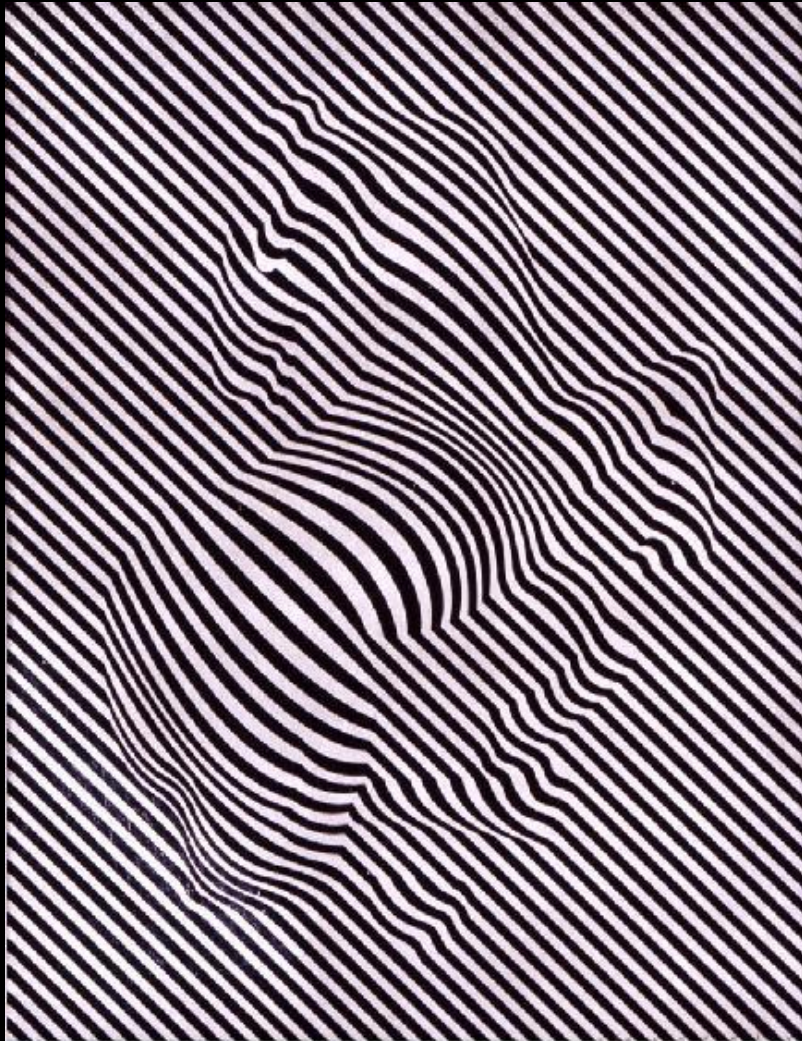


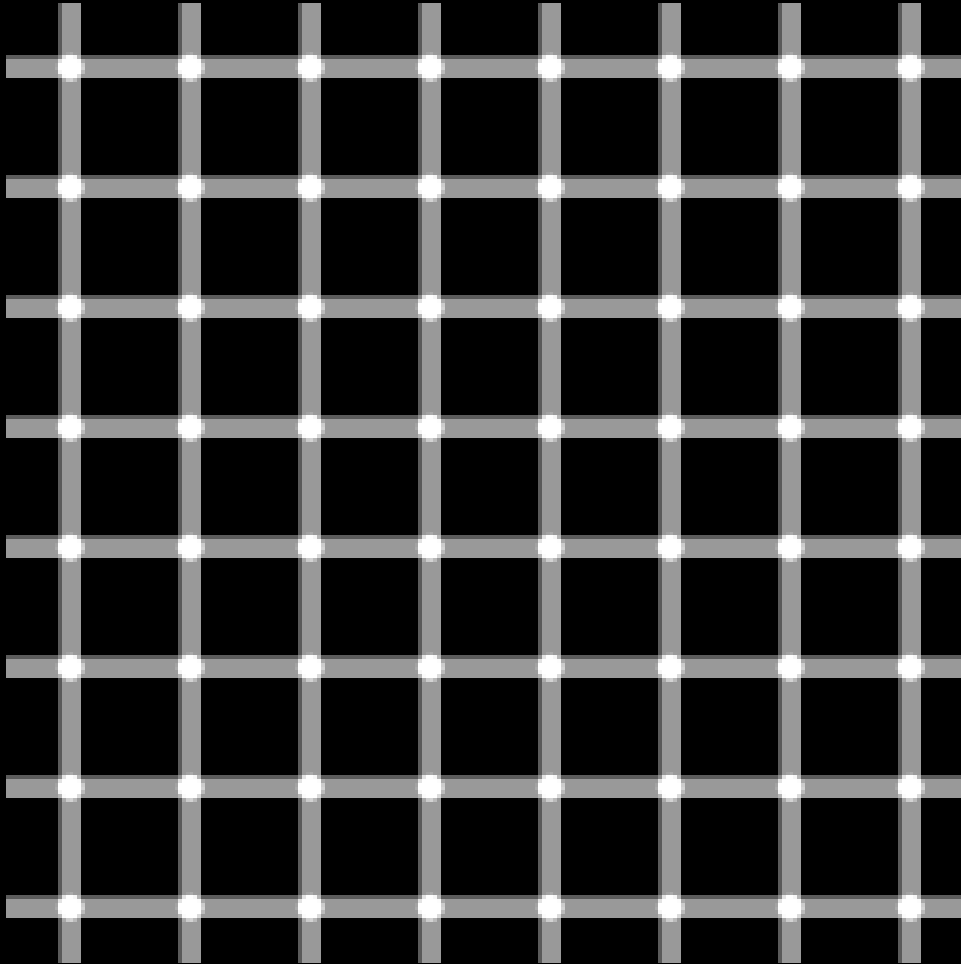
# OPTICAL ART



Op Art is a style of art making that uses hard edged shapes and color contrast to create the illusion of 3-D space.

