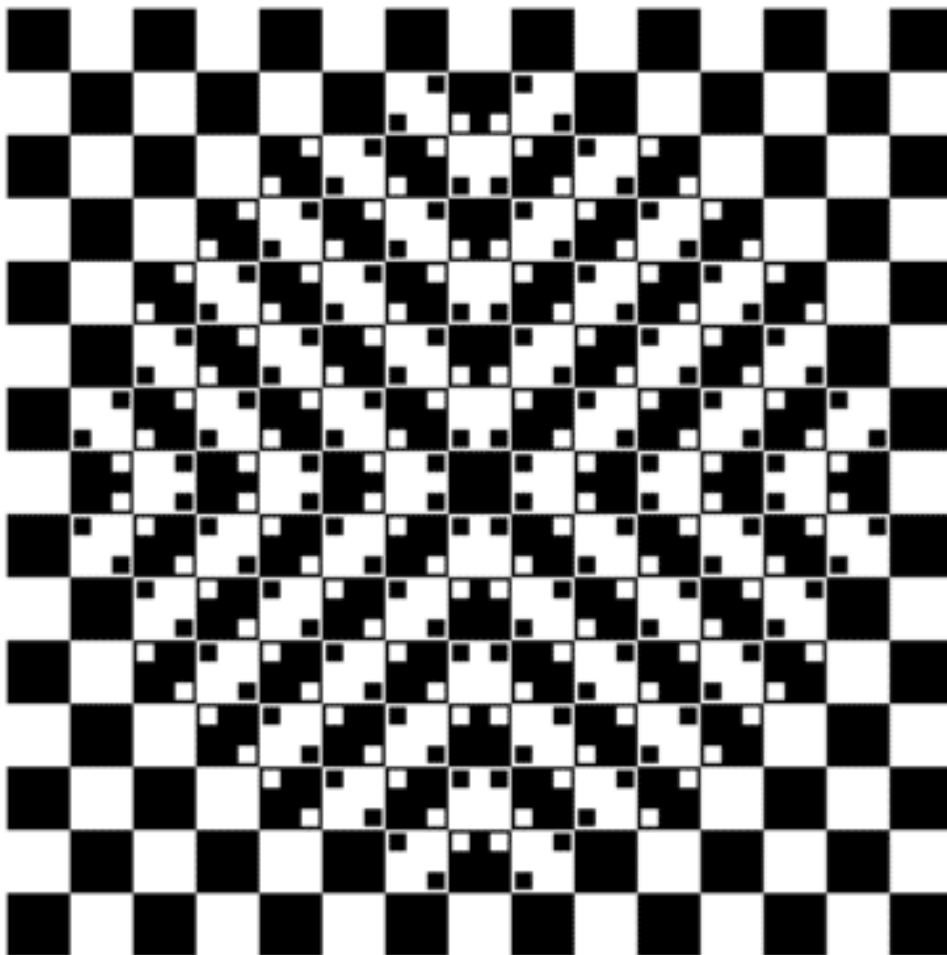


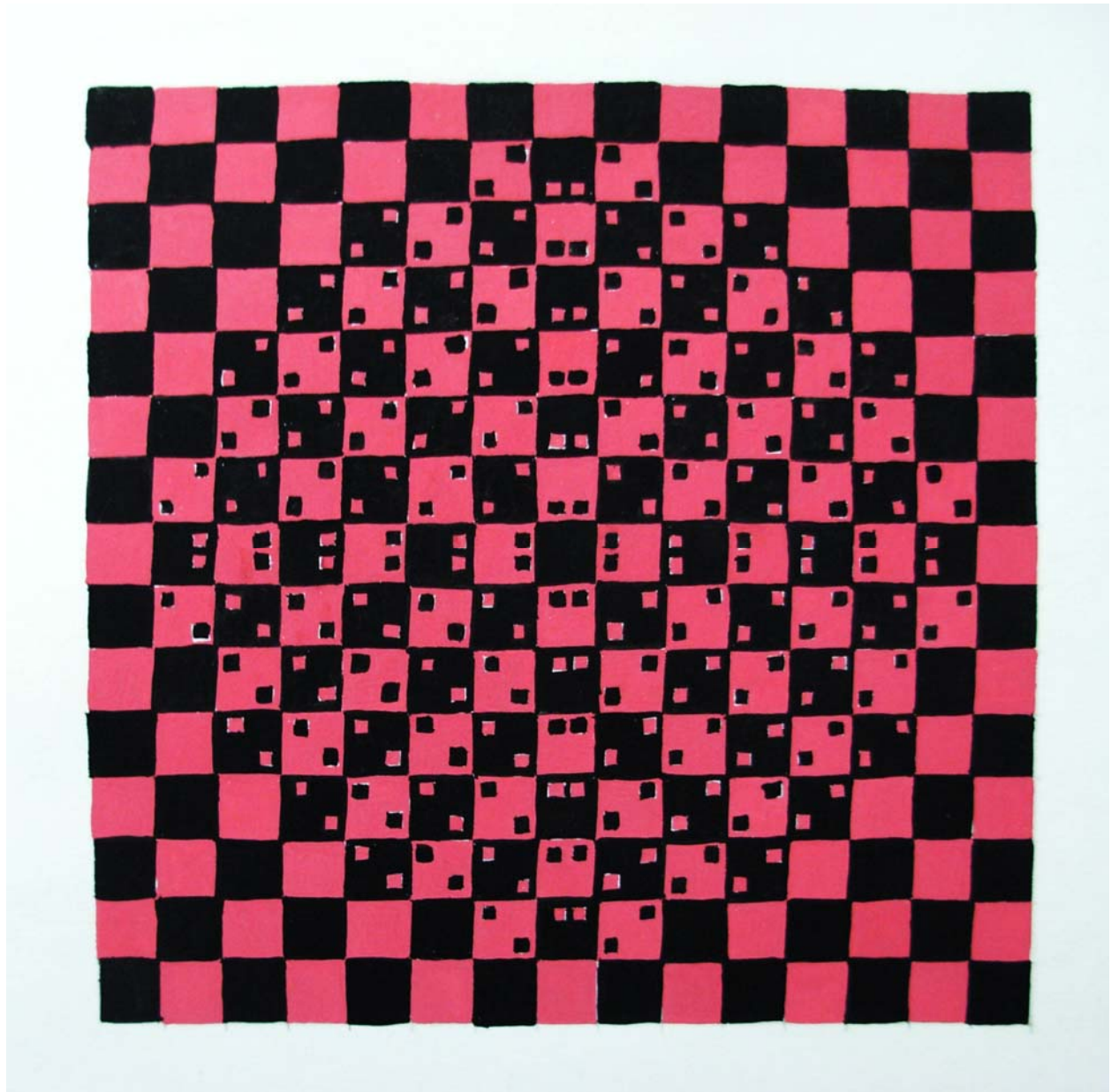
Optical Illusions

Assignment 1

