

The Sky is Not Blue

The aroma of coffee roast and freshly baked goods overpowers your olfactory senses as you enter The Blue Cat, your favorite coffee shop in town. You order the usual, a blueberry scone alongside a steaming hot cup of coffee. Decaf, of course. You find your usual seat in the far corner on a camel brown leather recliner, and wait for your friend to arrive. You are supposed to meet up to work on a graphic design project due at the end of the week. While you are waiting for your friend's arrival, an elderly woman sits down across from you in the seat you were saving for your friend. This agitates you, and you are about to reprimand her when something catches your eye. You notice her necklace, which is adorned with a matrix of brilliant red rubies. The jewels shimmer with wanton brilliance as they solicit the morning light coming from the window behind you. You comment on the adornment aloud without thinking, and the old lady smiles, thanking you.

"This necklace is an old family heirloom, passed down from my grandmother to my mother, and now to me. I only wish I could appreciate its beauty for myself."

"What do you mean?" you inquire, wondering if perhaps the luster of the ornament has long since worn off on her.

"You see, I have a rare congenital disease which has made me blind from birth. I have never experienced the crimson red of this necklace, the pastel blue hues of the sky, the luscious greens of the trees and grass in the summertime."

You notice the signs of her condition as the two of you are talking. She has a probing cane resting against her left thigh, and her irises are a cloudy, muted blue. She is looking at you, but her gaze seems to be far away, almost as if it is directed through you and toward some other realm. You are

speechless. As a graphic design major, it is difficult to come to terms with the fact that this woman has and never will experience the beauty of color. Color is something so integral to your life; something that you have simply taken for granted. You try to explain what the color red is like, but falter as you realize it is simply impossible.

How *would* you describe the color red? Would you describe it using an analogy, saying that it is a 'warm' color, or that it has a wavelength of 625-740 nm on the visible portion of the electromagnetic spectrum? Even with a frame of reference, it is impossible to convey the experience of the color red. Color is not the only property humans experience that is indescribable. Suppose the old woman had rheumatoid arthritis in her wrists. How would she describe the sensation of pain to you? Again, the only way she could relay her experience is through analogies. She could use an arbitrary scale to try and rate the level of pain. She could try to describe the location of the pain, or the duration, or causation, but she would be unable to put into words the sensation itself. Sensations, emotions, and thoughts of experience are called qualia. There are many definitions for qualia, and it is important to understand the components that make up the idea in order to have a more complete understanding of the concept. As mentioned before, they are all ineffable. They are non-physical, private experiences that occur within the confines of human consciousness. Due to this non-physical property, this also means qualia are different from the physical processes that cause them to occur. Qualia are complete experiences that cannot be deconstructed into smaller pieces, similar to the way in which subatomic quark particles cannot be dissociated any further. But perhaps the most abstract property of qualia is that they are experienced directly. Descartes proposition "I think, therefore I am," perfectly exemplifies this. One does not need to be told they are experiencing qualia, or what it is--they just are. The proof is in the pudding!

How then are we able to prove the existence of something as abstract as qualia without using the cop-out answer of “it is because it is?” One interesting argument for the existence of qualia is a thought experiment developed by philosopher John Locke called the Inverted Spectrum argument. Suppose there was something a little stronger than creamer mixed in with your coffee. You black out and wake up on the café floor, only to find that the once mahogany colored tiling is now a startling sapphire blue. The wooden sign above the entryway proudly displaying the coffee shop’s namesake, a blue cat, now depicts a cat the color of sunset orange. The light from the sun streaming in through the windows is now an eerie azure color. Your friend has just arrived, and she helps you to your feet. Her skin is the color of a pitaya.

“Are you okay,” she asks, “What happened?!”

“I don’t know,” you answer dubiously, “I blacked out, and now I’m seeing things! Your skin is magenta, the camel-brown recliner I was sitting in a moment ago is green, and the sky outside is yellow!”

“The sky outside is yellow?” she echoes sarcastically. “I think it’s a little early for this. Quit messing around, we have a project to work on.”

“I’m serious!” you cry out adamantly, “The sky really is yellow.”

Your friend looks at you, somewhat bewildered, and realizes that you are serious. She takes a deep breath. “The sky is *blue*. It always has been, and always will be.”

