

The meaning of yellow and red

Abstract

By arguing that qualia IS meaning or understanding, a new framework for understanding consciousness is developed. This way, the meaning of yellow and red are uncovered. The suggested solutions are that yellow means “source of light” and red means “important”. Also, in the process of arguing that qualia is meaning, remarkable similarities in the structure of qualia are uncovered. This way, a reason for why very hot and very cold water feel the same, is given. The same behaviour is also shown to take place for colours.

Introduction

When looking at the colours, we are faced immediately with a problem. Why do they look the way they look? Why is red red? Why is yellow yellow? When asked, a physicist will tell you a beautiful story about light and its frequencies and how each colour corresponds to a specific frequency. But all this picture is misleading. The main reason is that, for once, colours are qualia and they are created in the brain. There is no connection between the qualia of colours and whatever the light is doing outside of our brain. Unfortunately, the picture is very prevailing in society and in our educational systems, that the children grow up with this idea that colours are inextricably mingled with light, and so, the question “Why does red look red?” is very rarely raised. In this paper, the nature of qualia is analysed. It will be shown that qualia is meaning. One very simple reason for this is that each quale means something. The quale “ $1+1=2$ ” has a very clear meaning to everyone. But there are other qualia, as for example colours, that at a first sight, it is very hard, if not impossible, to know what they mean. By presenting a broad analysis of qualia in general and then of particular cases, we would come up eventually with an explanation for the meanings behind yellow and red, and so, explain why they look the way they look.

The nature of qualia

How does one even begin to address this problem? The first thing that one encounters when first meeting with

qualia, are their tremendous diversity. And the difficulty arises when someone tries to find the similarities between, for example, colours and sounds. How can such different manifestations of consciousness have anything in common with each other? At a closer look, though, few main common characteristics appear, as for example, ontological subjectivity, quality and unity. But even though both sounds and colours are subjective, each have a specific quality, and are each one well defined unity, the difference between them still begs the question: “In what respect does a sound differ from a colour?” “What makes a sound to be a sound and a colour to be a colour?” One answer to this is that each quale has its own content. But this is just a hand-waving answer, not really explaining the difference. In order to really explain the difference, the content must be specified. But what can the content of colour red be? Is it even possible to answer this question? In order to do so, we need to have a closer look at the structure of qualia.

Kant divided our consciousness into two parts, sensibility and understanding. Sensibility is comprised out of what we experience from our senses, like colours, sounds, smells, feelings, emotions. Understanding, on the other hand, is made up of concepts that lie under the control of reason. Apparently, the division is well justified. But is this division a fundamental one? Or is it merely an apparent one? Let’s have a closer look at both parts, and see if we can find some elements that will allow us to consider both one and the same thing. Let’s first start with understanding and take a case

where understanding occurs. Let's assume that we want to understand something, as for example Pythagoras Theorem. In order to do this, we take a Mathematics book. We read a while and try to figure out the logical argument presented in its pages. After a little effort and concentration, something new happens. For a brief moment of time, so brief that it is only an instant, we understand. So what happened? What is that instant in which we understood Pythagoras Theorem? If we have a closer look at it, we discover few properties. First of all, its nature was ontological subjective. That moment was experienced by us, in a subjective manner. Secondly, it has a specific quality. There is one thing to understand Pythagoras Theorem, and there is another thing to understand Relativity Theory. They both have their own specific feeling to them. And thirdly, it is unified. It is one specific experience that occurs in only one instant. So, what we discover, are the very properties of qualia. The understanding of Pythagoras Theorem is a quale. We acquired the quale of Pythagoras Theorem, and by its very way in which it feels, we know that we understand the theorem.

Let's now have a look at sensibility. Let's say we want to see colour red. In order to do this, we take a book about paintings and open it to a page where an apple is drawn. What happens at that moment is that in an instant, we see colour red. But colour red is also a quale. It is subjective, being experienced by us. It has a specific quality of looking red. And it's unified: it is one entity, called red.

The conclusion that we reach is that there is no fundamental difference between understanding and sensibility. One might point out at this moment, that there is actually a difference. For the case of understanding, we take some time and efforts to reach that understanding. While for sensibility, it just happens to us. But is this a real difference? I will argue that is not. And here is why. When one acquired the understanding of Pythagoras Theorem, the next time it will encounter the theorem, it will simply understand it immediately, in exactly the same manner that one sees colour red. The difference is most likely not a fundamental difference, but rather a difference having to do with the brain. For the case of sensibility, there are already specialised regions in the brain that are responsible for the immediate experience of sensibility qualia. For the case of understanding, the physical structures in the brain are missing at the first encounter with the understanding. A learning process is needed by which the appropriate physical structures are created in

the brain. But after they are created, understanding will come up with the same ease as sensibility comes.

So we draw the conclusion that, as far as the nature of consciousness is concerned, understanding and sensibility are the same phenomenon. In order to make things clearer for the rest of the paper, I will summarise this as follows:

Consciousness is Understanding.

Meaning

Is this a fair conclusion to draw? After all, understanding is a meaningful phenomenon. When we understand Pythagoras Theorem, we acquire a certain meaning. From now on, when we read in a book about this theorem, we know what it *means*. Every understanding that we acquire about the natural world, actually means something. Understanding is meaning. But are all qualia meaning? Does red mean anything? Haven't we just uncovered a difference between sensibility and understanding? Let's proceed and see why all qualia are meaning. For this, we need to have a look at the duck-rabbit image.

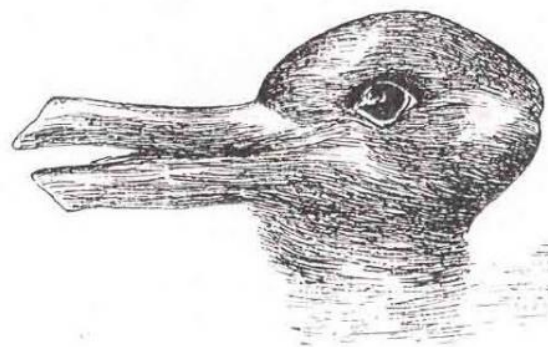


Figure 1. Duck-rabbit image. An example of how qualia and meaning are the same thing.

This image is actually showing the equivalence between meaning and qualia. Every time we gave the meaning of "rabbit", we also experience the quale of rabbit, namely the image of a rabbit. Every time we gave the meaning of "duck", we also experience the quale of duck, namely the image of a duck.