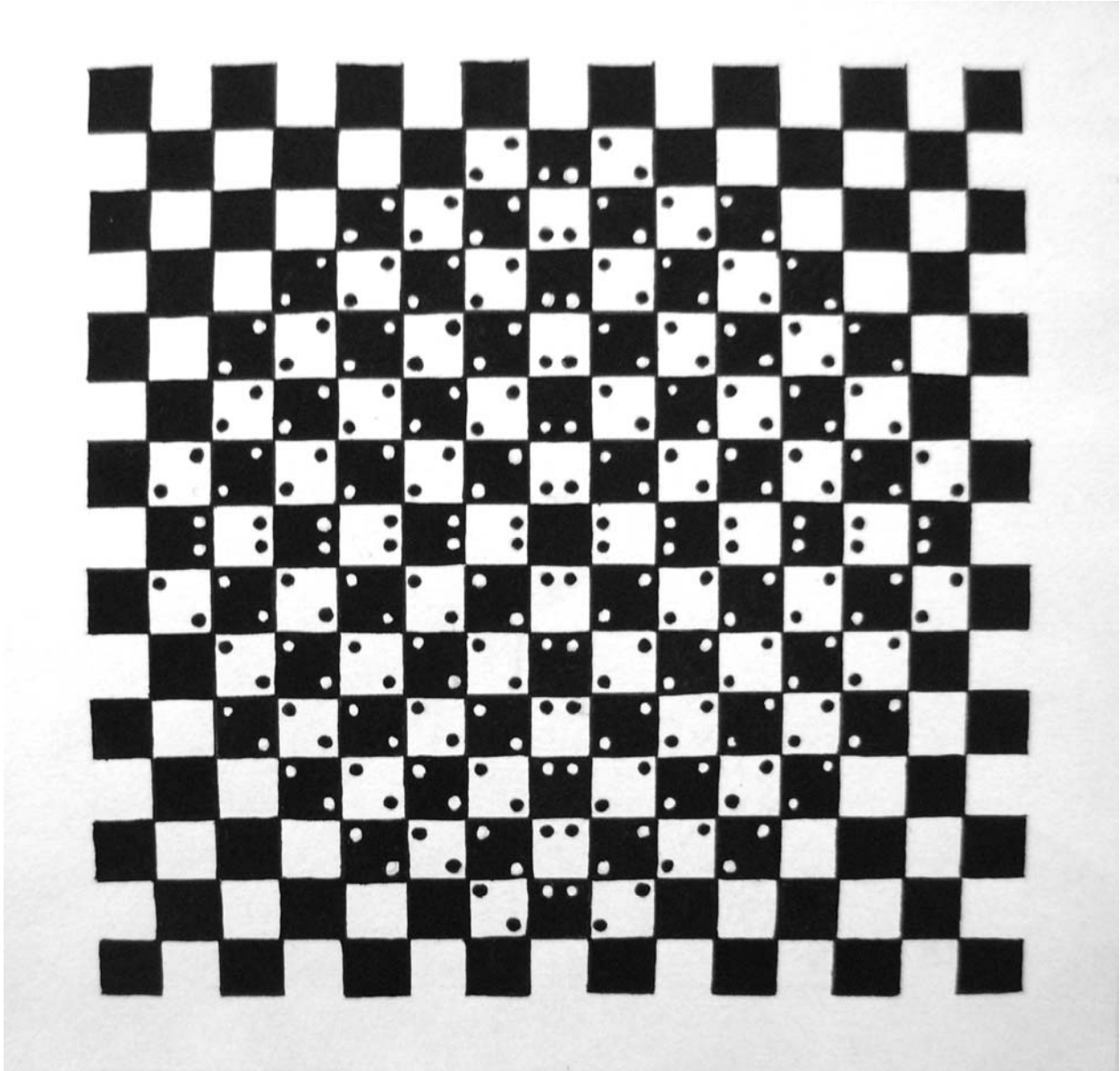
To take an existing illusion and introduce small changes to ultimately remove the illusory effect of the image