Check out this painting by one of the most famous Op artists, Victor Vasarely.

## FIRST LETS DISCUSS SOME DIFFERENT TYPES OF OPTICAL ILLUSIONS

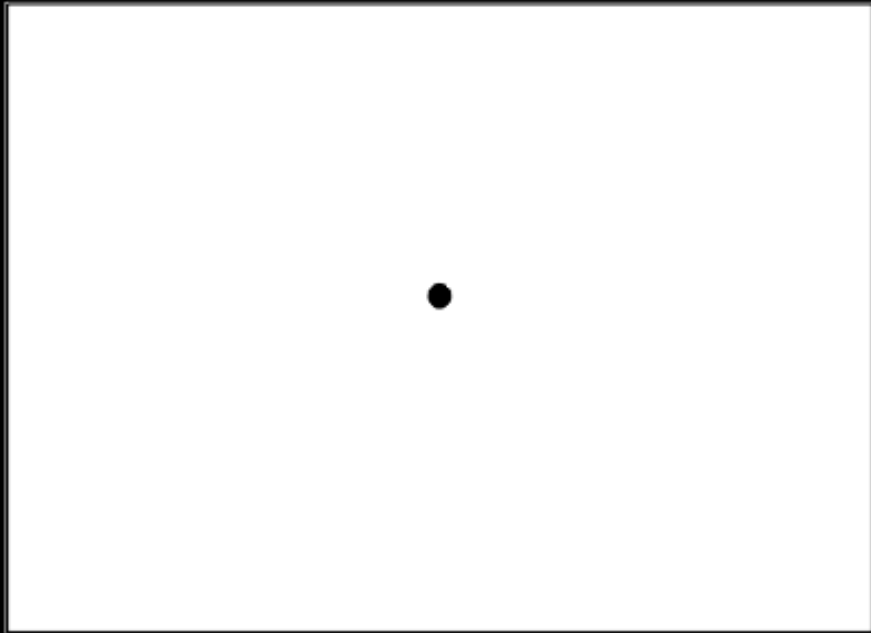
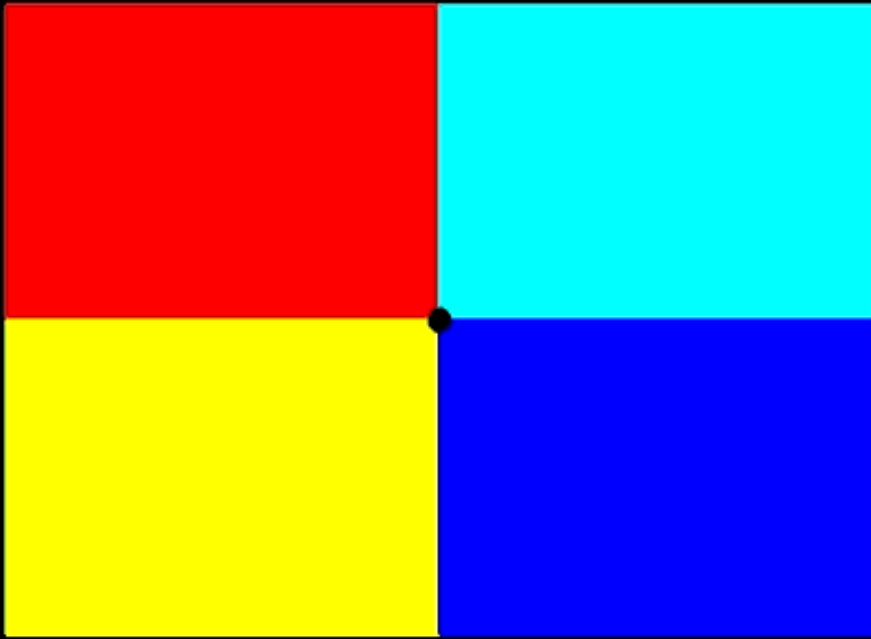


One type of optical illusion is the “after image”

The after image refers to an image that continues to appear in your vision after you have stopped looking at it.

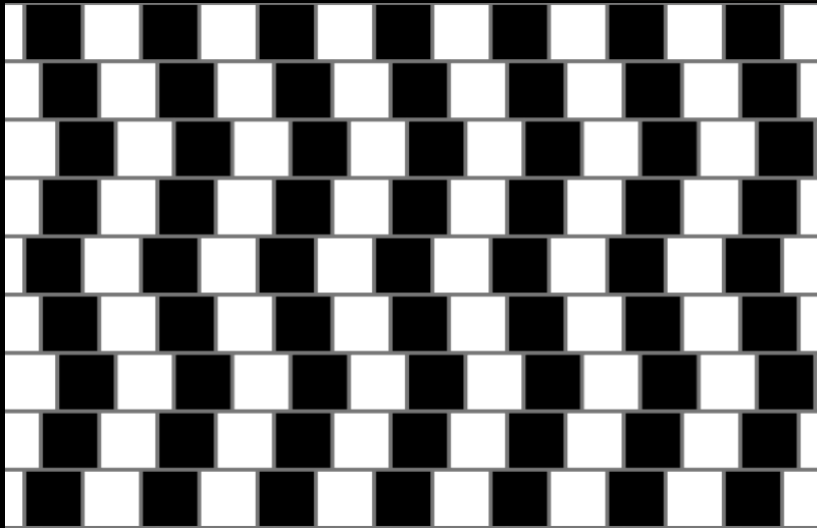
One common after image is when you look at a light bulb for a few seconds and then experience a glow floating in front of your eyes when you look away.

