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“THE PROPERTY OF BEING RED”
ON FRANK JACKSON’S OPACITY PUZZLE AND HIS NEW
THEORY OF THE
CONTENT OF COLOUR-EXPERIENCE

ABSTRACT. Frank Jackson has a new objectivist and representationalist account of the content of colour-experience. I raise several objections both against the account itself and, primarily, against how he tries to support it. He argues that the new account enables us to see what is wrong with the so-called Opacity Puzzle. This alleged puzzle is an argument in which a seemingly implausible conclusion is derived from three premises of which seem plausible to an representationalist. Jackson’s diagnosis of the puzzle as a fallacy of equivocation is mistaken. The term “the property of being red” is not ambiguous in the way he claims it to be, and the puzzling argument is valid. Moreover, its conclusion is not implausible, so after all there is no real puzzle. I try to show how Jackson’s wrong diagnosis results from neglecting the difference between properties proper and properties as conceived in the light of a given property-concept.

Frank Jackson sketches a new, fully objectivist account of colour. It contains a new answer to the question:

What is it that makes a physical property, like a certain reflectance profile, a certain colour, *e.g.*, the colour red?

And his answer is representationalist: It is the fact that this physical property has certain features which are determined by the representational content of the colour experience we have when we see something as red. This brings us to the question:

What is the representational content of colour experience, *e.g.*, the experience we have when we see a thing as red? Or more specifically: What sort of a property is a thing represented as having – whenever we have the experience of seeing it as red?

Jackson's answer to this second question is not completely clear to me. But it is clear that the answer he wants to give should satisfy two requirements. First, the property in question is not the first order physical property of being red, but the second order property, or "role-property", of being red. Second, this second order property of being red (let's call it *being red*₂, for convenience) is as fully objective – independent of subjects' experiences or dispositions to have experiences – as the first order physical property of being red (called *being red*₁, for short).

The objectivity of the property of being red₁ can be assumed to be unproblematic; it is just another physical property, maybe a certain reflectance profile. A crucial twist in Jackson's attempt also to establish the objectivity of the property of being red₂ seems to be this: Although being red₂ is how we represent red things in our colour-experience, being red₂ should turn out to be exclusively a matter of *how the object is* which is seen. Being red₂ is not a matter of *how subjects experience* the object which is seen.

Of course, Jackson accepts that there is an intimate connection between our colour experiences and our colour concepts. But the subjectivity of the experiences, or rather their dependency on facts about subjects, does not infect the concepts which make up their content.

He does not deny that colour concepts are, as a matter of fact (or maybe even as a matter of natural necessity), acquired by undergoing non-deviant causal contact with certain objects, and that it is part of the non-deviancy that certain kinds of experience are brought about in appropriately disposed subjects. He may even agree that, given our restricted human capabilities of concept formation, we *could not* acquire these second order concepts other than by going through experiences of this kind. But nevertheless what these concepts are concepts of – namely colour properties (being red₂) – may well be features of properties which things in the world have completely independently of our human nature.

So, as Jackson views these matters, the colour property-words which we have (even if they are ambiguous) are all about properties, which are as objective as one could wish. Whether a given thing, *x*, has a property which makes it a red thing does in no way depend on human experience, or on what human beings are disposed to experience under optimal conditions. And even the question: "What makes a given physical property, *P*, the colour red?" is not a question which essentially refers us back to any such "subjective" matters. The schemas

$$\begin{aligned} x \text{ is red} &\iff x \text{ is ...} \\ P \text{ is the colour red} &\iff P \text{ is ...} \end{aligned}$$

can be completed correctly without filling in anything which concerns human experience or other facts about human nature.

This is Jackson's new project. And it sounds highly attractive to me, insofar as it promises to establish colours as objective properties of things in the world. But, alas, I don't believe any part of his sketch of how to carry this project out.

There is much in Jackson's way of approaching these issues, which I think mistaken, and there is very little of it, which I address in my ensuing comments. What I think to be mistaken, for example, is the representationalism about colour experience altogether. The experience of seeing something as red may, under certain conditions, give rise to mental events (like the judgment that this thing before me is red), which have a propositional content. But Jackson's taking it for granted that such colour experiences themselves have a content which can be captured in a that-clause, strikes me as – ahem – hard to swallow. However, in what follows, I shall suppress my thoroughly anti-representationalist sentiments as well as I can.¹

I shall concentrate on two points in Jackson's paper: (1) the Opacity Puzzle and (2) his account of the representational content of colour experiences.

