

Colours with a Humean face

Publicerad i Sats, Nordic journal of philosophy 4:1 2003

Introduction/Abstract:

In this article it will be argued that a Humean, projectivist theory of colour can be held consistent and plausible. This can be done without selling out to cognitivist intuitions about colours if the distinction between an everyday- and a meta- level is upheld. The distinction, it will be argued, is both natural and philosophically uncomplicated.

In the process of developing a plausible projectivist theory some arguments against dispositional accounts will be raised. It will be argued that dispositionalism phenomenologically misrepresents colours and that Harold Langsam is wrong when he thinks that colours *do* look like dispositions¹. It will turn out that a simple misconception of the colour phenomenology serves as basis for his assumptions.

Furthermore it will be claimed that Michael Smith, in his attempt to avoid the Scylla and Charybdis of analysis, makes a good non-reductive analysis of the colour concept in his 'Response-dependence without reduction'². However, it does not take him all the way and in the end he still drowns in Charybdis. The guidelines to how this unfortunate result can be avoided will be given, and they will be given in a Humean manner.

Setting the scene:

A fair demand to a colour theory is that it is in accordance with our intuitions, or that it can explain what other origin the intuitions have. Some of the main intuitions are as follows:

1) It is in the objects that we find colours. If you wonder which colour an object has, you do not introspect. You look at the object. And if you have doubts about the colour, you take a closer look at the object in question.

2) Objects are coloured independently of any observer of the objects and they are also coloured in the dark. A red Ferrari is red even if it is parked in a sealed container.

¹ Harold Langsam: 'Why colours do look like dispositions'. *The Philosophical Quarterly*, 198 (2000)

² Michael Smith: 'Response-dependence without reduction'. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998)

3) Colours cause colour experiences in the subjects.

A colour theory must furthermore be in accordance with what science has to say about colours, if it is to gain plausibility. This can be summarised in the following, simplified paragraphs:

a) Objects have different types of micro-physical surface structures that reflect light in different ways.

b) These surface structures and the light contribute to the colour experience in the subject.

All the above mentioned paragraphs point to colours being objective properties of the objects. Still, there also seems to be a subjective dimension in the colour discourse. Objects seem to be dependent on responses from subjects to be coloured and to have particular colours. It seems natural to say that it is not only because of its physical properties that the red Ferrari is red. It is also because it is experienced as red by the subject.

You can imagine a world where subjects, because of different lighting, different eye-functions or other changed conditions, see this same car, with the same physical properties, as green. In such a world it seems natural to say that the Ferrari is green, even if it is the same Ferrari that was referred to as red before.

This seeming duality of a subjective and an objective side of the colour discourse has turned out to be very hard to explain.

Dispositionalism:

Dispositionalism is one attempt to explain the dual structure of the discourse. The theory has lately gained much attention because it seems able to conjoin the subjective and the objective dimension without reducing colours to be the one or the other. As the name unveils, dispositionalism is the theory that colours are dispositions. The dispositions are in the objects and are to be understood as properties of the objects.

At the same time, however, they are dispositions to produce responses, in form of colour experiences, in the subjects.

The dispositional property is most commonly captured in a colour concept, formulated as a biconditional, more or less, of the following form:

(D) An object x is red iff x is disposed to generate a 'red' experience in the subject (s) under conditions (c)

That is, x has the property of being red if it looks red under certain conditions. (s) and (c) leave room for variations. (s) can for example be a subject with normal eye functions, and (c) is typically read as standard conditions such as normal indoor lighting. At this stage it is not necessary to give a more precise formulation of (s) and (c).

With (D), an explanation can be given to how to conjoin the subjective and the objective criteria. The property of being red is a property of the object, because the disposition to look red is a disposition in the object. The object also has colour even if nobody experiences it and even if it is in complete darkness, because the object still has the disposition to look red. It is just not manifested or actualised under such conditions. The colour of the object also causes the colour experience. If the disposition to look red is not a property of the object, it will not look red. The disposition causes the 'red' experience³. None of the intuitions seem to cause any explanatory problems for the dispositionalist theory. This is also true of the scientific facts. The dispositions are typically seen as properties that supervene on more categorical properties, such as the micro-physical surface structure of the objects, in the case of colour. It is these surface structures and their ability to reflect light that science describes. The surface structures are fully objective, while the dispositions that supervene on them also are properties of the objects.