We know that the black dots are not there, but our eye’s see them anyway because of the excessive stimulation of the image. The image is very “busy.” It is also black and white, which are high contrasts.



CHECK THIS ONE  
OUT! STARE AT THE  
BLACK DOT IN THE  
UPPER RECTANGLE  
FOR THIRTY  
SECONDS. THEN  
MOVE YOUR EYE TO  
THE DOT IN THE  
LOWER RECTANGLE.  
WHAT DO YOU SEE?

# DISTORTION ILLUSIONS

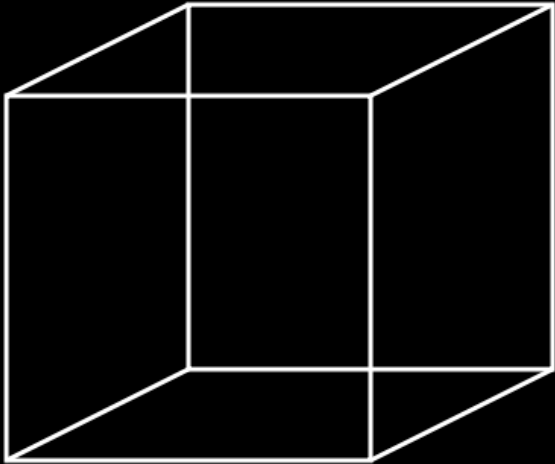


The Café Wall illusion-  
Are there any diagonal  
lines in this image????

Check out this cool  
building in Australia that  
was inspired by the Café  
Wall Illusion!



# AMBIGUOUS ILLUSIONS

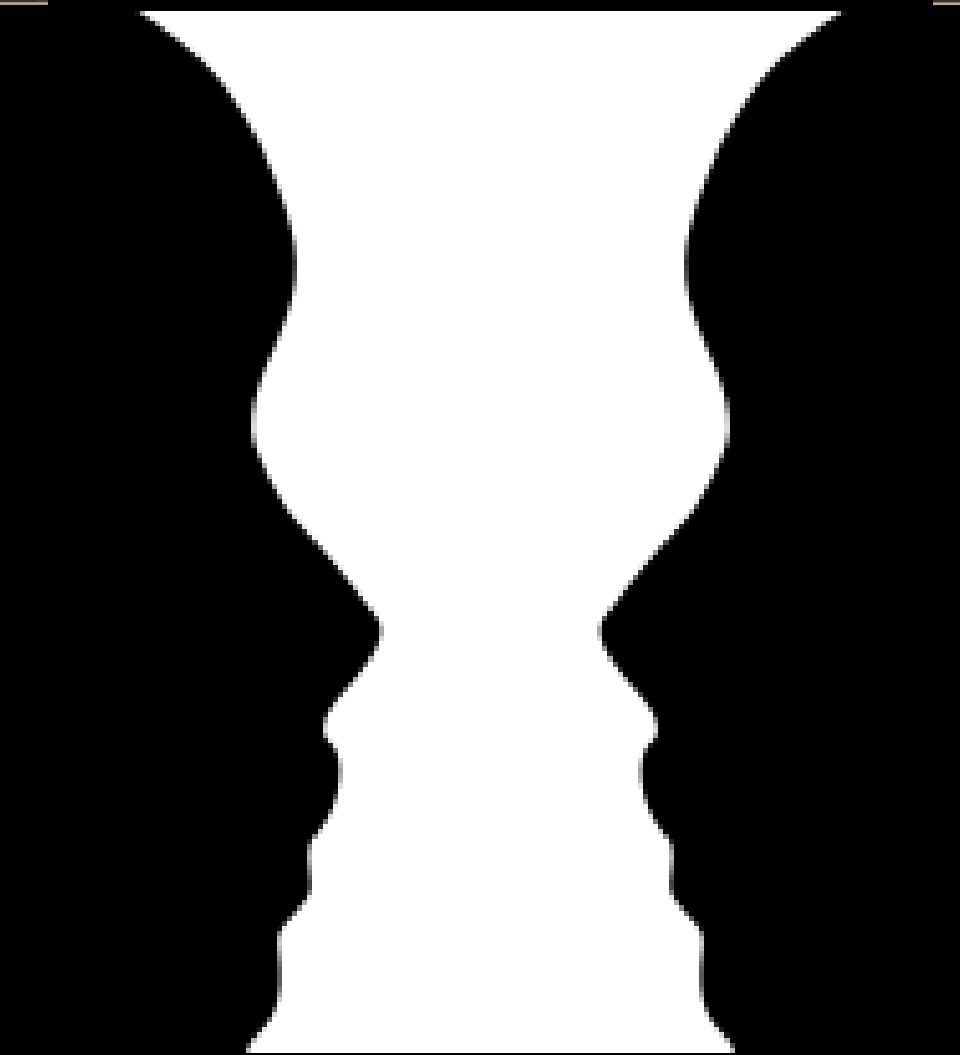


The Necker cube: Which lines are in front? Which are behind?



Tumbling Blocks: Which blocks are concave? Which are convex?

