



Is my perception of colour
the same as
your perception of colour?

“Is your red the same as my red?” - Vsauce
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Introduction

Research question

Is my perception of colour the same as your perception of colour?

Abstract

Colour. The most intriguing phenomenon us humans are able to observe, yet colour is just a mere illusion. We all know that animals perceive colours differently, like dogs who are only able to perceive a selection of colours, but we assume us humans to all have the same vision. But how do we know for sure that we indeed do discern colours the same way? We use the same words to describe colours, yes, but we can never be sure how the individual sees the colour described by the word in reality. Or can we?

Research goal

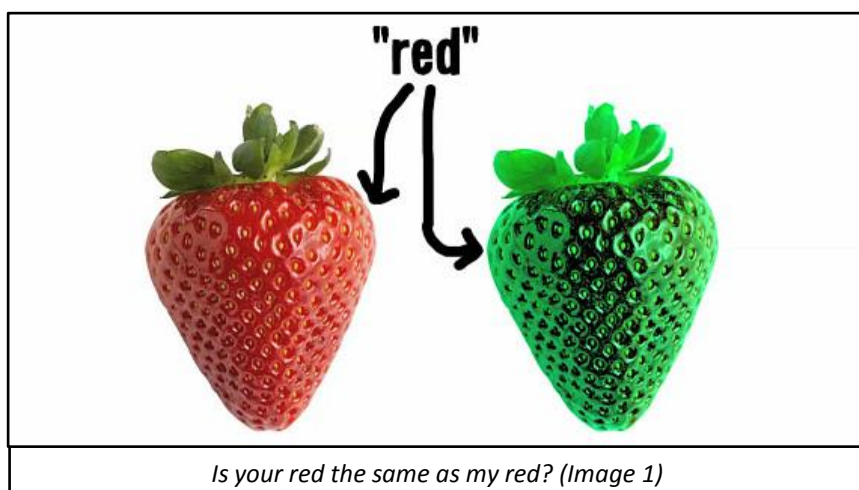
The objective of this research report is distinct: finding out whether we all do or do not perceive colours the same way. When we were informed about this assignment, this question immediately popped into my mind. It was because it is one of the most headache provoking questions (besides from the question, *why are we here?*) that had ever invaded my mind. Though I knew I would probably not find a definite answer, I still decided to delve further into this realm of illusion and ambiguity, called: colour.

Thus my ultimate goal for this research report would be to find out what answer seems best in place, and does that answer differ from my statement in the hypothesis.

Hypothesis

Though I think it is more likely that we all perceive colours the same, I do not rule out the contrary. The contrary is as possible as us perceiving colours the same, simply because we cannot really investigate what the real cause is (*note: when writing the hypothesis, I had not yet read up on the various articles discussing and debating this topic*).

Though they are both equally as possible, my preference lies more with us all perceiving colours the same. There is no reason as to why I think it is that way, it is just a mere assertion.



Methodology

By comparing and contrasting various articles/research reports on the matter, I hope to find a majority that is either giving yes or no as an answer. This way I can give an approximate answer on the research question. A definite answer would be impossible, as there is not a way (yet) to look inside other people's minds.

I found most articles via google (scholar), to ensure reliability of sources. I also double checked the latter by finding out who wrote the articles and what site they were posted on. All of the articles that I have used are mentioned under the section: *sources*.

Though I used many articles, one *video* served as the main contributors of knowledge for writing this report. It is a nine and a half minute video called '*Is Your Red The Same as My Red?*' and was uploaded by a popular YouTube-channel called: Vsauce.^[1] The video provides plenty of information regarding my research question using a lot of (practical) examples. Vsauce is a verified YouTube partner and has given quite a few TED-talks, which ensured me of the channels reliability.

I used Michael's (the host of Vsauce) references to look up the specific articles that I have found.

The cover is meant to represent the question, *is your red the same as my red?*. Nelson Mandela might have perceived what is red to you as green, he might even have discerned what is black to you as white! This too is a reason to be against racial segregation, as it might just be the word of the colour not the colour itself that people hate and despise one another about.

I designed the cover of this research report by myself in Adobe Photoshop CS6, the photo credit is listed as image 3 under the section *sources*.



Results

The first article that I found regarding my research question, is called '*Conceptual Analysis, Dualism, and the Explanatory Gap*', by Ned Block and Robert Stalnaker.^[2] It does not directly deal with the research question, but it does go into detail of two of the most vital reasons of the inability to explain a colour to someone: the explanatory gap and dualism. A good example of the explanatory gap would be people trying to explain a colour to a person who has been blind for their entire life. Tommy Edison, who has been blind his entire life, explains this in a YouTube video called '*Describing Colours To Blind People*' on his YouTube-channel TommyEdisonXP.^[3] He says: "*Some people try to explain to me what a colour looks like by describing the way it smells, that just doesn't make any bloody sense!*". It is because he has no concept of 'colour'. It does not lead to him seeing a colour in his head, because he has never seen before.