The dispositions also have the subjective aspect that makes it possible to explain the subjective side of the colour discourse, in that the colour properties are dependent on responses from subjects. The property of being red is dependent on a 'red' response from the subject in shape of a 'red' experience.

So far, dispositionalism seems to give a plausible description of the colour concept and of how it

³ It should be noted that many dispositionalists would not agree that dispositional properties are causally active. My temptation, and this is only a temptation, is however to argue that they will be forced to agree with this if they are to be in accordance with the intuitions and if they want to separate themselves from physicalist theories that also operate with causally impotent dispositions.

As my reading of dispositional accounts, in this case, speaks in advantage to the accounts, it should, however, not upset dispositional theorists too much.

is that colours are properties of objects.

Arguments against dispositionalism:

In this section some arguments will be raised which show that once you take a look beyond the surface, dispositionalism is not as appealing as it first seems to be.

The first argument deals with the colour phenomenology, and the claim is that the actual experience is not in accordance with the phenomenology presented by dispositionalism.

In the second argument, focus is put on the biconditionals that are supposed to capture the colour concept.

Phenomenological misrepresentation:

A problem for the dispositional theory which a number of philosophers have drawn attention to is that there seems to be a systematic misrepresentation of colours in our experience if colours are dispositions⁴. Colours simply do not look like dispositions. When a subject looks at a coloured object, he does not see the object's colour as a disposition to produce a colour experience in the subject. Instead, the object is seen as having a simple categorical property when it is experienced as coloured.

In other words, the colour appears, to the subject, to be a fully objective categorical property of the object and not a disposition to appear red. The latter would have been the case if dispositionalism was in accordance with the colour experience.

There are basically two ways for the dispositionalist to defend himself against this argument. He can either choose to accept the criticism and say that colours do not look the way they are, and then say that this does not change the fact that they are dispositions. Or he can try to show that we actually *do* see colours as dispositions. The first choice leads to an error theory. We experience colours and speak of colours as if they were simple categorical properties of the objects, when this is actually not the case. This does not show that a dispositional error theory necessarily fails as a theory. Yet, to say that there is a systematic misrepresentation in our experience seems counter-intuitive. Also, an explanation has to be given to why it seems so counter-intuitive. I

⁴ For example: Boghossian and Velleman 'Colour as secondary quality', *Mind*, 389 (1989) and 'Physicalist Theories of color' *Philosophical Review* (1991), and Mark Johnston 'How to speak of the colors'. *Philosophical Studies*, 68 (1992): 221-263. The problem is serious enough for Collin McGinn to give up his own dispositional theory in favour of a sui generis theory of colour. See: Collin McGinn, 'Another look at color'. *Journal of philosophy*, 11 (1996): esp. 537-538).

think such an explanation can be given and I will show so in the last part of this article.

What it does show is that a dispositional theory is not as appealing as first assumed. What made it so appealing was that it so easily and conveniently could be made to be in accordance with the intuitions about colours.

The dispositionalist can avoid this result if he chooses the other strategy. If he can show that we actually do see colours as dispositions, there will not be any misrepresentation.

A philosopher who has tried to travel this road is Harold Langsam⁵. He starts out with the question of how our visual experience can represent the experienced colours as being properties of physical objects. You cannot, according to him, be certain that you possess a complete picture of the phenomenology before you have given an answer to this question. The answer Langsam gives is as follows;

“[T]he way in which visual experience represents colour appearances as properties of physical objects is *by* representing them as manifestations of dispositional properties of physical objects.”⁶

To show that this is the correct answer to what our phenomenology looks like, Langsam uses an analogy between colour experience and pain experience. Just as the colour experience, the pain experience has a double structure. The pain is experienced as objective in that it is in the finger or wherever it is you are hurt. But it is also experienced as subjective because it is experienced as existing only because the subject can feel it. The question to be answered is how something subjective can be seen as a property of something objective, as for example a finger. It can be seen so because the pain experience in itself has this double structure;