# RUBIN'S VASE



**DO YOU SEE  
THE FACE OR  
THE VASE?  
CAN YOU SEE  
THEM BOTH  
AT ONE TIME?**

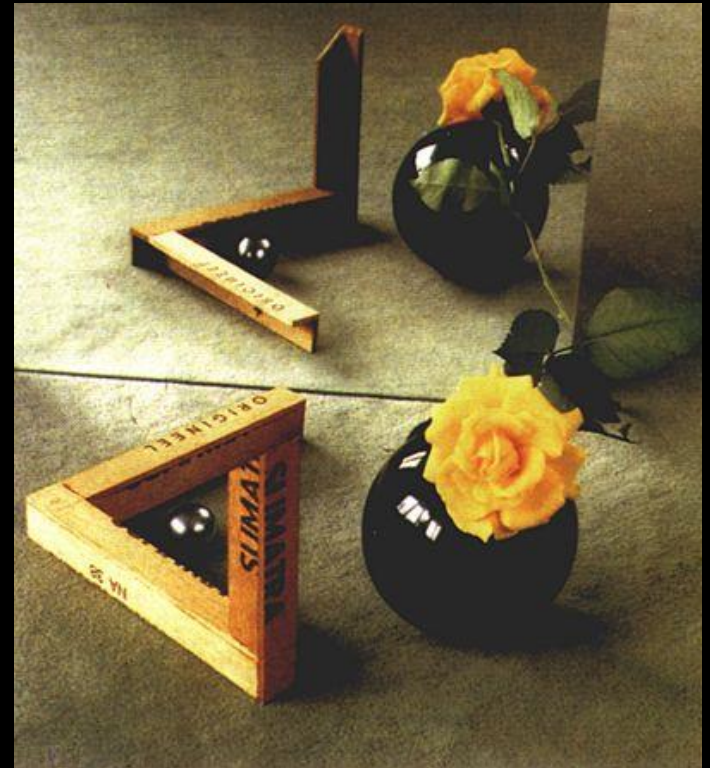
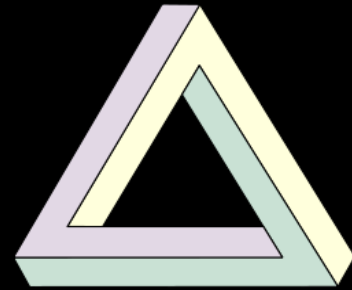
**WHICH IS THE POSITIVE SPACE?  
WHICH IS THE NEGATIVE SPACE?**

# IMPOSSIBLE WORLDS AND OBJECTS

The Penrose triangle, or Tri Bar:

This is not possible in the “real world.”

However, there have been 3 D constructions of the tri-bar that are truly convincing.

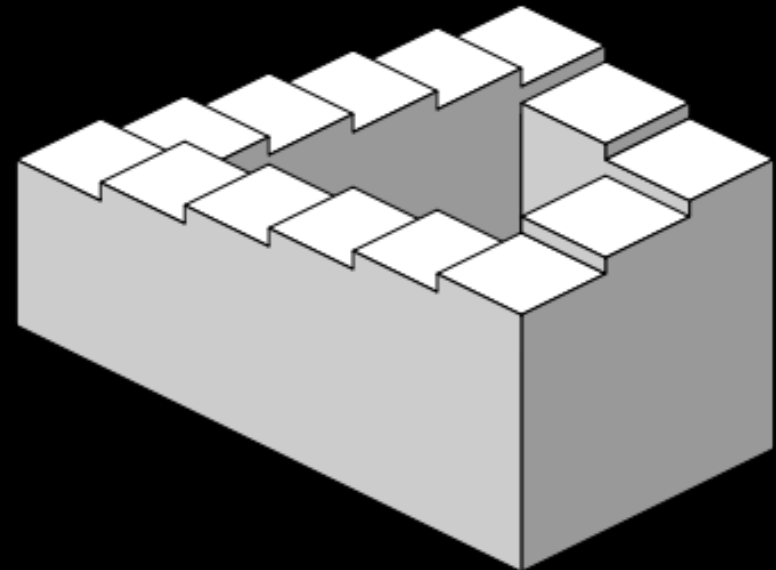
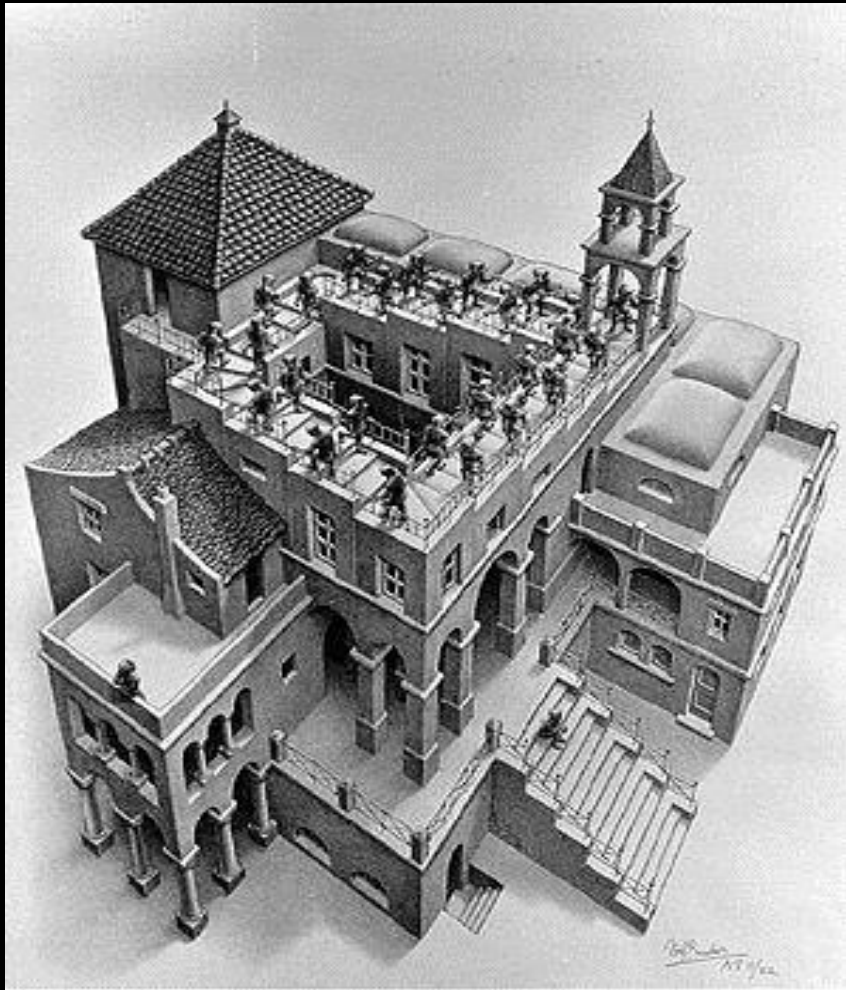


# LET'S TALK ABOUT PARADOXES

The Penrose staircase-

One could go up or down the stairs forever in a continuous loop! How crazy...

