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What is Color?: Mazviita Chirimuuta on Color Relationism Seen Through Paintings

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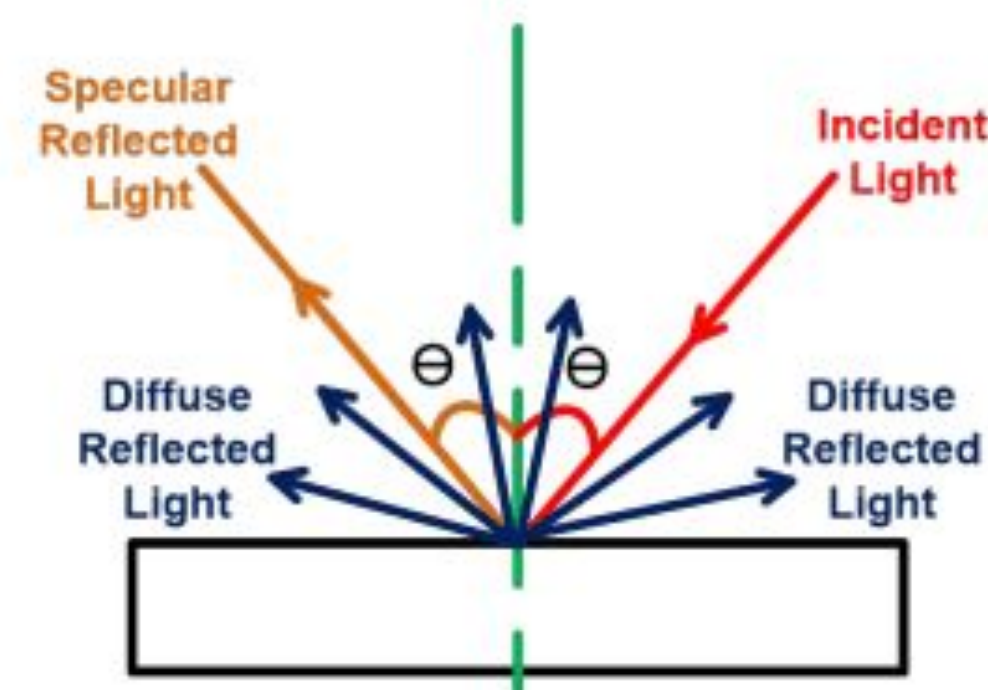
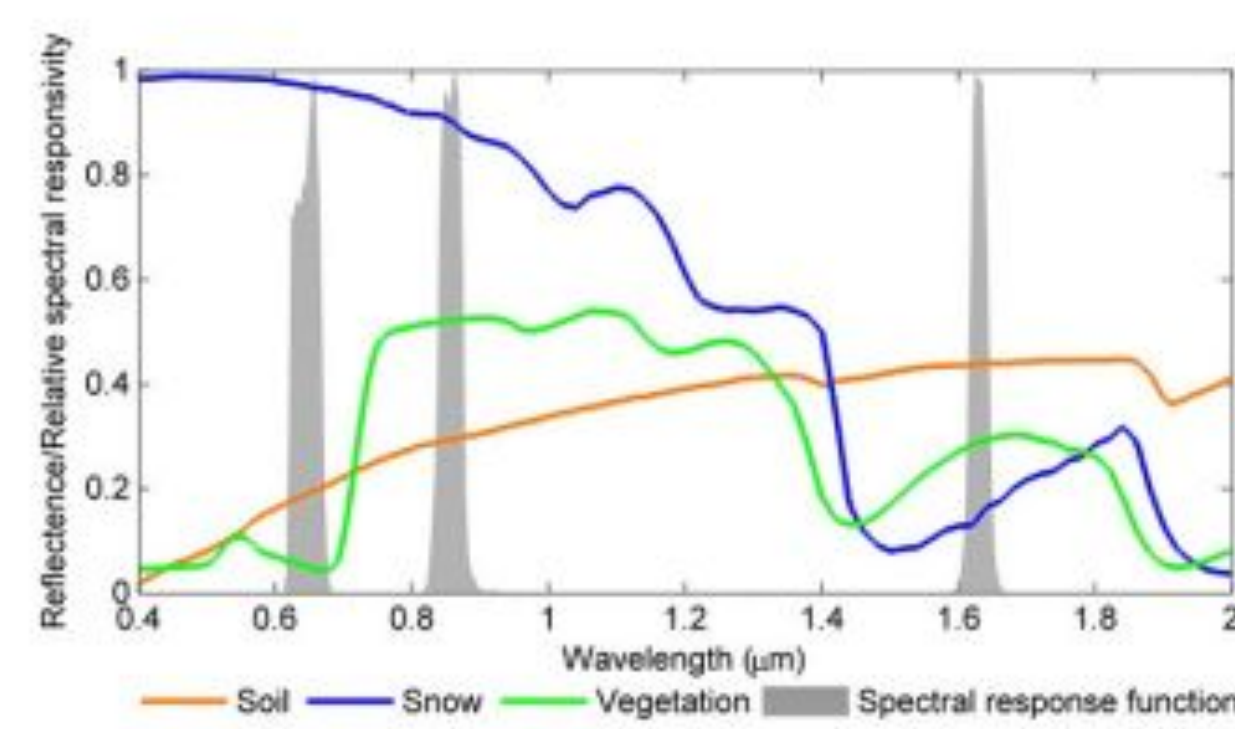
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The Problem: How to Explain Color? Conventional Understandings