As regards (1), I shall voice my doubts against Jackson's solution and try to show that the puzzle is not what Jackson thinks it to be. It is not, as Jackson holds, a seemingly sound argument with an unacceptable conclusion. Rather it is a valid argument with a merely seemingly unacceptable conclusion. The real puzzle about the Opacity Puzzle seems to me to be this: What is it about its conclusion that strikes us as so intuitively unacceptable? (At the end of section 1 I shall try to answer this question.)

As to (2), what I shall have to say about Jackson's sketch of his new account of the representational content of colour experiences is just a bunch of more or less intuitive misgivings. The tenor will be that the sketch would render colour experience more indirect and more conceptually sophisticated than it may seem to the eye of the innocent beholder – or even to a representationalist.

1. THE OPACITY PUZZLE

The Opacity Puzzle is designed to show that phrases like “the property of being red” should be considered ambiguous – at least, if you are a representationalist about colour experience and a causal realist about colour properties. So let's see.

And let's remember: Ambiguity claims are not for free. Paul Grice has forcefully made us aware, or reminded us, of that. They are not complimentary. To claim ambiguity with regard to a phrase is to make a substantial claim. You can't just say:

We don't like this argument, it just does not seem valid, intuitively. Well, if we assume equivocation, it isn't valid. So, hey, let's go: Let's pick out the phrase "x"; let's assume it is ambiguous. And given this assumption, wow, this argument isn't valid. *Q.e.d.*
 – Bravo, we've solved another philosophical problem.

In giving this caricature of a sloppy thinker's reasoning, I do not mean to insinuate that Jackson is trying to lure us in this direction. But the reader should be reminded of the fact that ambiguity claims, even when they come handy, should not pass for truth without independent reasons. Jackson, I take it, provides us with an argument in support of his ambiguity claim, even if he does so only implicitly. The argument implicit in his reasoning rests on this: The Opacity Puzzle needs to be solved, and it can *only* be solved on the assumption that in fact the ambiguity in question exists. And indeed, if he were right in saying that his diagnosis of the puzzle and his solution to it yield the *only* feasible reaction to it, then this would be a strong reason for assuming the ambiguity he takes to reside in phrases like "the property of being red". His attempt to show that all rival solutions are unsatisfactory is, therefore, tantamount to an attempt to give a powerful argument for the ambiguity claim.

Against this, what I should like to argue, in this section, is this: (i) Jackson's diagnosis is mistaken, since the disconcerting argument which is called the Opacity Puzzle is not a fallacy after all; (ii) the solution he proposes does not really work as it stands; (iii) it does not even work when a certain difficulty in it is removed, and (iv) its correct solution – or rather: its dissolution – gives us no reason for assuming that phrases like "the property of being red" are ambiguous.

What is supposed to be puzzling about Jackson's so-called Opacity Puzzle is this. There are three assumptions, which sound plausible (at least to a naturalist and representationalist of the appropriate stripe), but they seem to lead to a conclusion, which sounds highly implausible (to anybody):

1. The property of being red = the normal cause of looking red.
(Causal axiom).
2. The property that looking red represents things as having = the

property of being red. (Representation axiom).

3. The normal cause of looking red = reflectance profile *RRP*. (Empirical claim).

Therefore, the conclusion:

4. The property that looking red represents things as having = *RRP*.

Jackson (2007) proposes to escape the puzzle by making a distinction concerning the meaning of the phrase “the property of being red”. This phrase may refer, he claims, to two different properties, one being the property, as Jackson puts it, “which acts on us when something looks red in normal circumstances”, the other being “a property of the first property”. The first property is called the realiser property, the other the role property. Jackson’s reaction to the puzzle is this: Read the phrase “the property of being red” in the causal axiom as referring to the realiser property, and read the same phrase as it occurs in the formulation of the representation axiom as referring to the role property. In this way, he can still accept all the premises, but the undesired conclusion is blocked.

