Lab 1 Report

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Perception & Multimedia Computing

Write-up Questions

Part 1

2.- Run your code, align your position so that your right eye is in front of the blue square, and cover your left eye. Then slowly move your head towards and away from the screen. What do you observe?

As I move my head away from the screen, the small circle on the right seems to disappear, becoming visible again when I get closer to the screen.

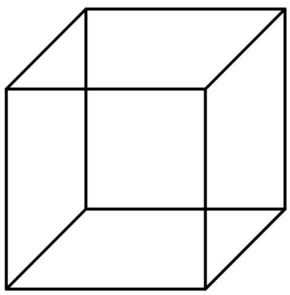
4.- Repeat the above with the new image. Under what circumstances do you see the same effect with the new picture?

I experience the same effect with the reversed image when I align my left eye with the blue square, cover my right eye and then move slowly back and forth.

Part 2

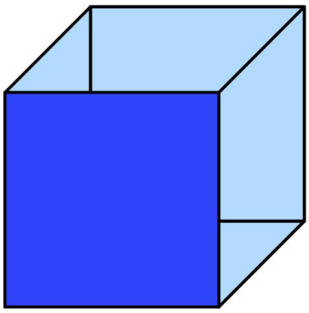
c.- Write about your choice of image and your sketch, explaining the choices you made, and how well you think you have illustrated the effect of bistability.

In order to illustrate the effect of bistability, I have chosen the Necker Cube (shown below). The Necker Cube is an optical illusion that was first published as a rhomboid in 1832. It is the frame of a cube that has no visual cues as to its orientation, leaving room for interpretation of which is its front side.

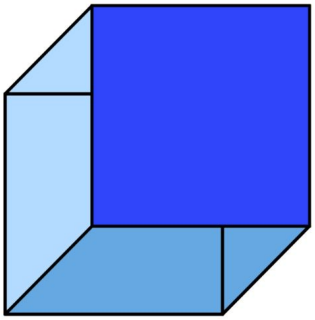


I chose the Necker Cube because I think it is a very good example of bistability. One could interpret the cube to have the lower left or upper right squares as its front side, and it is easy to consciously or unconsciously go from one interpretation to another.

In the second part of this lab I sketched this cube using the *line()* function to draw the lines of its frame. At this point, the ambiguity of the cube is evident and different users could have different interpretations of the drawing. When any key is pressed on the keyboard, the sides of the cube are filled with different colors, indicating which is the front side in one of the interpretations.



When another key is pressed, the cube is painted again. This time it shows the second interpretation of this illusion, the one in which the top right square is the front side.



I believe these illustrations of the Necker Cube perfectly represent the effect of bistability, as they show the different interpretations that one single image can have depending on how we look at it.