Locke’s argument claims that because we can find the Inverted Spectrum plausible, meaning we can picture a scenario in our mind’s eye where the colors on earth have been inverted without contradictions, then we must admit that qualia exist and are indeed non-physical properties. Of course, our reality as we know it is shaped by both physicalism and consciousness. One idea that supports this

dualistic perspective is the idea of zombies. No, not the pop culture interpretation of the undead inspired by George Romero's *Night of the Living Dead*, but a philosophical zombie. A philosophical zombie is a concept stating that it is possible for a "zombie" to express all the outward physical and emotional behaviors of a human, but to lack the phenomenological experiences we define as qualia.

Descartes believed that all non-human living creatures are automata, and that their every behavior could be explained by physical mechanisms such as evolutionary traits. But the human consciousness was not so simple. He compared the mind of the human to the mind of the machine. With the now antiquated technology of his day, he concluded that there was something beyond the physical realm required to analyze the human consciousness. Our technology is considerably more advanced today than in the time of Descartes, and with considerable advances in artificial intelligence, it is conceivable that one day we will be able to create a real-life philosophical zombie.

While the Inverted Spectrum Theory and the Zombie Argument are widely accepted, not everyone finds the idea of qualia quaffable. Daniel Dennett, perhaps qualia's biggest critic, provides an argument against these spontaneous perceptions in his book *Consciousness Explained* (1991). In his book, Dennett provides an argument against qualia by claiming that its definition breaks down with a more practical application. Dennett pits the idea of qualia against real-world neurosurgery and clinical psychology. He contends that in the context of real-world application, qualia has no use in the situations above, and the potentially useful questions that it presents are unanswerable because of its own fundamental properties.

Let's go back to the second scenario. You wake up on the café floor, and just like before, all of the colors have been inverted. You know immediately that something is wrong. You hypothesize that some mystery ingredient in your warm beverage must have caused your optic nerve to go haywire and

invert your qualia. However, you soon realize that your qualia is not the only thing that could have changed. Perhaps it is not the colors that have been inverted, but your connection to memories of past qualia that have been altered. Both of these options have the same result, and you have absolutely no way of knowing which has occurred. What was in that coffee anyway? The only thing you're sure of is that from now on you'll stick to water.

The main fault Dennett finds with qualia is that it relies too heavily on memory. The only way to notice a change in qualia is to point out an incongruence with our past memories of qualia. However, what we remember are only construed memories of qualia, and not the qualia themselves. Dennett confirms through this thought experiment that we cannot prove the existence of qualia simply through introspection.

Our memory is inconsistent and subjective to say the least, and as such it cannot be used as concrete evidence to prove or disprove qualia. Without going into too much detail, memory is subject to alteration by a number of influences. Drugs, physical and mental trauma, mental disorders, and stress, along with a slew of other factors can influence our surprisingly fragile minds. Memory is also quite subjective. Everyone's memories possess some degree of subjectivity, because each individual has their own level of perceived memory ability--independent from objective standards or performance. Subjective memory is defined as the reflection of one's perceptions about his or her personal memory functioning. That word, "perception" should set off a few red flags. That's right, our memory itself is a collection of perceptions, or qualia! We cannot define qualia using qualia, in the same way we wouldn't use the word we are defining in its definition.

The true definition of qualia remains elusive because we continue to use a physical definition for a non physical phenomenon. There are several plausible arguments for its existence, but when we

attempt to blend qualia with a neurobiological perspective, it fails miserably. Yet as impossible as it is to prove qualia's existence, it remains equally futile to disprove it. I must confide that my research has only made a splash in a subject that is as deep as the Mariana Trench. The answers to my questions have only led to more questions. I feel as though there is so much more yet to be discussed that one could devote their life to unearthing the mysteries of qualia and and never fully explain the phenomenon. Next time you are sitting outside enjoying your coffee, look up at the sky and ask "is the sky really blue today?"

Links: https://www.d.umn.edu/~dcole/inverted_spectrum.htm

<https://en.oxforddictionaries.com/definition/quale>

<https://philosophyterms.com/qualia/>

<https://plato.stanford.edu/entries/phenomenology/>

<https://plato.stanford.edu/entries/zombies/>

https://link.springer.com/referenceworkentry/10.1007%2F978-981-287-082-7_356

<https://en.wikipedia.org/wiki/Qualia>