1.1. *The Role Property: A Property of Things or a Property of Properties?*

There is a minor difficulty about this proposal as put forward by Jackson. If the role property is, as he says, a second order property, a property not of things but of properties of things, then we cannot read the phrase “the property of being red”, as it occurs in the representation axiom, as referring to the role property. The reason is that the property referred to in the representation axiom has to be a first order property, because it has to be a property that *things* are represented as having. But since things cannot have properties of properties, the representation axiom would be turned into a falsehood by the manoeuvre envisaged; and Jackson’s claim that the representation axiom “is only true as a claim about the role property” would be false.

In order to overcome this difficulty we should, I suggest, make a threefold distinction when we philosophise about the property of being red. First, there is

the *role constituting property*, *i.e.*, the 2nd order property which is the combination of those 2nd order properties which a physical 1st order property has to have in order to be the colour red.

Second, there is

the *realiser property*, *i.e.*, the physical 1st order property, whatever it is, which actually has the role constituting property.²

And third, there is

the *role property*, *i.e.*, the property of having the 1st order property, whatever it is, which actually³ has the role constituting property.⁴

What is now called *the role property* is not anymore a property of properties, but rather a property of things, and so it is a property which may render the representation axiom a true statement. My suspicion is that Jackson, when he uses the term “the role property” in his paper, equivocates between speaking of what I have called *the role constituting property* and speaking of what I now propose to call *the role property*.⁵

But whatever equivocations may be involved in Jackson’s terminology, one thing is fairly clear: When it comes to the second premise of Opacity Puzzle,

The property that looking red represents things as having = the property of being red,

the right hand side of the identity statement cannot be read as referring to the role constituting property. The statement can be thought to be true only if the definite description on the right hand side refers to a property of things – hence not to the role constituting property, but only to the role property proper.

1.2. *Role Property and Realiser Property: The Same Property, but Differently Conceived*

But another difficulty arises, if we adopt this suggestion about how to specify the concept of a role property. For given this new specification, the role property and the realiser property appear to be one and the same. Consider the following identity statements:

The role property = the property of having the 1st order property, whatever it is, that actually has the role-constituting 2nd order property

The realiser property = the 1st order property, whatever it is, that actually has the role-constituting 2nd order properties

The property of having property P = the property P

The first two identities are true by definition, the third is a conceptual truth; it follows from these three that the role property is identical with the realiser property.⁶

It has to be noted, of course, that although the properties are identical, the *concept* of the role property is different from the *concept* of the realiser property. So instead of speaking of the role property and the realiser property, thereby misleadingly suggesting a difference between properties, I suggest we'd better speak of the *role concept* and the *realiser concept*. The red role concept may be expressed by a definite description which specifies the property it refers to exclusively as the bearer of 2nd order properties; the realiser concept may be expressed by a physical property name; following Jackson, it may be a term like "the reflectance profile *RRP*". Both concept-expressions refer to the same property, but they express different concepts, since they pick out the same property by different modes of presentation.

If all this is on the right track, then Jackson's proposal of how to escape the Opacity Puzzle does not really work. According to his diagnosis the argument which gives rise to the puzzle is a fallacy of equivocation; the phrase "the property of being red" is said to denote different properties as it occurs in the two axioms. The causal axiom, Jackson says, is only true as a claim about the one property, and the representational axiom is only true as a claim about the other property. Yet if there are no two different properties denoted by the phrase "the property of being red", then this diagnosis itself is at fault. Part of what went wrong in Jackson's diagnosis seems to stem from neglecting the difference between properties proper and property-concepts (or properties as conceived in the light of a certain property-concept).

What about the so-called puzzle, then? Its conclusion – that the property looking red represents things as having is *RRP* – certainly sounds implausible, even if we assume, with Jackson, that the premises do not sound implausible. How is this to be explained? I want to suggest an answer along the following lines: The conclusion follows validly from the three assumptions and is not implausible at all; it appears to be implausible only because we read too much into it. This answer is the opposite of Jackson's: He insists that the inference is not valid, and that the conclusion is implausible.