”The structure is dual in that the experience distinguishes between the pain (something subjective) and the damage (something objective), and presents both of them to the subject as properties of the finger.”⁷

According to Langsam, the colour experience is analogous to the pain experience, in that it has the same type of dual structure;

⁵ Harold Langsam: ‘Why colours do look like dispositions’. *The Philosophical Quarterly*, 198 (2000)

⁶ Harold Langsam: ‘Why colours do look like dispositions’. *The Philosophical Quarterly*, 198 (2000): 71

⁷ Harold Langsam: ‘Why colours do look like dispositions’. *The Philosophical Quarterly*, 198 (2000): 73

”Colour appearances, like pains, are subjective, so if they are to be presented as properties of objective physical objects, they must be presented as the way that some objective property of those physical objects appears.”⁸

If this was the case, then the disposition to look coloured would seem to fit as the objective property of the physical object.

The analogy fails on a crucial point, however. The colour appearance itself is subjective, just like the pain, as they are the content of the subject's experience. Still, colours are not experienced as subjective, while pains are. As mentioned earlier, colours are experienced as objective categorical properties of the objects. It makes sense to say that I have pain, because of the subjective dimension. But I cannot say that I have colour in the same way. I cannot, for example have the red of the Ferrari. The Ferrari has this red, not I. If you have doubts about this you should turn inward and investigate if the Ferrari red is experienced as a subjective part of you in the same way that pains are.

It should be emphasised that it is not the colour appearance that is to be presented as a property of an object. It is the colour itself. There is no dual structure in the way the colour appears that can motivate Langsam's argument, as it has been assumed that there is in the pain experience. The appearance is in itself subjective, but this is beside the point. What matters is that the experienced, the colour, is experienced as wholly objective.

The analogy fails on this crucial point. And without it, the answer Langsam gives to the introductory question stands unmotivated. The dual structure in the colour experience that dispositions were supposed to explain is simply not there. The dispositions have therefore no explanatory function in the phenomenology.⁹

The problem in a nutshell for a dispositionalist is that he seems to be forced to assume that the colour appearing in the experience is not the same colour that is in the object in form of a

⁸ Harold Langsam: 'Why colours do look like dispositions'. *The Philosophical Quarterly*, 198 (2000): 73

⁹ An escape route for the dispositionalist that has not been mentioned is that he can give up the idea that the colour experience looks like a disposition, without ending up with an error theory. Instead, he can say that the colour experience *is* the disposition, that is, the colour experience is the manifestation of the disposition. But in stead of solving the dispositionalist's problem, it leads him into an infinite regress. 'Red' then becomes 'the disposition in a subject to produce in the subject a disposition to produce in the subject a disposition... ad infinitum'. See Boghossian & Velleman: 'Colour as secondary quality', *Mind*, 389 (1989): 87-91 for a more detailed exposition of this argument.

disposition. This in turn means that it is not the colour you experience, but instead the colour*. There appears to be a phenomenological misrepresentation that needs to be handled. Either you must accept that your theory is an error theory, or you must explain why there is no error, despite the misrepresentation.

Circles and biconditionals:

Focus is now to be put on (D) and the function of (D). The idea of the biconditional is that it should function as an analysis of colour concepts, such as 'red', and show how and in what way the concept is response-dependent. At the same time the biconditional should enable colour propositions, such as 'x is red', to keep their cognitive content so that both the subjective and the objective dimension of the colour discourse can be explained. It will also be demanded that the biconditional is a priori true, since this will give truth conditions with an a priori status to the colour proposition. With this in hand you will know that 'x is red' is true if the right hand side of the biconditional is fulfilled.