But then, why can we not describe a colour to someone who *can* see? That is because of the fact that we have qualia: feelings, essentially. It is because of our inability to assign physical phenomenon to these qualia.^[4] This is what is known, as the explanatory gap. Erwin Schrödinger describes the explanatory gap as follows: "*The sensation of colour cannot be accounted for by the physicist's objective picture of light-waves. Could the physiologist account for it, if he had fuller knowledge than he has of the processes in the retina and the nervous processes set up by them in the optical nerve bundles and in the brain? I do not think so.*"^[5]

Philosopher Daniel Dennett, and others, argues that qualia may be ineffable due to failure of our own language.^[6] Michael from Vsauce gives a great example for this theory, he says: "*... there may be an alien race that communicates in a language that causes colours to appear in your brain, without your retina even having to be involved, or without you having to actually see the colour, yourself*"

So, what does this all amount to? Can we now answer the research question? We cannot say yes nor no, we could however answer the question with: maybe.

My red may be your red, but it also may not be so. This can be supported by classical modal logic: something is possible if and only if it is not necessarily false.^[7] The latter applies to my research question.

Analysis

First let me quote my hypothesis:

Though I think it is more likely that we all perceive colours the same, I do not rule out the contrary. The contrary is as possible as us perceiving colours the same, simply because we cannot really investigate what the real cause is (note: when writing the hypothesis, I had not yet read up on the various articles discussing and debating this topic).

Though they are both equally as possible, my preference lies more with us all perceiving colours the same. There is no reason as to why I think it is that way, it is just a mere assertion.

Analysis & conclusion

The results that are stated on the previous page are very specific and seem very promising, it is only at the end of that section that you realise that you have not yet received any answers. The latter can already be derived from the second paragraph, which says that the inability to describe ones feelings is due to something called the explanatory gap. Would it ever be possible to overcome that gap? Or are we for ever deemed in mystery when it comes to qualia? We do not know.

When reading my hypothesis, it is clear that I did not expect to find an answer, which is exactly what I found. Everything might just be an illusion, a dream or one big film. We do not know. We live in our own magical universe, our own realm of creativity and mystery. And though we might not all perceive life in the same way, we are better of loving life for the way it is; all its questions, unpredictability's and uncertainties. We are us, we are all the same and we all do not know.

This research report is an example of how an elephant that is made to be a mouse, will always want to be an elephant.

-- So --

Is my perception of colour the same as your perception of colour?

Maybe.



(Image 4)

Note *(Appendix)*

This research report might not seem much like a research report, due to its vague conclusion and off topic nonsense. It does feel like a research report to me. I wanted to do this my own way, in my own style; be original and think out of the box. I am not particularly satisfied with the result, due to the fact that I did not take the amount of time that I wanted to write this report. I could easily have written twenty pages, but I did not write them. I wanted to read my research report through to check for spelling errors, but I did not do so. I confined myself to just this, to grant myself more time for studying for my SE-week and other tests. I feel bad about this, because I had really big plans for this assignment.

Besides that, I hope you had a good time reading this research report!

Sources

- Images used:
 - Image 1: *Is Your Red The Same as My Red?* Posted on iflscience.com by Elise Andrew | via www.iflscience.com
Link: goo.gl/pgkZ3y
 - Image 2: *Michael from Vsauce* posted by Tabby Myeeba Stewart via Pinterest | Link: goo.gl/xEHoon
 - Image 3: *Nelson Mandela Portrait* by Greg Bartley/Camera Press via Redux | Link: goo.gl/xO4oF9
 - Image 4: *Mind Blown* posted by Jake Rosin on rantlifestyle.com
Date: 18-6-14 | Link: goo.gl/Yy9lhk
- Sources used for informational purposes:
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 - [2]: *Conceptual analysis, dualism, and the explanatory gap* written by Ned Block and Robert Stalnaker | Published by Duke University press on behalf of Philosophical Review | Date: January 1999
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 - [4]: *Qualia* written by Michael Tye | First published by The Stanford Encyclopedia of Philosophy | Link: goo.gl/d6QVLe
 - [5]: *What is life?: the physical aspects of the living cell*, written by Erwin Schrödinger | Published by the Cambridge University Press in 2001 | ISBN: 0521427088
 - [6]: *Quining Qualia*, written by Daniel Danett | 1988
Link: goo.gl/HgUAgC
 - [7]: *Modal Logic*, via Wikipedia: The Free Encyclopaedia
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