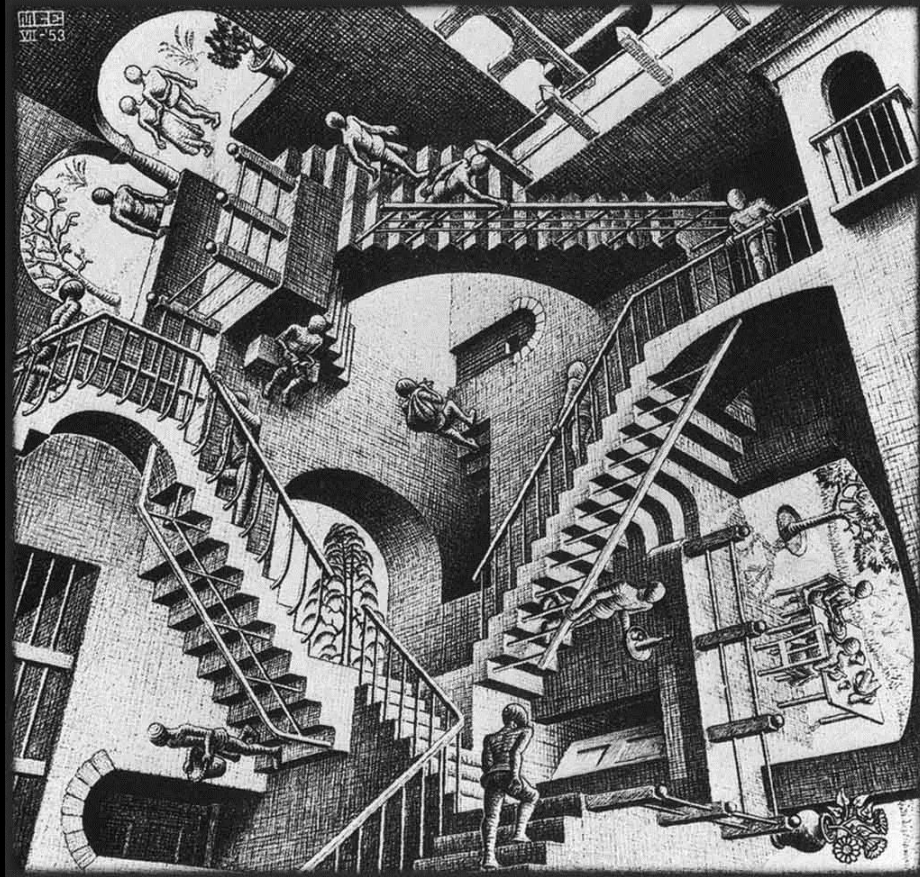
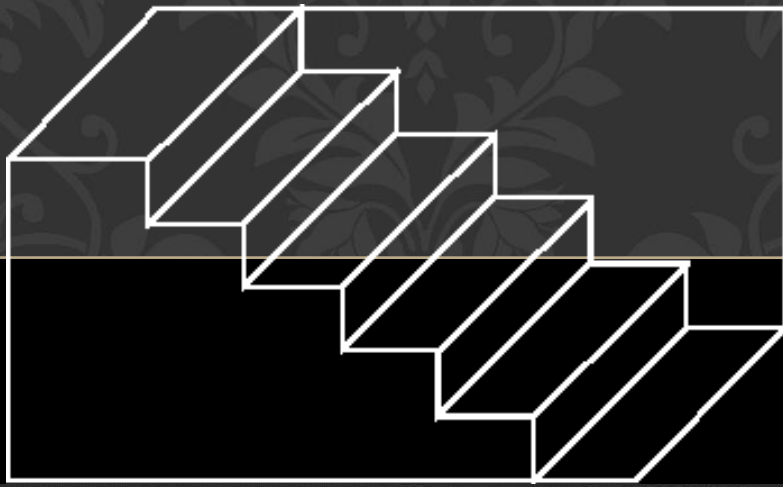
MC Escher was clearly influenced by the Penrose stairs. You can see them here in his famous print, *Ascending and Descending*.





THE SIMPSONS- TREE HOUSE OF HORROR 4  
I THINK I SEE AN IMPOSSIBLE STAIRCASE!





SCHRODER STAIRS: DO YOU SEE TWO DIFFERENT STAIRCASES: ONE GOING UP FROM RIGHT TO LEFT, THE OTHER TURNED UPSIDE DOWN? MC ESCHER WAS ALSO INSPIRED BY THESE STAIRS. YOU CAN SEE THEM IN HIS PRINT, *RELATIVITY*.