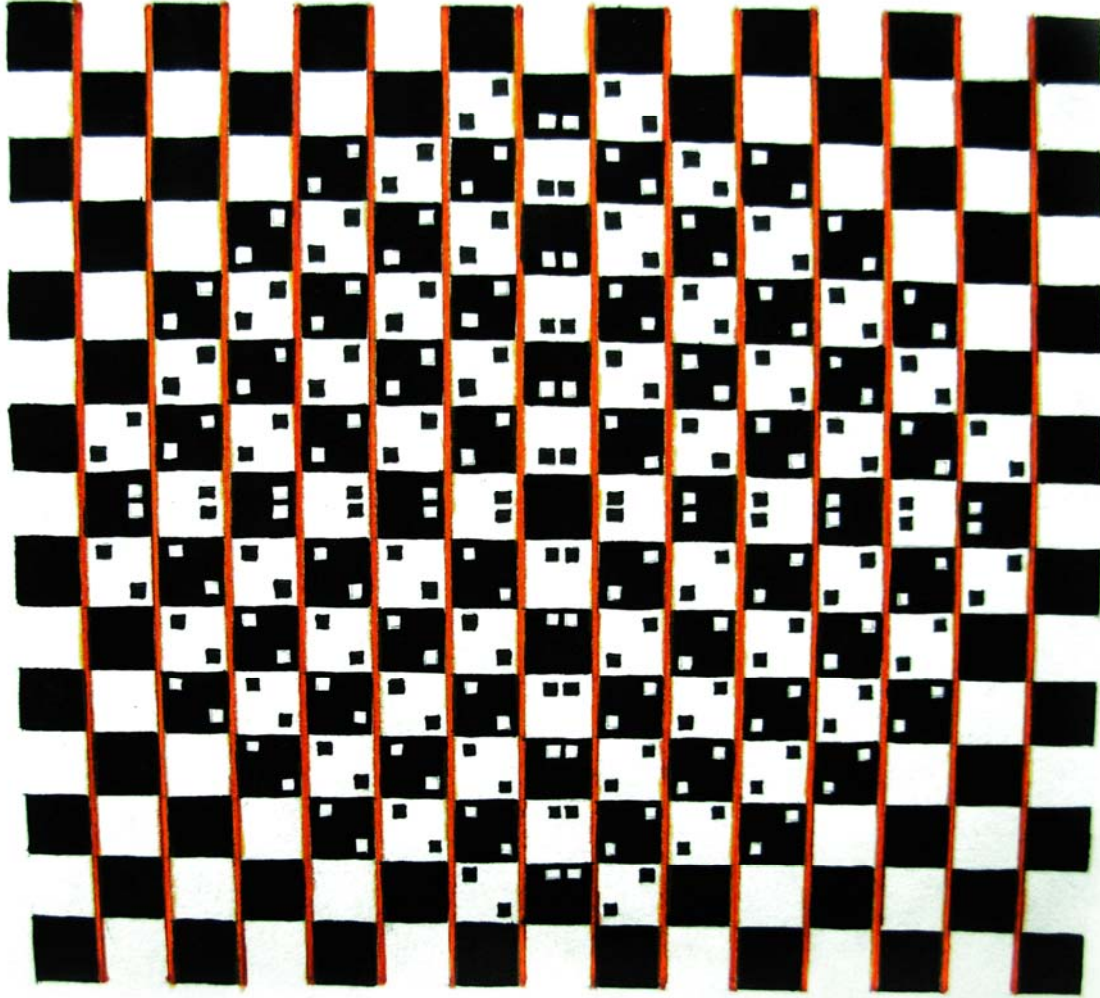
Bulging lines illusion was invented by the Japanese artist and vision scientist Akiyoshi Kitaoka. The black and white checkered board seems to be bulging out into a sphere as the diagonal placement of the tiny internal squares play tricks with the eye and makes us believe that the lines are not parallel to each other.