Realism

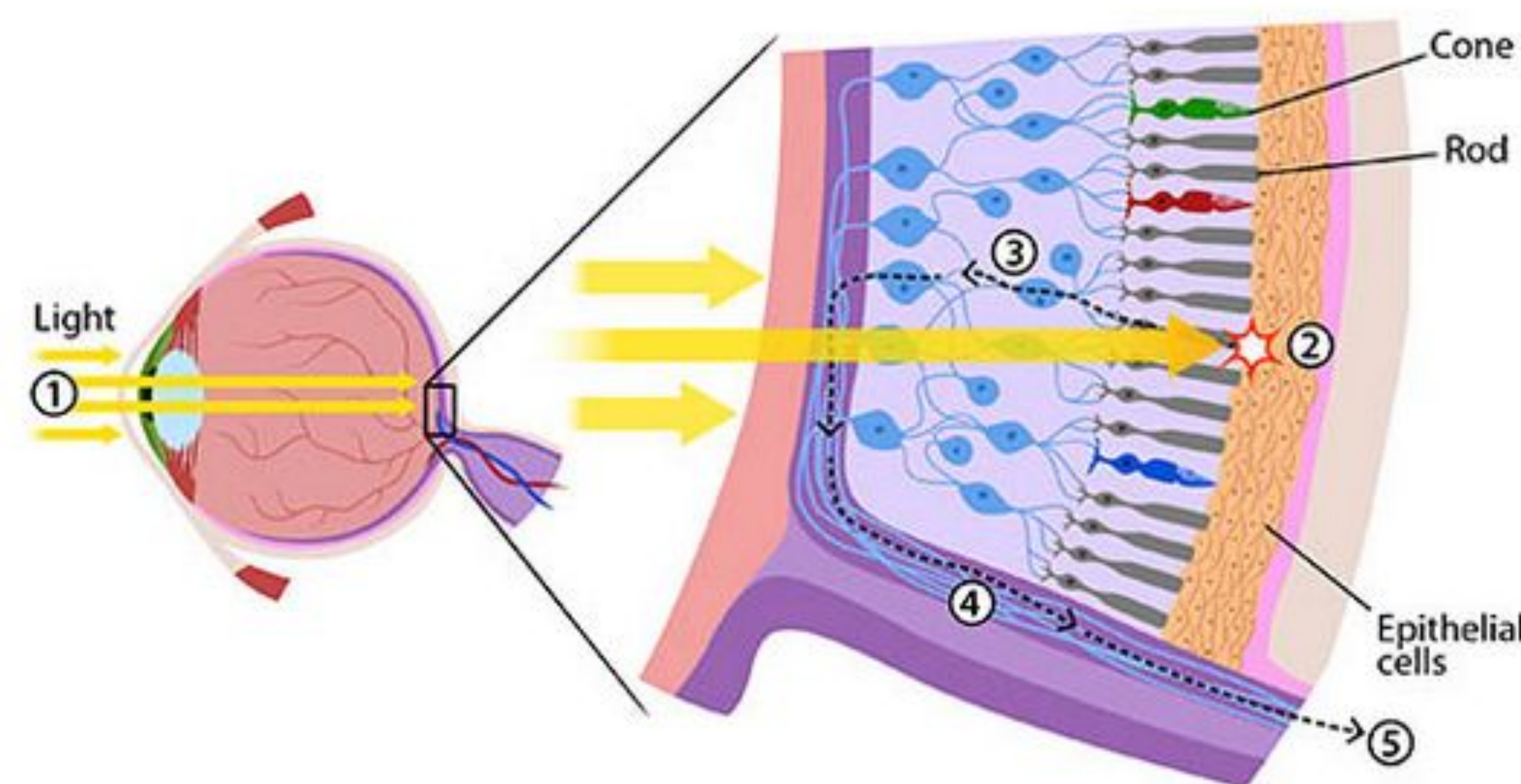
- color is a property of things in the world
- explanation of physicists and chemists
- wavelength theory (Armstrong 1968)
 - identifies color with wavelength of light
 - inconsistent with empirical facts about color constancy
- reflectance realism (Tye 2000)
 - identifies color with spectral surface reflectance (SSR), or the proportion of incident light that will be reflected back from the surface