1.3. *About the Conclusion*

Let us first focus on what the conclusion

The property that looking red represents things as having = *RRP*

says and what it does not say. The conclusion is totally silent about concepts. It does not state that the realiser *concept* is the concept under which we represent the property which things seem to have when they look red to us. This clearly would be an extravagant thing to say. It is utterly implausible that when *X* looks red to us, the concept *RRP* is part of the representational content of our colour experience. Jackson is clearly right when he says: “*X*’s looking red does not plausibly involve anything that could be described as an open invitation ... to believe that *X* is *RRP*”.

What the conclusion really claims is this: The property our colour experience represents the thing as having, when we see it as red, is the same property as the property *RRP*. It does not say what Jackson rightly rejects: that our colour experiences *represent that* the thing has the property *RRP*. (Nor does it say that our colour experiences represent-under-a-*RRP*-mode-of-presentation⁷ the thing as having *RRP*.) The conclusion of the Opacity Puzzle does not say that the concept *RRP* is part of the conceptual machinery of our representations when we have colour experiences. It does not say anything about *how* (by what conceptual means) we represent, it says only something about *what* we represent.

Let me try to elaborate this point more clearly. Consider the following two statements:

- (A) The property picked out by the realiser concept *RRP* = the property things are represented as having when they look red to us.
- (B) The realiser concept *RRP* = the concept involved in our colour experience when things look red to us.

What makes the conclusion of the Opacity Puzzle plausible for a representationalist à la Jackson is given in (A); what makes it sound implausible is that it seems to entail statement (B) also. But (B) is nothing which the conclusion says; and the truth of (A) is consistent with the falsity of (B). So the alleged puzzle may be dissolved by recognizing that its conclusion is only about a property represented, and not about how it is represented.

This observation suggests a very different diagnosis of the so-called Opacity Puzzle, namely that it only seems to be puzzling. The

argument itself is just fine. It is not a fallacy. And its conclusion does not get us into trouble. The conclusion only seems to get us into trouble, because we tend to read too much into it, in reading it not only as what it is (namely a plausible claim, at least for the representationalist, about what is represented in colour experiences), but in reading it also as containing an implausible claim about how, by what conceptual means, our colour experiences represent what they represent. Therefore the implausibility of the conclusion is only apparent.

Two more short remarks on this point. The alternative diagnosis of the Opacity Puzzle is not at odds with the sense which Jackson attaches to the word “represent”. In arriving at the alternative diagnosis we did *not* switch surreptitiously to a different sense of the word “represent”, for example to a sense of representation as reliable co-variation. It is not denied that the relevant sense of “represent” is the sense favoured by Jackson, *i.e.*, the invitation-to-believe sense. (What is in fact denied is that the conclusion of the puzzle entails that looking red represents *that* things have *RRP*, or that the representation of *X* as having *RRP* involves a *RRP*-mode of presentation.)

Second, let me emphasise that Jackson’s claim about the representational content of colour experiences (the claim that such content involves role concepts) is *not* threatened by our considerations concerning the Opacity Puzzle. Indeed, his claim about the content would be powerfully supported, if his answer to the puzzle were the only feasible answer. But the claim about the content is not dependent upon Jackson’s answer to the puzzle. Even if his answer to the puzzle should be untenable, even if the so-called puzzle is not a puzzle after all, Jackson’s claim about the content of colour experiences may still be true (and supportable in other ways). This will be the topic of section 2. – But before we turn to these issues, let us ask:

1.4. *Why Do We Tend so Naturally to Read Too Much into the Conclusion?*

This question has to be raised, given what I have suggested so far. Since what is really puzzling about the so-called Opacity Puzzle, if I’m right, is that the conclusion of the valid argument sounds so blatantly implausible, although its premises do not (at least to a representationalist). Of course, one could try to argue that the validly derived conclusion vividly brings out the hidden implausibility of (at least one of) the three premises. Being an anti-representationalist, I

do naturally have the itch to argue along these lines. The reader may guess which of the three premises I'd blame to be the origin of the blatant implausibility. But as I promised, I shall resist the temptation. Instead, I shall stick to my diagnosis that the puzzling implausibility of the conclusion, *i.e.*, of

The property that looking red represents things as having = *RRP*

is only apparent, and that there is a satisfactory explanation of why there is this appearance of implausibility.

