# Article information:

Science of 'the Dress': Why We Confuse White & Gold with Blue & Black | Live Science
<https://www.livescience.com/50842-dress-debate-color-perception.html>

# Article summary:

1. Researchers have studied the phenomenon of "The Dress" scientifically and found that the difference in perceived color has to do with how the brain perceives colors in daylight.

2. The differences in color perception are probably due to assumptions the brain makes about the illumination of the garment so that it will appear the same under different lighting, a property known as color constancy.

3. People are much more likely to perceive a surface as white or gray if the amount of blue varies, compared with similar changes in the amount of yellow, red or green.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article titled "Science of 'the Dress': Why We Confuse White & Gold with Blue & Black" by Live Science discusses the scientific explanation behind the phenomenon of people perceiving the colors of a dress differently. The article cites three studies conducted by different groups of researchers to explain why some people see the dress as white and gold while others see it as blue and black.

The first study, conducted by Bevil Conway and his colleagues, suggests that differences in color perception are due to assumptions the brain makes about the illumination of the garment so that it will appear the same under different lighting, a property known as color constancy. People who saw the dress as a white-gold color probably assumed it was lit by daylight, so their brains ignored shorter, bluer wavelengths. Those who saw it as a blue-black shade assumed a warm, artificial light, so their brains ignored longer, redder wavelengths.

The second study conducted by researchers at Giessen University in Germany and the University of Bradford in England showed that participants reported seeing a spectrum of shades from light blue to dark blue with yellow/gold to dark brown/black trim when they adjusted the color of a disc on the screen so it matched that of the dress and its trim. Nonetheless, when the dress color was a certain brightness, participants deemed it "white," and when it was below that brightness, they called it "blue."

The third study conducted by researchers at the University of Nevada found that people are much more likely to perceive a surface as white or gray if the amount of blue varies compared with similar changes in the amount of yellow, red or green.

Overall, this article provides an interesting insight into how our brains perceive colors differently based on various factors such as lighting conditions. However, there are some potential biases in this article. For example, there is no mention of any counterarguments or alternative explanations for why people perceive colors differently. Additionally, there is no discussion of any potential risks associated with this phenomenon.

Furthermore, the article seems to be promoting the idea that there is a "novel property of color perception and constancy" involved in how we experience shades of blue versus yellow. However, this claim is not supported by any evidence presented in the article.

In conclusion, while this article provides some interesting insights into the science behind color perception, it could benefit from a more balanced discussion of alternative explanations and potential risks associated with this phenomenon.

# Topics for further research:

* Alternative explanations for color perception differences
* Risks associated with differences in color perception
* Cultural influences on color perception
* Evolutionary basis for color perception
* Role of genetics in color perception
* Impact of color perception on daily life and decision-making

# Report location:

<https://www.fullpicture.app/item/9e1483606db35b68e358863d2aa1d3c7>