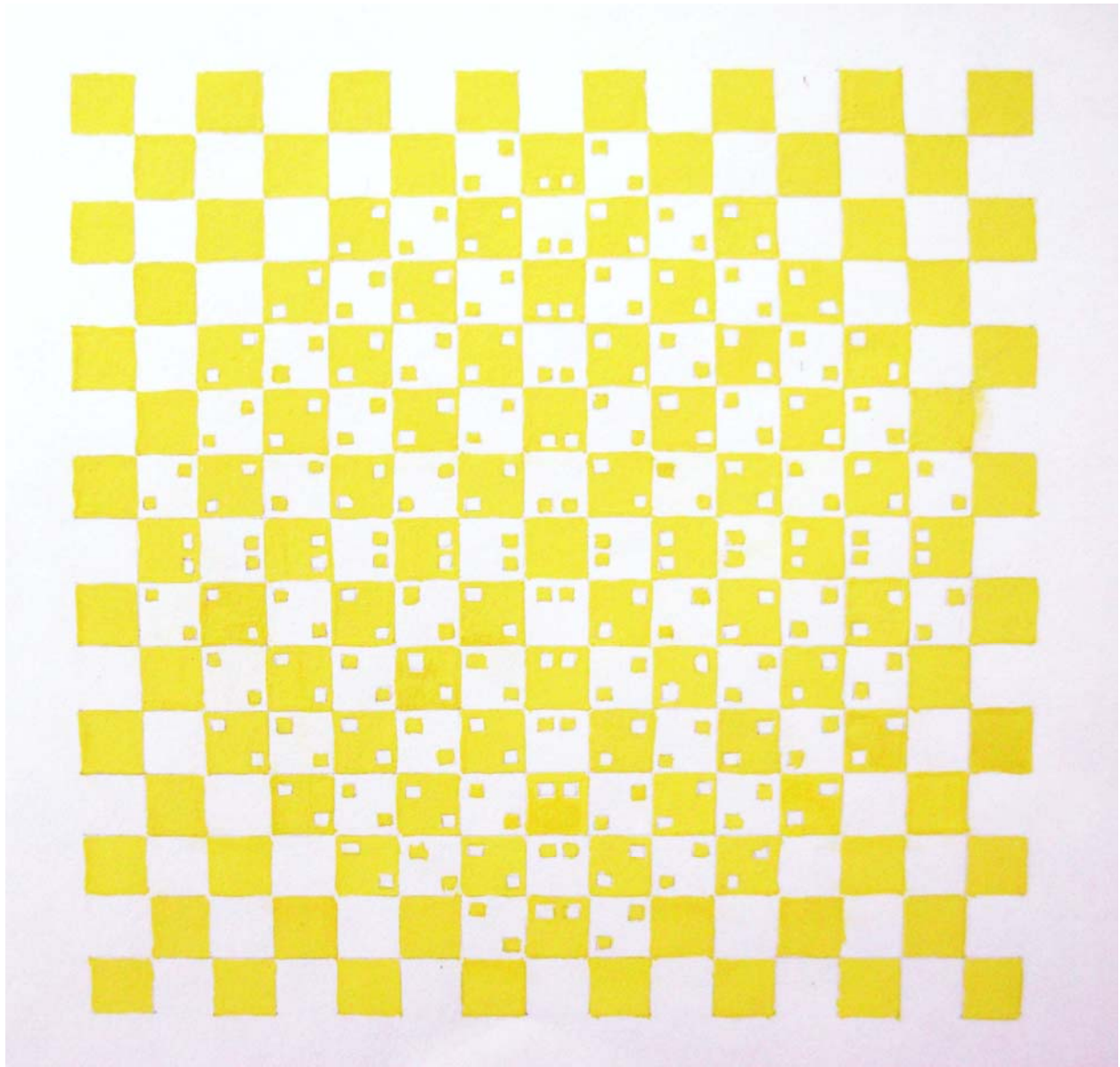
Exploration 1: I replaced the white squares with red. Although the contrast reduced to an extent, the stark colour scheme still retains the illusion. A sphere can be seen, but the bulging has reduced.