Here goes. We may speculate that something like the following is involved. (At the very end of this section I shall make a correction concerning the way in which I present this suggestion for the moment.)

Sentences of the type

(1) *A* represents *X* as having property *P*

have two readings. In the strong reading, (1s), such sentences entail that *A*'s representing *X* as having *P* involves a *P*-mode of presentation; in the weak reading, (1w), they entail nothing about how (*via* what sort of mode of presentation) *P* is represented by *A*. (1s) entails

(2) *A* represents that *X* has *P*,

whereas (1w) does not entail (2).

As to an identity statement like

(3) The property *A* represents *X* as having = the property *P*,

we should distinguish it from an identity statement like

(4) The property *A* represents *X* as having, (*this property*) *considered under the very mode of presentation under which A represents this property* = the property *P*, *considered under a P-mode of presentation*.

A property-considered-under-a-mode-of-presentation is not a property. You may think of it as an ordered pair, $\langle P, \mu \rangle$, consisting of a property *P* and a mode μ under which it is presentable in mental representation. Whereas (4) entails (1s), (3) does not entail (1s) but merely (1w).

Now for a crucial part of the speculation. The strong reading of (1) is extremely dominant; it would take an extra effort, or a very special context of use, to make it clear that merely (1w) applies. Since (1) clearly follows from (3) and we usually are not aware of the weak reading of (1), we tend to misread (3) in such a way that it leads us to

the dominant reading of (1). That's why we naturally read (3) as (4): for (4) entails (1s), which in turn entails (2). So it may seem quite natural that we get from (3) to (2).

That's my speculation about why we tend so naturally to read the conclusion of the Opacity Puzzle as entailing the obviously false consequence that our colour experiences represent that things have *RRP*.

Actually, given my Gricean dislike of postulating ambiguities just because they would come in handy, I prefer to treat (1) as univocal: This sentence has only one literal meaning, the one I have just called *the weak reading*. But there is a generalized conversational implicature which is carried by asserting sentences of type (1), and that is to say: In a standard use of (1), the speaker means – and is understood – to commit himself also to the truth of (2). This explains nicely, I think, why we tend so naturally to read too much into sentences like (1).

The upshot of the first section seems to be this. Jackson has not succeeded in giving an argument for the alleged ambiguity of phrases like “the property of being red”. Any distinction between two properties of being red – between being red₁ and being red₂ – has not received support by the so-called Opacity Puzzle. Of course, there may be such a distinction nevertheless. And there clearly is a distinction between what we have called *the role constituting property* of being red (a complex second order property) and any red object's *realiser property* of being red (a physical first order property). But it has turned out that this distinction can't be at issue in the Opacity Puzzle. What Jackson seems to have wanted to establish, namely a distinction between two properties of being red, both of them exemplified by objects – this distinction is perspicuous by its absence.

2. JACKSON'S ACCOUNT OF THE REPRESENTATIONAL CONTENT OF OUR COLOUR EXPERIENCES

But maybe everything I have explored in the first section is due to just another philosophical slip of minor importance. Maybe Jackson slipped, maybe I did, maybe both of us did. Jackson may have made a mistake in presenting the Opacity Puzzle in the way he did. I may have misconstrued his argument and misunderstood the strategy of the argument behind it. Maybe he thinks that properties are individuated (or partially individuated) by the concepts we have of them.

Maybe, may be, maybe. – But what we now are about to turn to is a different issue, not dependent on the Opacity Puzzle and what it shows or fails to show.

In his argument, Jackson employs a certain conception of the representational content of colour experiences. One part of the account concerns *the kind of representation* (the sense of the word “representation”) which is at issue, when we say that a colour experience represents whatever it represents; another part concerns *the kind of content* of such experiences.

As to the first part, Jackson tells us in effect that a colour experience represents whatever it represents in the sense of “being a kind of open invitation to believe, a defeasible invitation but an invitation one accepts, absent defeaters”. Hence creatures incapable of having beliefs could not have colour experiences, a consequence which, to me, is not very attractive. For it seems at least not incoherent that there are creatures which lack the cognitive resources for having beliefs but which are able to see things as variously coloured.