What is Reflectance?



Antirealism

- color is a product of processes of visual perception
 - produced through physiological processes and processing of visual stimuli and contextual information by our brains
 - Colors are not physical descriptions, but serve an evolutionary purpose
 - Colors are illusions
 - they are viewer-dependent
 - “Since physical objects are not colored, and we have no good reason to believe that there are non-physical bearers of color phenomena, and colored objects would have to be physical or non-physical, we have no good reason to believe that there are colored objects. Colored objects are illusions . . .” - Hardin (1993, 111)



Light moves through the eye and is absorbed by rods and cones at the back of the eye.

Color As Relational

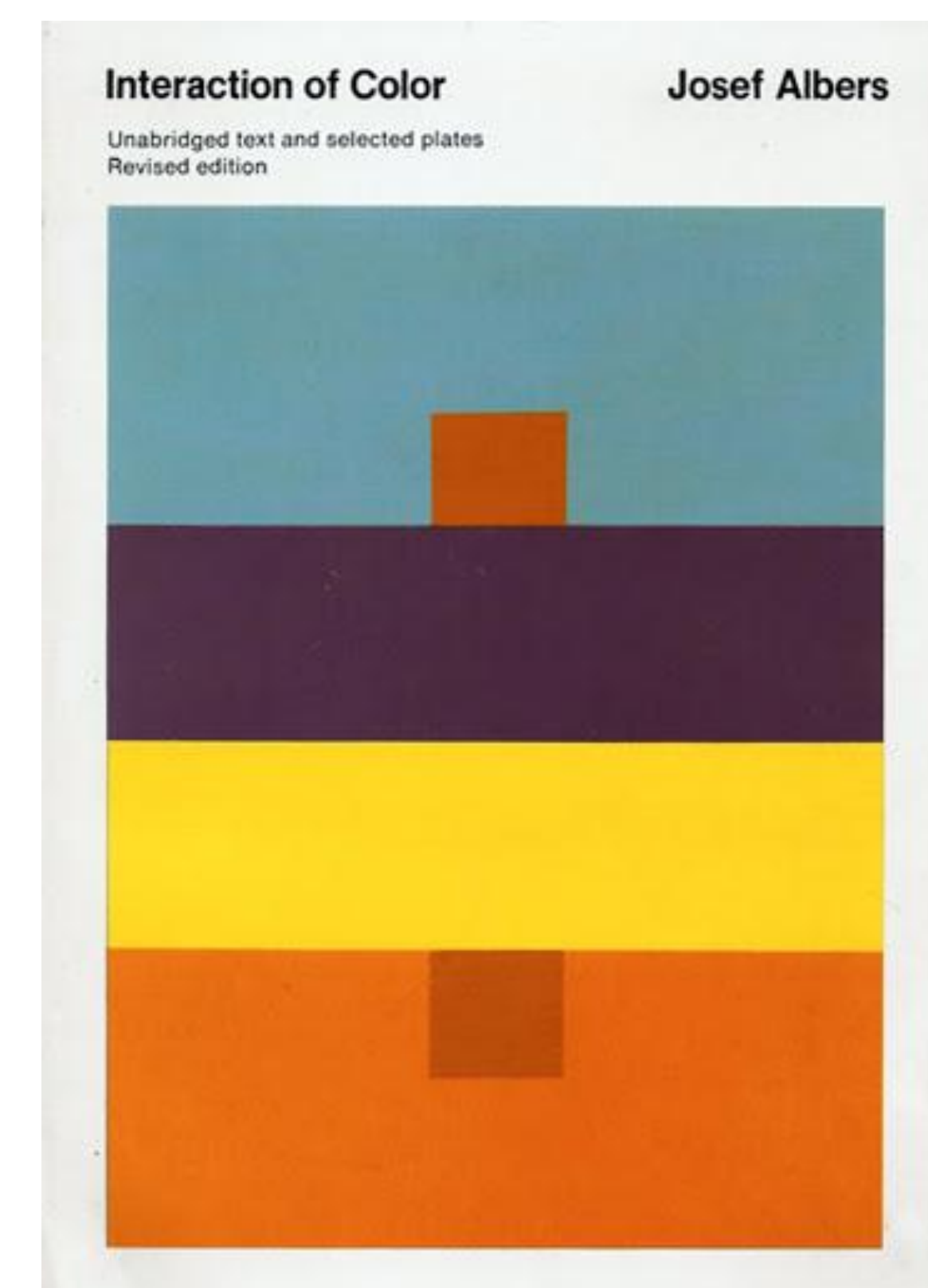
- Relationism according to Mazviita Chirimuuta
 - color is neither one thing nor the other
 - produced through an interaction between physical properties of things and our processes of perception and interpretation