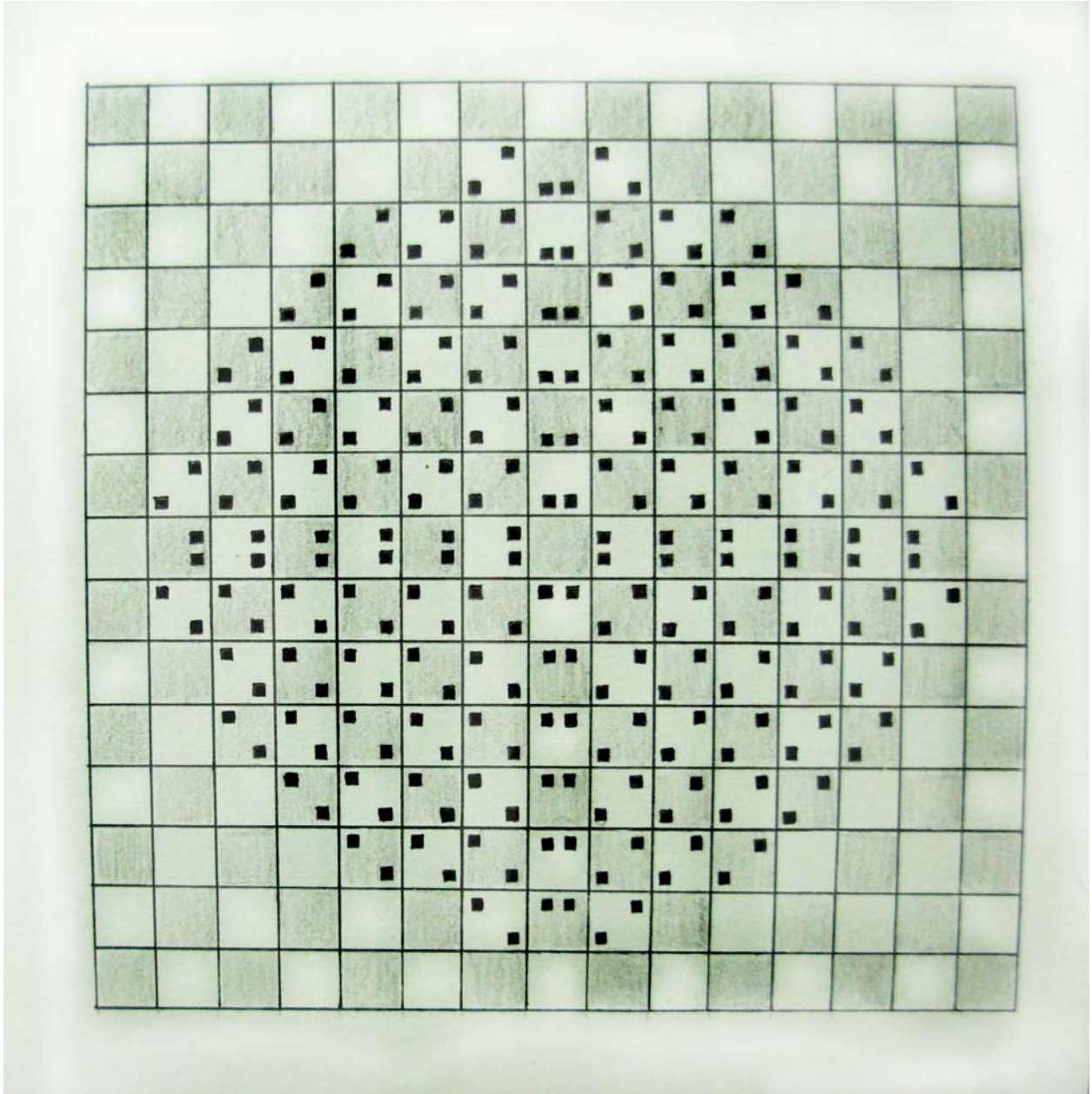
Exploration 2: Keeping to the original black and white colour scheme, I changed the internal squares to dots. Straight sides of squares have a greater tendency of pulling the lines towards them. Having dots instead visibly reduce the bulging effect while still retaining the spherical shape.



Exploration 3: Here, I tried to reduce the bulge by spacing out the squares. I have painted orange lines in between