

In-Class Assignment 6 – May 9th, 2019

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Original Image



Image seen when affected with Protanopia



1) Which of the conditions created the most noticeable difference from your original image? Explain the condition, your response, and indicate how that might alter or impact someone's interpretation of it as opposed to the original.

The condition which created the most impact on the map for the Dubai metro is **Red-Blind [Protanopia]**. Protanopia is color blindness which results from insensitivity to red light, which in turn leads to confusion between colors of green, red and yellow. It is the most commonly found form of color-blindness and is hereditary in nature.

The original image of the Dubai Metro Map system has two main parts:

- **Red Line and Green Line Stations:** the red line stations only go to red line stations and green line stations only go to green line stations, and there are only two stations which serving as changing points for the two which are the Burjuman and Union station.
- **Zones:** Each different color of zone such as pink, neon green, yellow, grey, light blue etc. Each zone signifies a different pricing range for the tickets.

The two filters which affected the image most were that of Protanopia and Deuteranopia, as in both these filters, the red line stations and green line stations looked identical and indistinguishable, but in Protanopia some of the colors of the zones looked identical as well, that's why it had the most noticeable difference from the original.

This identical nature of the lines and zones in the filtered image can cause confusion in terms of how to reach ones destination as the red lines stations don't have trains going to green line stations, but all of them look exactly the same so how would one distinguish between the two, and in terms of the zoning, there might be confusion about how much might be to be paid for each zone and that may hinder the interpretation of the visual as well.

2) Determine and explain one way in which the image could be altered or adjusted to minimize the effect seen in the impaired image. Be sure to include how your change would help specifically.

A suggestion would be to have the red stations possibly represented with red solid and outlined filled dots and the green stations with simply green outlined circles, and have something distinct in terms of style for the changing stations. This way both the type of stations is distinguishable on basis of a certain factor, which here is the style of fill. To minimize the hinderance of interpretation due to color, I would suggest using distinct symbols instead of colors to distinguish the two station lines. For zone pricing, I would suggest numbering the zones to distinguish each zone properly.

3) Which of the conditions created the least noticeable difference from your original image? Why? Is there the possibility that the differences presented could affect how

someone interprets the image? (3 pts) If you think there would be no impact or minimal impact you can say that, but justify the response.

The least noticeable difference from the original image would be due to the Protanomaly. This is least noticeable because here the main difference from the original image is to do with the difference in zone colors but the station line colors are still their distinct red and green colors so. The main difference in the zone color may cause confusion in terms of ticket pricing but the main intent of the image is to allow individuals to plan their travel journey on the metro, and the distinct color of the red and green lines allows them to properly view them as two different types of stations. Even in the zone colors, the colors are still distinguishable to a degree which corresponds into the low degree of confusion for pricing as well.

Image seen when affected with Protanomaly

