

## Theory Of Knowledge Exhibition

### To what extent is certainty attainable?

The TOK prompt I have selected is: "To what extent is certainty attainable?". This exhibition will be focused on the theme of Knowledge and the Knower, specifically exploring the extent to which various ideas can be certain and how certainty may not be attainable among communities of Knowers.

#### Object 1: The colour wheel

03.10.2019

### THE COLOUR THEORY

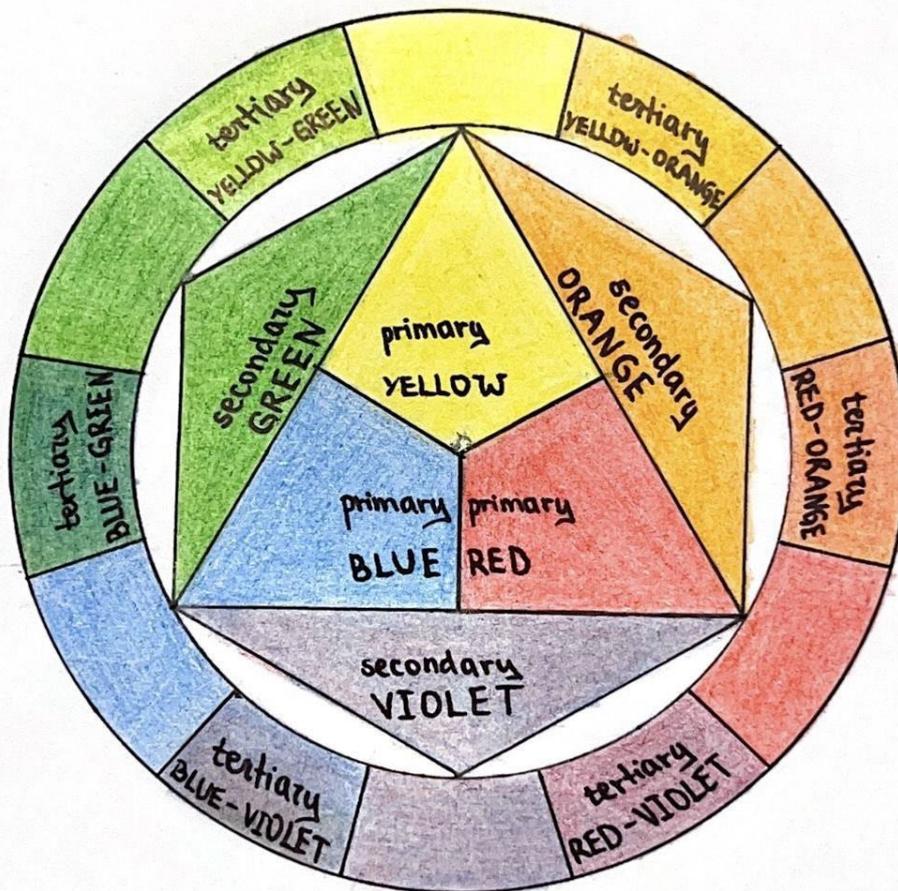


Figure N° 1.16

The photograph above depicts an illustration of the colour wheel, created by me during my studies of Colour Theory as part of my Year 9 Art course. The colour wheel was introduced by Isaac Newton in the 17th century<sup>1</sup>, and visually demonstrates the relationship between 12 primary, secondary and

tertiary colours. Complementary colours are located opposite each other on the colour wheel, and when mixed, produce a grayscale colour. Placed alongside, they produce the strongest contrast for those two colours, which is considered certain by most art experts.

This knowledge of Colour Theory is implemented across different industries today, ranging from marketing campaigners to fashion designers, not only to make an object visually appealing, but also for the sake of psychological influence, for instance, the 1970s psychedelic colour trends, characterised by deviations from natural colour combinations.

Usually, the knowledge of Colour Theory is successfully implemented, helping the designer achieve the desired effect, however it is questionable whether it is certain that the use of Colour Theory will have the same effect on all observers. Although experts agree that the knowledge of colour and complementary colours is certain, many observers may disagree, because different people have different opinions on what is aesthetically pleasing, making this claim uncertain. For example, opinions on Andy Warhol's bold colour combinations may differ (perhaps due to culture). Furthermore, some amateur observers may become convinced by expert opinions that certain colours create the "best" combination by the 'placebo effect', thus changing their perception.