Jackson does not specify the propositional content of colour experiences in great detail, but he is quite explicit about its conceptual format. The propositional schema of the content of the experience of seeing *X* as red is: *that X has the property, whatever it is, that has such and such properties*. Only when the phrase “such and such properties” has been substituted by a specification of the red role constituting properties, we have a specification of the proposition (and not only of its schema) which is the content of the experience of seeing *X* as red. At the end of the paper presented at the Bielefeld conference, Jackson made a suggestion about what “such and such properties” may be.

Before I shall turn to this suggestion, it may be observed that both assumptions just mentioned are not uncontroversial. First, it may be doubted that the experience of seeing something as red (*nota bene*: we are not talking about seeing *that* the thing seen is red) has a propositional content at all; it may be held, for example, that the representational content be some kind of non-propositional property-awareness of red. And, second, even if the propositionality of the content were acknowledged, one may still feel uncomfortable about the fact that the proposition schema envisaged by Jackson contains conceptual resources of second order. One wonders if anybody who sees something as red really can be supposed to have this kind of conceptual sophistication.

In the version of the paper presented in Bielefeld, Jackson made a speculative suggestion about the specific propositional content of our colour-experience, and he explicitly added that this suggestion was

made only in order to fix the discussion. This suggestion has not survived in the final version of the paper. I hope it is not unfair to come back to this proposal. What it came down to was this: “... when we see X as red, we represent that X has the property that occupies such and such a position in the similarity space specified by the colour solid”.

Given the sense of “represent” which is at issue, the subject who undergoes the experience should, in a standard case in which there are no defeaters, acquire or activate the belief that X has the property that occupies such and such a position in the similarity space specified by the colour solid. This is a fairly demanding belief; how could one literally have it without having mastered the concept of a colour solid? As an aside, it recently took me some time to get some idea of this concept. But I’ve got an idea of only one version of it, the NCS-Colour-Solid; there seem to be rival conceptions, for example the Luther and Nyberg’s colour solid, and I don’t have an inkling if these two versions of the colour solid specify the same similarity space. Have I now mastered the concept of *the* colour solid, or at least of *a* colour solid? I am not sure I have. But before I made the effort of reading about colour solids, could I have literally believed that X has the property, whatever it is, that has the property of occupying, say, the position 15/81-R22B in the similarity space specified by the NCS colour solid? – Again, one wonders if really anybody who sees something as red can be supposed to have this kind of conceptual competence.

A last point about Jackson’s account. This account seems to render our perceptual knowledge of colours highly indirect. But don’t we (at least in certain cases of veridical colour experience) acquire some sort of knowledge by acquaintance of the colour we see a thing as having? At least it seems to us that in visual experience colours are given to us as it were immediately, not as something which is identified as the bearer of such and such second order properties. Yet if colours are experienced by means of role concepts (concepts which identify colours in terms of certain second order properties), then it is not clear how our perceptual knowledge of them can have the immediacy it sometimes at least *seems* to have. So the question arises: How can Jackson’s approach account for the apparent knowledge by acquaintance? Or wants he us rather to conclude that the appearance of such knowledge is just an illusion?

Both Jackson’s criticism of the *via media* and his preferred objectivist theory of colour are underpinned by his account of the representational content of colour experience. But how plausible is this account? Even if we were to grant that colour experiences do

have representational content and, what is more, that the content of colour experience is propositional, even if we were to grant this much, Jackson's version of the representationalist account is in danger of being overly intellectualistic – anyway: overly demanding – both in how it characterizes the schema of the propositional content (as involving higher order conceptual machinery) and in what it provisionally suggests as the specific items which have to be filled, in order to get to a complete content, e.g. the concept of a colour solid.

To conclude. In this second section, I have expressed some misgivings about Jackson's new account of the representational content of colour experiences which, I hope, may weaken its *prima facie* appeal. This account, as it is presently developed, may be viewed as amounting, very roughly speaking, to a demandingly complex existential claim like the following:

There is a complex second order property P_r (the red role constituting property, the one we've been calling "red₂"). P_r is the combination of second order properties $P_1 \dots P_n$. These properties are properties of the colour red (which itself is a first order physical property, the one we've been calling "red₁"); more specifically, $P_1 \dots P_n$ are those properties the having of which makes a physical first order property the colour red. And we have a folk concept, C , of red₂, *i.e.*, of a thing's having the property, whatever it is, that has $P_1 \dots P_n$, such that

- (i) C captures the content of our colour experience when we see something as red, and
- (ii) C contains no reference to subjective features.