It is not enough that the analysis gives truth conditions to the proposition, though. Simon Blackburn¹⁰ draws the attention to other aims with the analysis: it must explain what it is you do when you pass a colour judgement as well as to show what it means that a subject says 'x is red'. For these aims of the analysis to be achieved, two disasters must be avoided. These have been baptised Scylla and Charybdis¹¹ after the monster and the maelstrom in 'The Odyssey'. Scylla is when you lose the a prioricity of the biconditional and Charybdis is when you preserve it, but on the expense of analytical advance.

The two disasters can best be illustrated from (D). If you fill out the (s) and/or the (c) with purely descriptive terms, you can get the following biconditional;

(Sc) x is red iff x is disposed to generate a 'red' experience in a subject with statistically normal eye functions, when the subject looks at x in common indoor lighting.

¹⁰ Simon Blackburn: *Ruling passions* (Oxford: Clarendon Press, 1998: 107) and Simon Blackburn: 'Circles, Finks, Smells and biconditionals'. *Philosophical perspectives - Language and logic*, 7 (1993)

¹¹ Scylla and Charybdis are for Blackburn primarily a problem for response-dependent moral concepts. I doubt that he would agree with my use of them as an argument against response-dependent colour concepts.

This biconditional falls into the jaws of Scylla. It is giving conditions under which x is disposed to generate a 'red' experience. But it is an open question whether x, when experienced as red under these conditions, actually is red. It makes perfect sense to assume that subjects, with statistically normal eye functions, actually can be mistaken when they judge x to be red, even if they experience x as red in common indoor lighting. However unlikely, still it could turn out that a majority of subjects have a defect that makes them see green things as red in common indoor lighting. There is nothing a priori given that excludes this possibility. In other words, even if the right hand side of the biconditional is fulfilled, the proposition 'x is red' may still be false. Even if it is assumed that 'x is red' actually always is true when the right hand side of the biconditional is fulfilled, the proposition would at best be a posteriori true. To close the question you must presuppose that the right hand side guarantees the truth of the left hand side. But no argument has been given for such presupposition in the biconditional.

To avoid Scylla, you can instead fill out (s) and/or (c) with colour terms;

(Ch) x is red iff x is disposed to generate a 'red' experience in a subject who only sees red things as red when the subject looks at x in common indoors lighting.

This is a clear example of how you can drown in Charybdis. (Ch) is a priori true. But the truth is preserved on the expense of the analytic advance. The concept that was supposed to be analysed appears on the right hand side as part of the analysis. This makes the biconditional trivially true and no analytic advance has been made.

Many attempts to avoid Scylla and Charybdis have been made.

One of the few who explicitly has made such an attempt is Michael Smith¹². Smith agrees that Scylla must be avoided. The a prioricity must be kept.

He believes, though, that he has found a way of sailing through Charybdis without drowning. According to Smith it is possible to give a non-reductive analysis of the proposition 'x is red', where the content of the proposition is kept cognitive and where the analysis is both a priori and an analysis.

This is made possible by the platitudes in the language that he describes as follows;

¹² Michael Smith: 'Response-dependence without reduction'. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998)

”When we acquire mastery of any term in language ... we acquire a set of dispositions to make inferences and judgements along certain lines. Let’s call the description a theorist might give of these inferences and judgements a set of ‘platitudes’.”¹³

The platitudes are similar to the intuitions mentioned earlier and they can be divided into different categories such as the relation between red and other colours or the relation between colour experience and colour judgements. A platitude of the former kind is for example ‘Red bears more resemblance to orange than to yellow.’ and a platitude of the latter kind could be ‘Objects typically look the colour they are.’ Smith is not saying that the platitudes are uncontroversial. There is the possibility that it is wrong to use the platitudes the way we, as masters of the colour concepts, use them. But if it turns out that the platitudes are inconsistent, we do not give up using them. Instead, we modify them so that they are no longer inconsistent. The reason why we do not give up using them is according to Smith because this would force us to give up using colour terms altogether. The colour platitudes therefore have an a priori status;

”[G]iving up on the inferences and judgements we make as masters of colour terms, in virtue of being masters, is to give up on using *colour* terms altogether. The platitudes that describe these inferences and judgements therefore have a prima facie a priori status, and gain a priori status simpliciter by surviving as part of the maximal consistent set of platitudes constitutive of mastery of colour terms.”¹⁴

Three questions remain unanswered. Why do colour propositions have cognitive content? Why should the propositions be analysed in response-dependent terms and wherein lies the analysis?