# LEGO ESCHIER

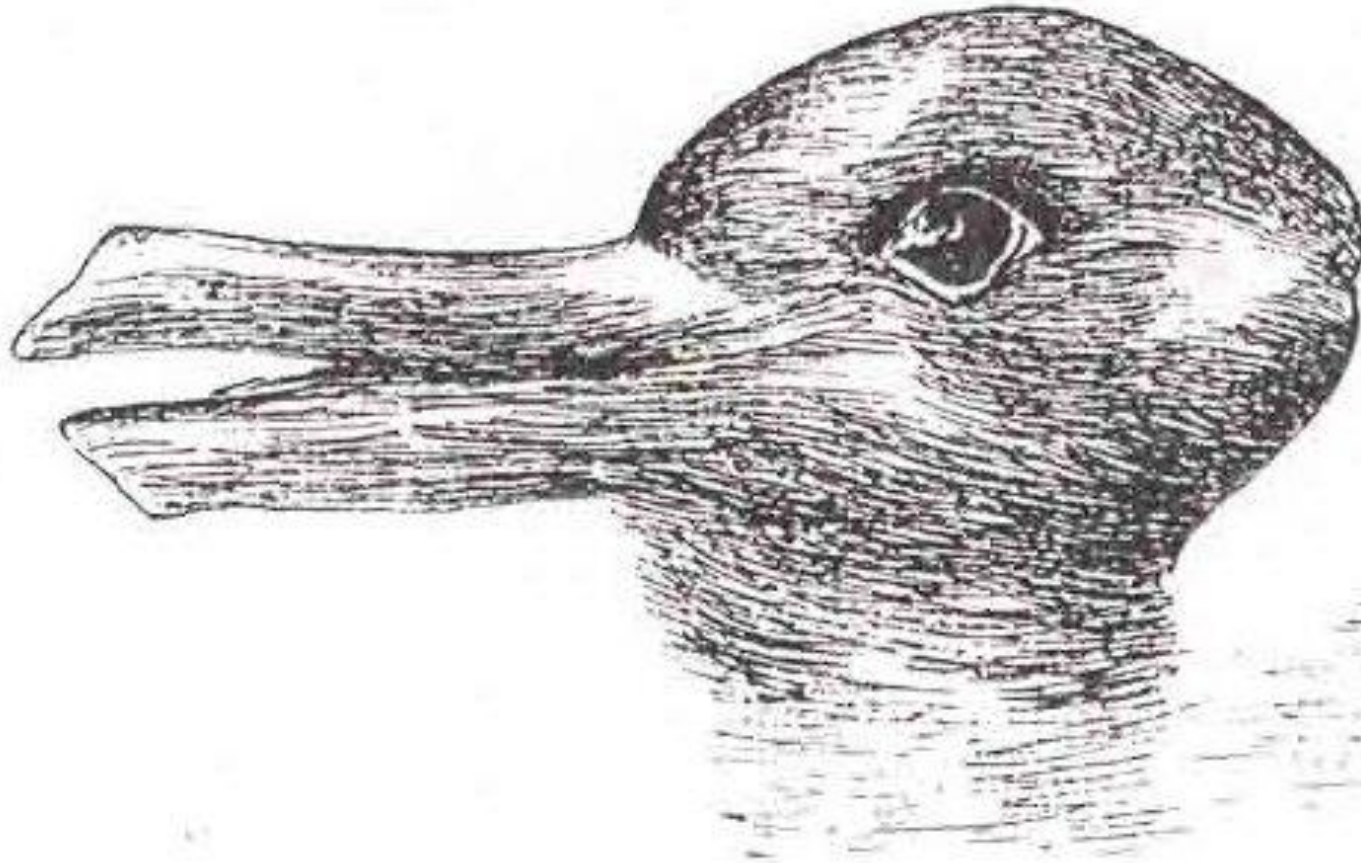


I'M CONFUSED!!





WHAT ANIMAL DO YOU SEE HERE?

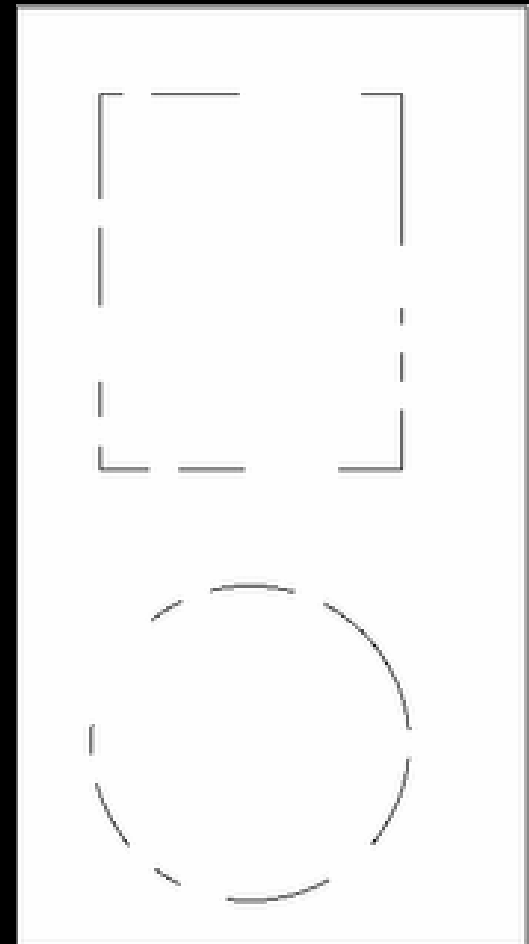
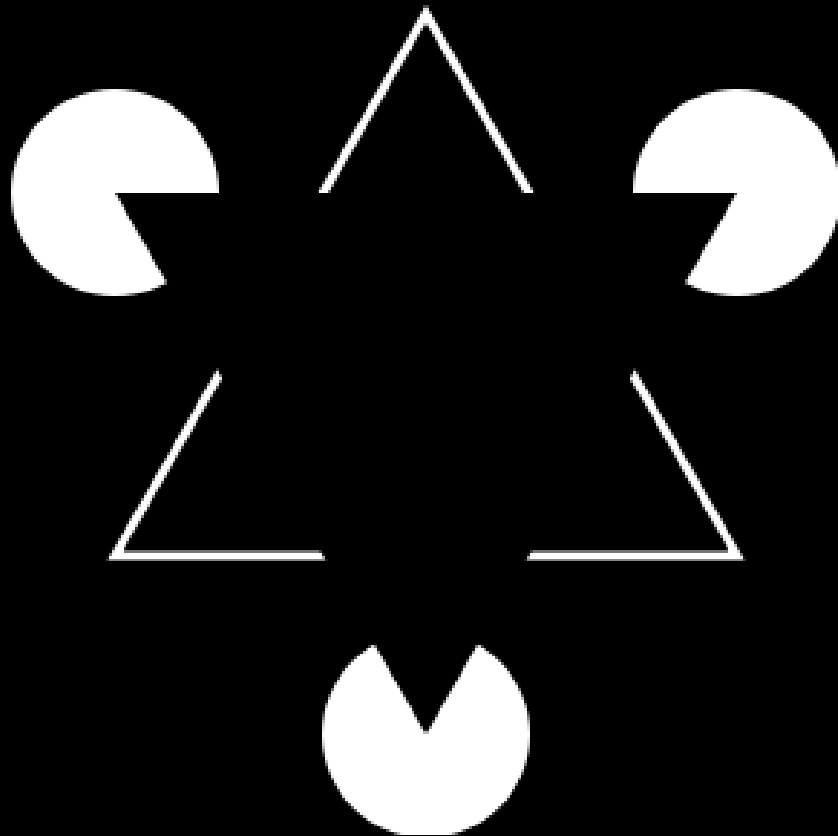