to emphasize that the lines are indeed parallel. However, the bulging effect remains. Instead of a sphere the bulge is now contained within an oval.



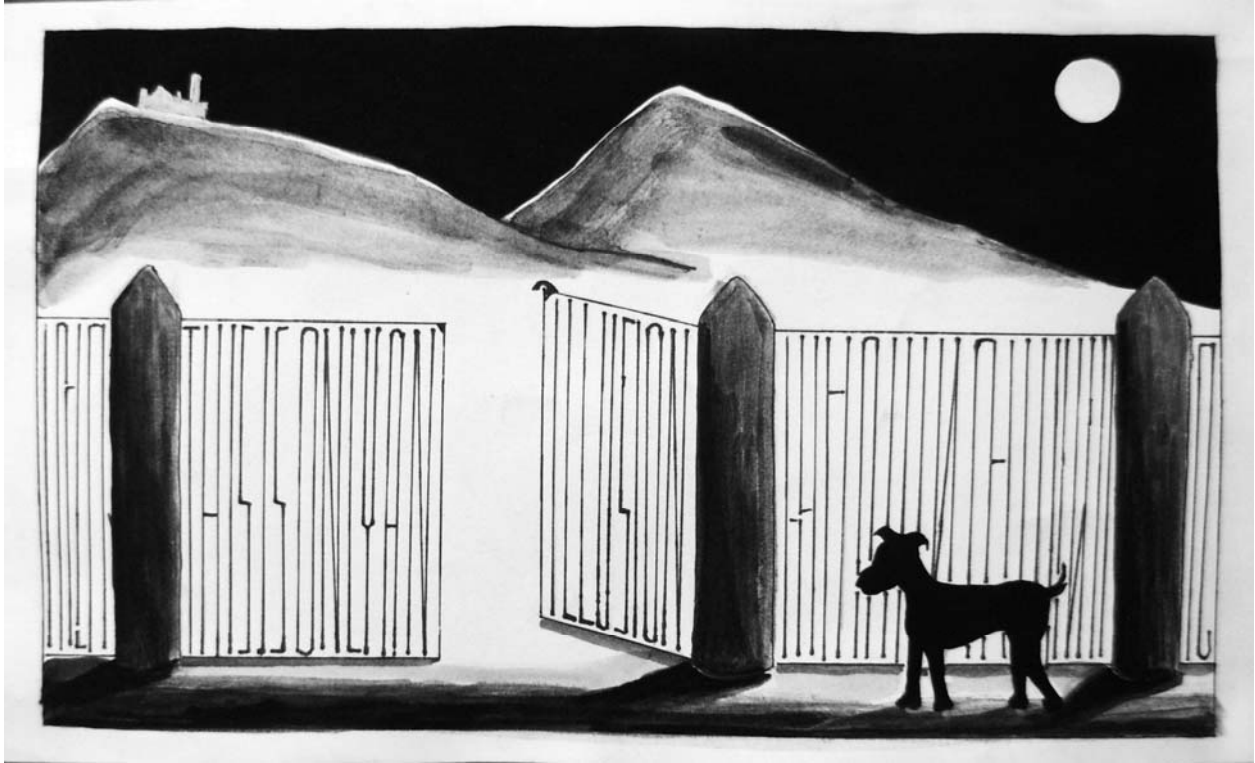
Exploration 4: The black squares have been replaced by yellow. The idea was that with such low contrast the bulging effect would be nearly removed. Because the eye strains to differentiate yellow from white, the illusion is not as obvious as in the others.