The answer to the first two questions is found in the platitudes. Platitudes such as ‘Objects typically look the colour they are.’ open up for the possibility that we could be mistaken in judging something red. We are forced to make an ‘is/seems’ distinction. So the colour proposition ‘x is red’ has a cognitive content, because it is not sufficient that x seems red. It must also be red. The platitudes force us in the same way to analyse the propositions in response-dependent terms. Platitudes like ‘The colour of x typically causes the perceiver to see x as the

¹³ Michael Smith: ‘Response-dependence without reduction’. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998): 89

¹⁴ Michael Smith: ‘Response-dependence without reduction’. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998): 90

colour it is.’, makes the response-dependent analysis reasonable.

But still, we may ask wherein the analysis lies?

It is not surprising that the platitudes are a priori available for the master of the colour terms according to Smith's reading, because the platitudes are the very ones that constitute the mastery of colour terms. So if you have been taught the mastery of colour terms, you will also have been taught the platitudes. In other words, being master of the concept ‘red’ means knowing the ‘red’ platitudes. The analysis is an analysis because it makes explicit what was only known implicitly, namely which ‘red’ platitudes are members of the maximal consistent set of platitudes that constitute the mastery of colour terms. This means that ”an analysis of the concept of being red is itself simply constituted by, or derived from, a long conjunction of these platitudes.”¹⁵

The analysis is non-reductive because it does not give an understanding of the colour proposition if you, as a minimum, do not already have an implicit understanding of the concept ‘red’¹⁶. But is the analysis at all an analysis, when you must have an a priori understanding of the analysed to understand the analysis? How does Smith avoid drowning in Charybdis? He does this by emphasising that the purpose of the analysis is to analyse the colour proposition. It is to show what the cognitive content is and how the proposition is to be understood. This is done by making explicit the platitudes that, before the analysis, only were known implicit. So far, Smith remains floating.¹⁷

What about the other aim of the analysis, then? As mentioned earlier, it is not sufficient that the analysis illuminates the content of the proposition. It should also show what it is you do when you make a colour judgement. The analysis Smith gives must be considered as failing on this point. It does not say anything about what it is to make a judgement. The whole analysis presupposes what was to be analysed, namely the concept ‘red’.

Smith's answer to this is that it cannot be true. “It would prove too much.”¹⁸ Why? Because

¹⁵ Michael Smith: ‘Response-dependence without reduction’. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998): 90

¹⁶ Smith also has a strong argument against the possibility of a reductive analysis (Michael Smith: ‘Response-dependence without reduction’. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998): 92-97). Here it is sufficient to present the conclusion. The result of a reduction would, according to Smith, be that it would not be possible to tell the difference between the different colours in the reductive analysis. It is obvious why this result should be avoided.

¹⁷ Even though more has to be said about the conjunction of platitudes, what it means to be a part of a maximum consistent set of platitudes, what the status of the set is and how it is/should be used. But for simplicity's sake it is assumed that Smith can give a plausible and satisfying account for this.

¹⁸ Michael Smith: ‘Response-dependence without reduction’. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998): 104

everybody agrees that a colour judgement expresses a belief. It has a cognitive content. Smith has a good argument against the possibility of a reductive analysis (see note 16). A non-reductive analysis can therefore not, in principle, be failing, as Charybdis indicates. This would show that colour judgements do not have cognitive content. Still, everybody agrees that the judgements have cognitive content, and therefore it proves too much. Even Blackburn (and I) must agree that the judgements have cognitive content.

This last argument is, as Smith himself points out, an *ad hominem* argument. This kind of argument has a tendency of causing a boomerang effect. To make explicit what is only said implicitly. Smith is not able to avoid Charybdis, therefore it cannot be a disaster. Yet, if you want to understand what the concept 'red' means without presupposing its meaning, it is a disaster. Furthermore, in the next part the guidelines for how Charybdis can be avoided will be given, for it can be avoided.