The definition of colour is simply: "a phenomenon of light, allowing one to differentiate otherwise identical objects."<sup>2</sup> Therefore, everyone perceives colour differently, which is why the claim that the use of Colour Theory is equally effective for all people is uncertain. For instance, colourblind people are unable to see colour the same way as others do, giving them a unique perspective on the colour wheel and therefore evoking different psychological responses when they observe colour. This object supports the idea that certainty may not be attainable when evaluating how applied knowledge may influence different people.

### **Object 2: "The Dress" illusion**



The second object of this exhibition is an image of an optical illusion called "The Dress". This colour phenomenon was widespread on various social media platforms in 2018, causing debates and

controversy amongst the viewers. In reality, the dress was confirmed to be royal blue, however the opinions online were split between the dress being black and blue or gold and white. Therefore, the colour of the dress in the image is uncertain.

This colour phenomenon was then scientifically studied, revealing that the differences in colour perception of the dress were in fact due to how the human brain perceives colour, and chromatic adaptation (or colour constancy). Chromatic adaptation is the ability of human vision to adapt to changes in illumination in order to preserve how objects appear to humans, which is why the colours of the dress were perceived so differently<sup>3</sup>. Therefore, it can be argued that nothing we see is actually certain, especially if it is an image, because the human brain interprets the lighting in which the subject is located with regards to the individual's pre-existing schema. Whilst some people interpreted the dress in its actual colours (blue and black), others were convinced that the dress is located in a shaded place, and is actually gold and white. This is due to the individual differences people have when processing information (in this case, visual), leading to uncertainty.

Some viewers eventually were able to see both colours, which could be explained by the 'placebo effect'. Therefore, if some people initially thought the dress was gold and white, but then were told the real colours of the dress, they could begin seeing the black and blue stripes during further observation, thus changing their mind. This supports the idea that what humans see is often uncertain, as their beliefs about it can almost be fully altered.

### **Object 3: Egyptian Sarcophagus**



The third object of this exhibition is an Egyptian Sarcophagus from the Cambridge Fitzwilliam Museum. The Sarcophagus is a coffin or a container to hold a coffin, first used by Egyptian pharaohs of the 3rd dynasty<sup>4</sup>. The Ancient Egyptians believed in 'eternal life' (reincarnation), and used the sarcophagi as the eternal lodging of those within it. Whilst afterlife was a strong belief held by the Ancient Egyptians (who had special rituals that would allow the deceased to enter the afterlife), it is uncertain whether eternal life exists.

Today, certain communities of people believe in or are certain of the proposition that afterlife indeed exists, whilst others strongly disagree with this statement. The idea of reincarnation causes controversy and uncertainty for many individuals because there are various scientific insights that potentially disprove this. However it is thus questionable why this idea is dated so early in human history (oldest known sarcophagus being over 4500 years old<sup>5</sup>) and what made our ancestors believe it.

Regardless of the debates amongst these communities of Knowers, the idea of eternal afterlife is uncertain and is unlikely to be proven<sup>6</sup>, at least at the moment (proving it could spark more debates and even offend Knowers that believe in it).

This suggests that certainty cannot be attainable when it comes to religious or spiritual beliefs, although some people are convinced that what they believe in is certain.

## References

- <sup>1</sup> <https://caltechletters.org/science/history-of-color-1>
- <sup>2</sup> <https://www.merriam-webster.com/dictionary/color>
- <sup>3</sup> <https://www.theguardian.com/science/head-quarters/2015/feb/27/the-dress-blue-black-white-gold-vision-psychology-colour-constancy>
- <sup>4</sup> <https://education.nationalgeographic.org/resource/sarcophagi>
- <sup>5</sup> <https://www.newscientist.com/article/dn2420-oldest-intact-sarcophagus-found-in-egypt/>
- <sup>6</sup> <https://www.psychologytoday.com/gb/blog/happiness-in-world/201210/the-problem-reincarnation>

Image: Object 2

<https://web.archive.org/web/20150227014959/http://swiked.tumblr.com/post/112073818575/guys-please-help-me-is-this-dress-white-and>

Seen 25 May 2022