Certainly nothing I have said shows that there are no such properties and concepts. But some of what I have said indicates, I hope, that it is not a trivial matter to specify what these properties and concepts might be.⁸

3. NOTES

¹ Since I used to be (or rather tried my best, for quite a while, to convince myself of the advantages of being) a representationalist, I hope I can manage it.

² It would be more apt to speak of *the realiser property with regard to object X and time t*, since it might be wise to allow for the possibility that a colour's role constituting property is realised in different objects (or in the same object at different times) by distinct physical 1st order properties. – But I shall ignore this relativization.

^{3.} I added the word “actually”, in order to make it clear that both terms (*i.e.*, “the realiser property of being red” and “the role property of being red”) are rigid. They are rigid, because each term is meant to denote a property we ascribe to things when we commonly call them red. And I take it that whatever we commonly call redness is nothing but “our” redness: the property in virtue of which red things in the actual world are red. What it comes down to, then, is this. The red role constituting property determines, relative to the actual world, which property is the property of being red. And the property thus determined is the property of being red in all possible worlds. Nevertheless, the red role constituting property is multi-realizable. But whatever properties realise it, realise it in the actual world. Let me explain. Our red things, the things which are red in the actual world, would not cease to be red in other possible circumstances – even if they lost their relational, 2nd order red role constituting property in those possible (but actually unrealised) circumstances. To put it as a slogan: *What is redness here, is redness everywhere*. And again: *What is not redness here, is not redness anywhere*. For imagine that in another world, *w*, certain things have a 1st order physical property, *P*, which in *w* (but not in the actual world) has the red role constituting property. Then *P* is not a realiser property of being red, since, by assumption, in the actual world *P* does not have the red role property. Notice furthermore that multi-realizability is not thereby ruled out. What if the current actual realiser property, say *RRP*, would one future day (in the actual world) cease to have the red role constituting property? Then *RRP* would not be the property of being red anymore; things which are red now would not be red anymore. What if another property *X* which now does not have the red role constituting property would one day acquire this 2nd order property? In this case, *X* would be the property of being red; things which are not red now would then be red.

^{4.} Again, it may be more appropriate to say: “*i.e.*, the property of having **one of the** 1st order properties ...”. – But again, let that go.

^{5.} Here is some textual evidence for this suspicion. Jackson says of what he calls *the role property* that it is “a property of the first [the realiser] property”. This is to say that the property in question is a property not of things but of properties. – On the same page he says that “[w]e represent that *X* has the property, whatever it is, that has ... the properties that make up the red ... role. There is one way *things* are being represented to be, namely that of *having the property that has such and such properties*” (my italics). This is to say that the property in question is a property of things, not of properties. After all, it is *things* which are being represented as having the property in question.

^{6.} Again, there is some textual evidence that Jackson may not disagree. He says that certain kinds of perceptual experience (*e.g.*, experience of shape) represent the relevant property *per se* (*i.e.*, represent the property *qua* the property it is), whereas other kinds of perceptual experience (*e.g.*, experience of colour) represent the relevant property *qua* the role it plays (*i.e.*, represent the property *qua* the bearer of certain 2nd order properties). The distinction Jackson draws at this point – the distinction between a property represented *per se* and a property represented *qua* the role it plays – is a distinction which concerns different ways of representing one and the same property. It is not a distinction between properties proper but rather a distinction between properties-*qua*-such-&-such. The distinction concerns properties-as-represented-under-the-so-&-so-mode-of-presentation, and these are

entities which might be thought of as ordered pairs consisting of a property and a mode under which it can be represented. More about this in sections 1.3 and 1.4 below.

⁷. The *RRP*-mode of presentation = the mode of presentation under which the colour red is picked out by the concept *RRP*.

⁸. Thanks to Ralf Busse for many email discussions in the course of writing the first version of this paper. Thanks to Fred Dretske and Martine Nida-Rümelin for comments on the penultimate draft.

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