Projectivism:

What is projectivism:

It was indicated in the introduction that projectivism has an advantage over dispositional theories as soon as you look beyond the surface. In this part it will be shown why this is so. The basis for the theory is David Hume's classic projectivism that finds its best expression in the following passage;

"[T]he mind has a great propensity to spread itself on external objects, and conjoin with them any internal impression, which they occasion, and which always make their appearance at the same time that these objects discover themselves to the senses."¹⁹

In Hume's theory there is a lot that 'spreads' on the external world; sound, smells, moral value and colours. He does not argue much for the case of colours, maybe because he like many scientists of his time took it for granted.

Instead of taking it for granted I will give my view of how a projectivist colour theory should be understood. A complete theory will not be given here but only a few guidelines, to what form a projectivist colour theory should have and to how it can be made plausible and appealing.

¹⁹ David Hume: *A Treatise of human nature* (ed. Selby – Bigge, 2.ed., Oxford University Press, 1992)
167

Projectivism is in agreement with dispositionalist theories that objects have primary properties that cause the colour experience. It also holds that objects are disposed to produce colour experience in the subject. When it comes to the question of placing the colour, however, projectivism gives a different answer. The colours are the simple, categorical properties that the objects *seem* to have when they are experienced as coloured. These simple categorical properties are projections from the subject, with the result that it is not because of the subject's response that the objects are coloured, but in the response. A consequence of this seems to be that the external world is colourless. Not until the projection “gliding or staining all natural objects with the colours, borrowed from internal sentiments”, there arises “in a manner, a new creation”²⁰.

It is easy to see why projectivism about colours does not seem to be a good option for explaining colours. To begin with, the intuitions mentioned earlier, all point in the direction of colours being objective properties of objects. But projectivism seems to say that objects are colourless and that colours are purely subjective. Phenomenological misrepresentation that leads to an error theory also seems unavoidable for projectivism. You do not see colours as projections. Furthermore, everybody agrees that the proposition ‘x is red’ has a cognitive content. But if x and other objects never are coloured, but only seem to be coloured, then the propositions must be systematically false.

The problem of projectivism is that the idea that the external world is colourless is counter-intuitive. This must be explained. It also seems plausible that you should try to change the way we talk about colours if the propositions were systematically false. Projectivism must give an answer to how this should be done and to why it should not be done if this is the case, to gain plausibility. This is the main task of the next section.

Why projectivism is a good option:

I want to begin with an important distinction in order to show how projectivism can solve the problems mentioned above. Smith’s problem was that he wanted to give colour judgements both cognitive content and truth conditions at the same time as he wanted to explain what it is you do when you give a colour judgement. He was not capable of fulfilling the last task without drowning in Charybdis, and therefore he concluded that Charybdis was a too great

²⁰ David Hume: *An Enquiry concerning the principles of morals* (ed. Schneewind, Hackett Publishing Company 1983): 88. Hume speaks here of moral value, but it is clear that he had the same understanding of colours. I am in debt to Boghossian and Velleman for the formulation: Boghossian & Velleman: ‘Colour as secondary quality’. *Mind*, 389 (1989)

demand to an analysis.

The reason Smith got caught in Charybdis is that what he tried to show with his analysis are two separate things. His net was not wide enough. Therefore he gave up trying to catch the one and began arguing that it need not be caught. What he should have done instead was to use two different nets. The question about what you do when you give a colour judgement which he could not answer is a meta-theoretical question. That is, it is a question put by someone standing outside the colour discourse, someone who wants to understand what the colour discourse is. The answer Smith gave was an answer from within the discourse, an answer that only made sense if you already had an understanding of the discourse. He gave a theory *in* the discourse about how colour terms should be used. But he could not say anything *about* the discourse, because he never lifted himself up to the meta-theoretical level. This level has been discussed, used and misused a lot, so some words should be said about how I think it should be understood. There is nothing mystical or complicated about this level. It is not 'a view from nowhere' where you are forced to try and abstract away from everything you know. It is not a level where you somehow float above the colour discourse looking down on it. You have both feet firmly planted on earth. The only thing you do is to switch perspective to the one where you look at why we altogether do as we do instead of the perspective where you look at how we do it and how we should do it. This can be done even when you stand with one foot in the colour discourse.