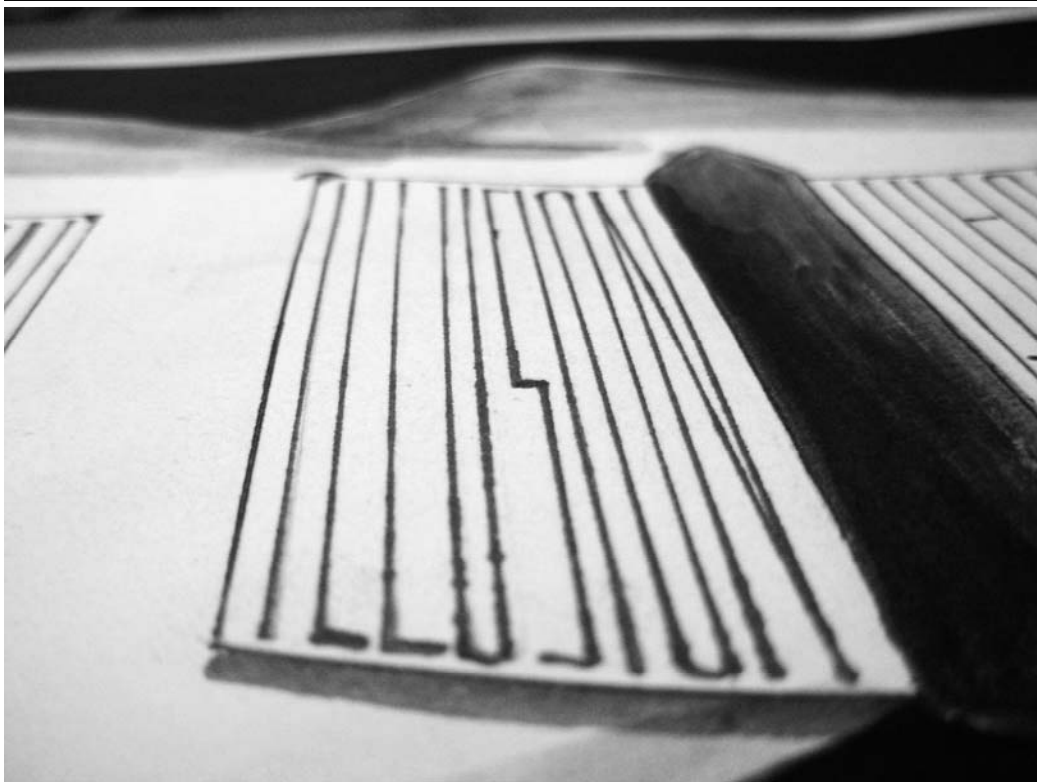
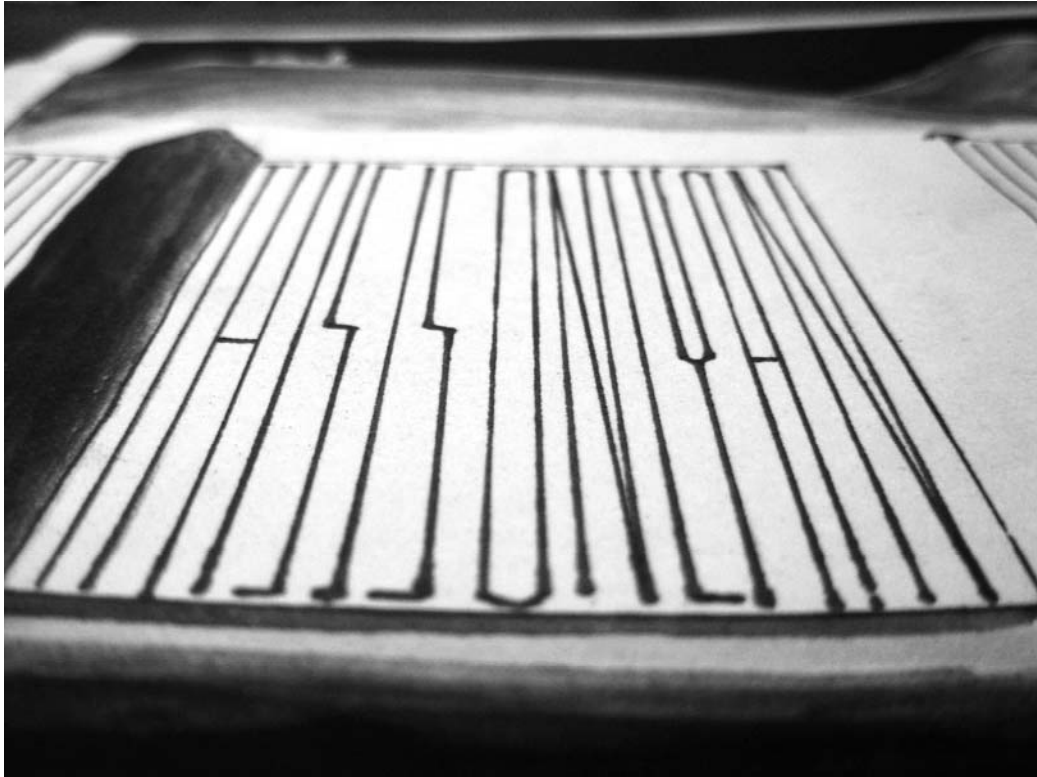
Exploration 5: In the final exploration I kept the colour scheme limited to grey and white. I painted the tiny squares black, and also gave black outlines to the grid. This completely removed the illusion as it was finally established that the lines are parallel.

Assignment 2

To take an existing theory and make my own illusion



The dog thinks it is just another night out across the fences. When he reaches the gates, he realizes he has been wrong. What does he find out?



Truth be told "THIS IS ONLY AN ILLUSION"

To create this simple illusion I have used the technique of **ANAMORPHISM**. An anamorphism is a distorted projection or perspective; especially an image distorted in such a way that it becomes visible only when viewed in a special manner.

Leonardo da Vinci's **Eye** (1485) is the earliest known example of an anamorphosis. It is a well known visual device, once popular among the renaissance painters where perspectival techniques were used to show one image when viewed from directly in front, and another when viewed from a special vantage point.

In my illusion I have elongated the alphabets on the gates beyond proportion so that at one glance it looks like ordinary grills. However, if the image is flattened out and viewed from a very low angle towards the bottom edge, the alphabets define themselves and form the words THIS IS ONLY AN ILLUSION. Also I have tried to make the other sides of the gates look like alphabets when they are not so in reality. Here I was trying to play with the human psychology of trying to make sense of things even when they do not exist.

DAMAYANTI CHAKRAVARTY
PG GRAPHIC DESIGN I
Cognitive Psychology (1 week)
Course Guide: Dr. Bibhudatta Baral