“...color vision is a way of seeing things—flowers, tables, ladybirds—not, in the first instance, a way of seeing the *colors*”. - Chirimuuta (2015, 69)

“of all properties that objects appear to have, color hovers uneasily between the subjective world of sensation, and the objective world of fact” - Chirimuuta (2015, 1)

- color adverbialism
 - “Colors are properties of perceptual interactions involving a perceiver (P) endowed with a spectrally discriminating visual system (V) and a stimulus (S) with spectral contrast of the sort that can be exploited by V.” - Chirimuuta (2015, 140)
- contextual information
 - light and shade
 - distance of object from viewer
 - juxtaposition (Josef Albers)

“The color of a particular surface will be a function of its relations to other surfaces and there is no one true color that an object has,” - Chirimuuta (2015, 74)



The cover of Albers' *Interaction of Color*. Published by Yale University Press in 1963.

References

- Albers, Josef. *Interaction of Color*. Yale University Press, 1963.
- Armstrong, David Malet. *A Materialist Theory of the Mind*. London: Routledge, 1968.
- Hardin, C.L. *Color categories in thought and language*. Cambridge University Press, 1997.
- Chirimuuta, Mazviita. *Outside Color : Perceptual Science and the Puzzle of Color in Philosophy*. The MIT Press, 2015.
- Tye, Michael. *Consciousness, Color and Content*. Cambridge: MIT Press, 2000.

Problems with realism and anti-realism:

- neither fully explains our experience of color
- each is presented as mutually exclusive, but elements of both seem to be true at the same time

Analysis of Paintings Using Relationism



Chase, William Merritt. “Still Life: Fish.” metmuseum.org, The Metropolitan Museum of Art., <https://www.metmuseum.org/art/collection/search/10476>.

What is the real color of the fish? Is it white as it appears, or is it gray as we know most fish to be? In this painting, it is clear how the context of light and shadow change the color the fish appear to have. Is the “real” color of things the color we see in full light, or the color we see in shadow?



Post, Frans. “A Brazilian Landscape.” metmuseum.org, The Metropolitan Museum of Art., <https://www.metmuseum.org/art/collection/search/437323>.

What color are the mountains? What color do we know mountains to be? Where are we in relation to the mountains? What does this mean for where color lies? What colors are used to paint the sky?

Analysis of these paintings using a relational approach shows that “common sense” understandings of colors don’t fully explain what color is.