With this distinction in place, the projectivist can now give an explanation to why we have the intuitions we have about colours. Let us take a look at the first intuition again;

1) It is in the objects we find colours. If you wonder which colour an object has, you do not introspect. You look at the object. And if you have doubts about the colour, you take a closer look at the object in question.

This can now be explained in projectivist meta-terms. It is quite natural that the subject experiences or sees the objects as coloured when it is in this way they are presented to him. And since there is a causal link between the object and the colour experience, it is natural that the subject takes another look at the object if he is in doubt about which colour it has. Similar explanations can easily be given to the other intuitions and in this way the projectivist can explain why we have the intuitions we have.

It is one thing to explain them, but quite another one to preserve them. If projectivism is true, should we not then change our intuitions so that they are in accordance with what colours really are, namely projections? Here you must be careful and know where you are standing. The answer to what colours are depends very much on where you stand, if you are on the meta-level or if you are answering from within the colour discourse. On the meta-level you can examine the external objects, their forms and surface structures. These surface properties cause different colour experiences in the subject and the experiences are conjoined with the experiences of the external objects. This process can then be described in a more or less detailed way depending on likes and needs. In this way it is possible, on the meta-level, to describe how subjects experience colours. If this is done in a detailed and precise enough way, you get a good explanation to why subjects experience and talk about colours as if they are simple categorical properties of the objects, even though these properties are properties that the subjects themselves ascribe to or project into the objects.

Can you then draw the conclusion that the external world is colourless? No, you cannot do that, and the following thought experiment illustrates why.

Imagine a world with objects like in our world, but with subjects that do not have any colour experiences, and assume that projectivism is the correct theory about colours. In this case, it would not make sense to say that the world was colourless. For it to make sense you must presuppose a colour discourse and this in turn presupposes that there are subjects who talk about colours and give colour judgements. But how can the subjects do this if none of them have ever had any colour experience? We who imagine the world and have had colour experiences as well as we have a colour discourse can of course say that the imagined world is colourless. But we can only do this in the light of the discourse we already have. And the judgements we give about the imagined world's colour situation will be judgements *in* this discourse. They will not say anything *about* the discourse. But if a subject in the imagined world would say the same thing, it would not have any meaning. It would not even be a judgement. 'This world is colourless' in the imagined subject's language would be as meaningful as 'This world is barupt' in the English language, which does not make any sense.²¹

To sum up, on the meta-level it can be described how the colour experience is caused and why

²¹ The same result will be reached if you imagine a world that only has one colour, say Ferrari red.

subjects experience colours as simple categorical properties. This explains why we also talk about colours as categorical properties. What we cannot say on this level is that colours really are projections. This is because we on the meta-level have the view of a theorist who is outside the colour discourse and who tries to explain why the discourse is looking the way it do. If you say that colours really are projections you move into the discourse and make a judgement in it. So on the meta-level you are restricted to say that what the user of the discourse name as colours are internal projections. This can be formulated in the following biconditional;

(D*) An object x is described as red iff x is disposed to generate a 'red' experience in the subject (s) under conditions (c).

The biconditional looks very much like (D). The important difference, though, is that (D*) is purely descriptive without falling into the jaws of Scylla as (D) did when it was given a descriptive reading.²² (D*) explains what is done when a colour proposition is made, and it gives us the analysis that Smith failed to give. Charybdis has been avoided.

The problem is that an analysis of the content of the proposition has not yet been given. With a helping hand from Hume, however, this can be done without the reappearance of monsters or maelstroms. The projections "raises, in a manner, a new creation"²³, as Hume formulated it, and it is this "new creation" that we experience in our daily life and find our bearing in. It is therefore also natural that it is this world the propositions are about when judgements are made about colours. In this world objects are coloured and it is these properties that are referred to in the proposition 'x is red'. The proposition can therefore be true or false. In this way 'x is red' has a cognitive content, which Smith says that everybody agrees on/must agree on. What remains to be explained for the projectivist is how he avoids an error theory. If the proposition is a proposition about the objects colour properties and these properties are projections and no real properties of the objects, then the proposition must be false. And if the propositions are systematically false, why not change the way we talk?