**MY WIFE AND MY MOTHER  
IN LAW: DO YOU SEE A  
YOUNG OR AN OLD WOMAN?**

# COMPLETION

Here's the deal- Our brain naturally wants to organize incoming information into things that are familiar or make sense to us. What shapes do you see in these images?



I THINK IT'S SAFE TO SAY THAT WE NOW KNOW  
WHAT AN OPTICAL ILLUSION IS!

Now let's look specifically at op art. Remember that Op Art is a style of art making that uses hard edged shapes and color contrast to create the illusion of 3-D space.

Op art, unlike "optical illusion" is a genre of art. However, Op art makes use of the different types of illusions that we have looked at.



VICTOR VASARELY, *DUO # 2*



So how does Op art work?

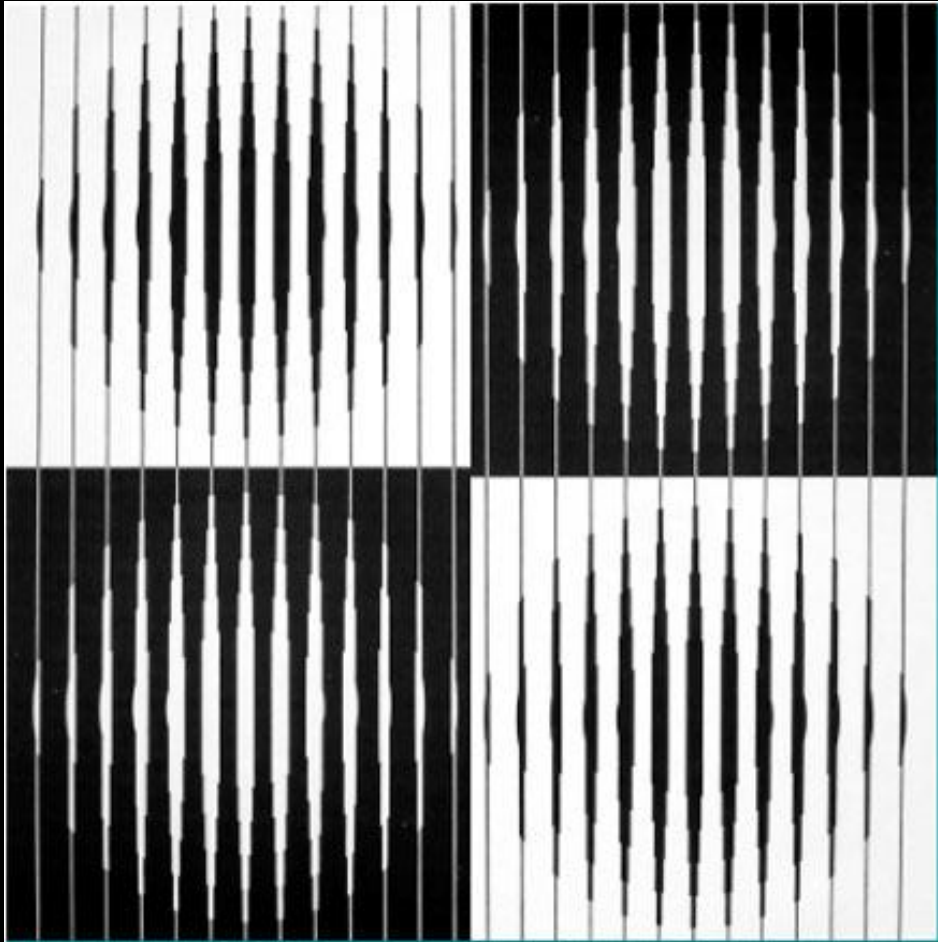
Optical art is an experience that relates to how our vision works. In many op art works there are positive and negative objects are ambiguous.

The best known method for creating op art is through the creation of effects through the use of pattern and line.



