenomenally compared then neither, to be consistent, can (visual) blueness and (visual) squareness be compared phenomenally – or, indeed, the perception of blueness and greenness *merely as such*.

Further, this denial in turn undercuts a another idea which is particularly attractive to representationalists, namely that when we attend to the overall phenomenal character of an experience as of a blue square, we can identify the distinct contributions made by the blueness and squareness. Since representationalists assert that we are never aware of phenomenal character distinct from intentional content, the only contribution that we *could* be aware of the “blue” and “square” parts of the experience making to its total phenomenal character is the contents *blue* and *square*. But the representationalist move considered here involves precisely the denial that the different contents of an experience, at least, within one modality, make identifiably distinct contributions to its phenomenal character.

Finally, the idea that within a single experience one can compare the phenomenal characters of the auditory *cluster* of contents with *clusters* of contents from other modalities, but not the phenomenal characters of individual contents, might appear to be an unstable middle ground. At any one time, one's perceptual experience of the world will contain the contents of most of the five senses. If talk of the phenomenal character of the experience as of blue *merely as such* is disallowed on the grounds that the contribution to phenomenology made by the blueness is inseparable from the contribution made by the other contents within the same modality, one has to ask whether we should also disallow talk of the phenomenal character of, say, an auditory experience *merely as such*. This is not a question of whether it is *easier* to identify the phenomenal contribution made by a single sense modality to the phenomenology of one's total perceptual experience than it is to identify the phenomenal contribution made by a single aspect of a sense modality

(shape, etc.). The representationalist move discussed here involves an insistence that one *can* compare phenomenology between modalities but not within them. Perhaps this consequence of the move could be defended, but at the moment there is no defence of it on the table, and none obviously available. To see that it needs to be defended, consider the consequence of its negation being allowed. If, with respect to a perceptual experience, it is equally possible to identify the distinct phenomenology of constituent *parts* of a sense modality as it is to identify the distinct phenomenology of the constituent *sense modalities* of the perception, then either one can phenomenally compare the visual perception of squareness with the tactile perception of squareness, or one can neither do that *nor* compare the visual perception of red (etc.) squareness with the tactile perception of cold (etc.) squareness. In either case it makes no *more* sense to talk about the phenomenal difference between seeing blue and seeing green than it does to talk about the phenomenal difference between seeing and hearing. Since even representationalists take on board the phenomenological difference between seeing and hearing as a fact to be explained (even if the proposed explanation is representational), the denial of the phenomenological difference between seeing blue and seeing green looks especially weak.

#### IV

So we are left with the idea that perceptual content supervenes on, though is not the same as, phenomenal character. We have also thrown out the idea that the content “square” determines, by itself, any particular phenomenal character. By extension, and under threat of ad-hocery, we should equally dismiss the idea that the content “blue” determines, by itself, any particular phenomenal character.

If we want to retain the idea that the sensation of a blue square involves distinct phenomenal characters for blue and square, we are nevertheless estranged from the idea that there is a straightforward one-to-one relationship between the



phenomenal characters and their counterpart contents. But in any case, without the idea that phenomenal character is identical to perceptual content, there seems little left to motivate the idea that every distinct perceptual content has its own distinct phenomenal character. The supervenience thesis we are left with does not require it.

But what, exactly, *is* the supervenience thesis we are left with? A familiar result from the metaphysics literature is that a supervenience claim is not a claim about the *nature* of a target phenomenon, but rather simply a modal claim about the pattern of variation that a phenomenon exhibits with respect to what it is taken to supervene *on*. It is a way of being neutral about what the relation actually is between the supervenient and subvenient domains, at least within the range of relations that would support the modal claim – typically relations like *identity*, *constitution* and *realisation*. Kim and Heil<sup>7</sup> express this as the idea that supervenience is a *determinable* relation with the other more familiar relations as determinates. Supervenience is, according to Kim, “a ‘surface’ relation that reports a pattern of property covariation, suggesting the presence of an interesting dependency relation that might explain it”.<sup>8</sup>

Now there are a limited number of dependency relations that are compatible with the supervenience claim put forward by intentionalists. For example, when Tye says “necessarily, experiences that are alike in their representational contents are alike in their phenomenal character,” the sort of necessity he has in mind clearly goes beyond mere causal or even nomological necessity. The idea, to use Kripke’s metaphor, is that when God creates experiences with intentional content, he does not have to do more work to create their phenomenal character. Indeed if we *did* hold that the pattern of variation of phenomenal character with respect to representational content were best explained causally, then obviously we would have to hold that character and content are distinct properties – and that the pattern is contingent.

Any claim that the pattern of variation is *necessary* will need at the very least to be supported by an accompanying claim concerning how the variation is best explained – an explanation

that accounts not just for the pattern but also its necessity. That is one of the explanatory burdens representationalists face. On this point they have no better account than that content and character amount to the same thing, and this we have seen to be false by their own lights. The obvious alternatives to an identity claim are, to my mind, barely comprehensible. For example, one might try to argue that representational content *constitutes* phenomenal character. But this would need either to invoke a part-whole relation between content and character, or the sort of relation between a statue and the block of cement it is made of. But neither of these seem even to come *close* to expressing a plausible way of describing of the relationship between what a sense experience is *of* and what it is *like*.

Consequently, if the representational theory of phenomenal experience is merely about its variation in relation to perceptual content, anti-representationalists have no particular reason to feel threatened. The representationalist claim about the *actual* relative pattern of variation may well be true, but this is compatible with their ontological distinctness, which representationalists deny. Our reason for believing that the pattern holds *necessarily* will depend on our being able to explain it in a way that makes the necessity understandable, and there is simply no good explanatory story of this kind on the table. For this and other reasons I have mentioned, the standard representationalist response to cross-modal perceptual contents leaves much to be desired.

#### NOTES

<sup>1</sup> Byrne, Alex (2001): 'Intentionalism Defended', *Philosophical Review* 110, 199–240, p. 7.

<sup>2</sup> Tye, M. (2002): 'Representationalism and the Transparency of Experience', *Nous* 36, 137–151, p. 137.

<sup>3</sup> I will not survey them here, but see most notably Tye, M. (1995): *Ten Problems of Consciousness*, Cambridge, Mass: MIT Press.

<sup>4</sup> For the classic statement of the argument from transparency for representationalism, see Harman (1990), "The Intrinsic Quality of Experience," in Tomberlin (ed.), *Action Theory and Philosophy of Mind*, Atascadero, Calif.: Ridgeview.

<sup>5</sup> Since my focus here is on the representationalist reply to this sort of argument, it is not necessary to describe the argument itself in more detail – for much fuller versions see, e.g., Block, N. (1996): ‘Mental Paint and Mental Latex’, in E. Villanueva (ed.), *Philosophical Issues, 7 Perception* (pp. 19–49); Lopes, D. (2000): ‘What is it Like to See with Your Ears’, *Philosophy and Phenomenological Research* 60, 455–459.

<sup>6</sup> Dretske, F. (1994): *Naturalizing the Mind*, Cambridge, Mass: MIT Press.

<sup>7</sup> Jaegwon Kim (1993). *Supervenience and Mind: Selected Philosophical Essays*, New York: Cambridge University Press; John Heil (1998): “Supervenience Deconstructed.” *European Journal of Philosophy* 6, 146–155. See also Terry Horgan (1993): ‘From Supervenience to Superdupervenience: Meeting the Demands of a Material World’, *Mind* 102, 555–586.

<sup>8</sup> Kim (1993): op. cit. p. 167.

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