Well, the answer depends on how much ontological weight you want to put into the propositions. On the everyday level on which we operate when we are not doing philosophy, colours are

²² For a precise formulation of the biconditional there must of course be given definitions for (s) and (c). But this will not cause any philosophical difficulties when the biconditional is descriptive in this way.

²³ David Hume: *An Enquiry concerning the principles of morals* (ed. Schneewind, Hackett Publishing Company, 1983): 88

simple categorical properties. That is the way we talk about them and that is the way we experience them.

The question is how much this talk ontologically implies. The projectivist and his critics agree that the proposition 'x is red' has truth conditions and that it subsequently has a cognitive content. The critics will, very likely, also agree that the minimal truth conditions for the proposition are as follows;

(T) 'x is red' is true iff x is red

But here the agreement probably ends. When it comes to explaining what it is for x to be red, the dispositionalist gives a dispositional explanation. But why not be satisfied with (T)? With the distinction between discourse- or everyday-level and meta-level, (T) is all we need. As a theorist on the meta-level you are interested in how the discourse is used. With the intuitions, the projectivist explanation of their origin and (T), the answer has been given to the usage. You can explain how we talk about colours (the intuitions), you can explain why we talk about the colours in this way (projectivism) and you can show which truth conditions we are giving the colour propositions ((T)).

As a user of the discourse you are guided by the platitudes Smith operated with, when you want to know if x is red. So on this level Smith's analysis is useful, it is just not enough. But on this level x is red if subjects typically have 'red' experiences when they look at x. It is also correct to use the term 'red' in such a case, to describe x, because this is what the platitudes tell us. One such platitude could for example be that objects typically seem to have the colour they actually have. In this way it turns out that the proposition 'x is red' can keep its cognitive content if you understand 'cognitive content' as 'having truth conditions'. This it has due to (T).

But it is not likely that the critics are satisfied with this. If x never really is red, then the proposition 'x is red' is never true, and we are still stuck in an error theory.

The criticism is misdirected. For the user of the discourse x *is* red when x looks red and nothing extraordinary is going on. And in this case the proposition is true. There is no error because the platitudes tell us that this is the correct way to talk about colours. The critic is a critic directed from the meta-level. And on this level you can see that what the user calls red is an internal projection. But you cannot say that colours *are* internal projections from this level. To say this

you need the discourse you have elevated yourself above. If you lower yourself down again, it would be incorrect to say that colours are projections, because this is not what neither your experience nor the platitudes tell you.

So if it is correct to say 'x is red' and the platitudes tell you that x is red, then x *really* is red and 'x is red' is true, *really* true.

Bibliography:

Blackburn, Simon: *Ruling passions*, Oxford: Clarendon Press, 1998

Blackburn, Simon: 'Circles, Finks, Smells and biconditionals'. *Philosophical perspectives - Language and logic*, 7 (1993)

Boghossian, Paul & Velleman, David: 'Colour as secondary quality'. *Mind*, 389 (1989)

Boghossian, Paul & Velleman, David: 'Physicalist Theories of color' *Philosophical Review* (1991)

Hume, David: *A Treatise of human nature*, ed. Selby - Bigge, 2.ed. Oxford University Press, 1992

Hume, David: *An Enquiry concerning the principles of morals*, ed. Schneewind, Hackett Publishing Company, 1983

Johnston, Mark: 'How to speak of the colors'. *Philosophical Studies*, 68 (1992): 221-263

Langam, Harold: 'Why colours do look like dispositions'. *The Philosophical Quarterly*, 198 (2000)

McGinn, Colin: 'Another look at color'. *Journal of philosophy*, 11 (1996)

Smith, Michael: 'Response-dependence without reduction'. *European Review of philosophy, Response-dependence*, ed. Casati & Tappolet (1998)