VICTOR VASERELY, UNTITLED #2  
MANY OF ARTISTS  
MAKE THEIR WORK  
BY USING  
CONVERGING LINES.  
THIS CREATES DEPTH.  
TO CREATE THIS KIND  
OF ILLUSION ONE  
STARTS OUT BY  
CREATING A  
VANISHING POINT.

VICTOR VASARELY, CAPELLA # 1



Contrast is also very important to op art works. Many of the more famous optical art works are limited to black and white, because they are the most contrasting of all the colors. What are some other colors that create a lot of contrast?



LET ME INTRODUCE YOU TO MY FRIEND BRIDGETT RILEY!



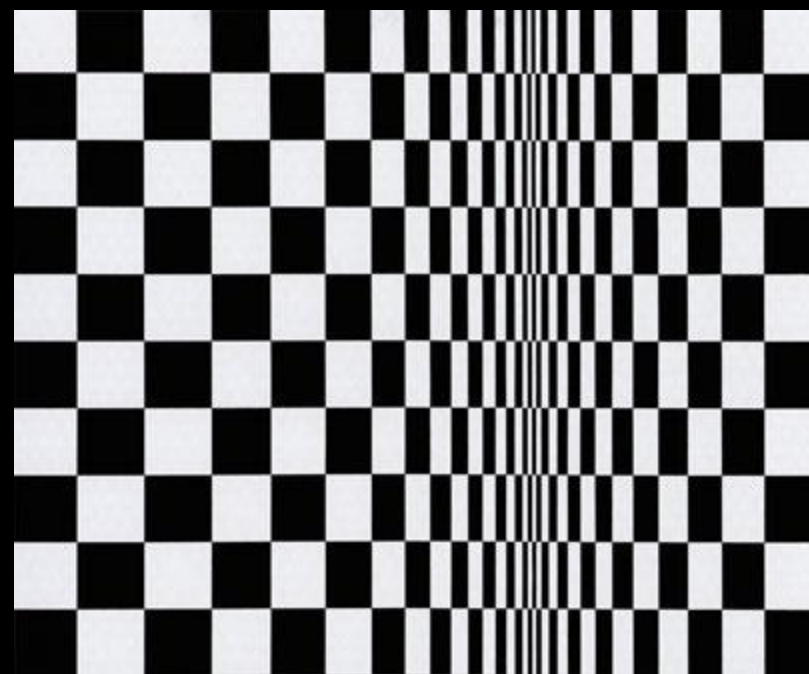
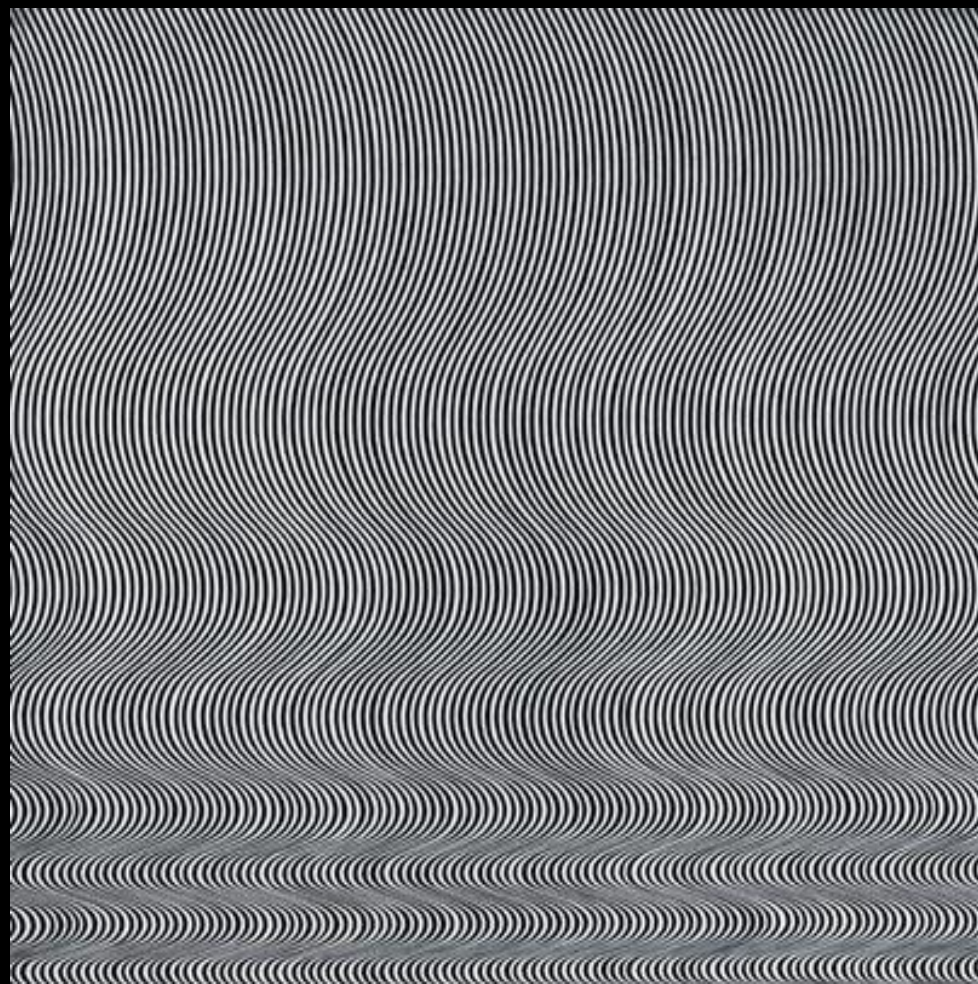
Riley is one of the most famous op artists. She became super popular in the sixties.

This one is called *Arrest*.

How does she make this look like it's waving??



*FALL, AND MOVEMENT IN SQUARES,*  
**BOTH BY BRIDGET**



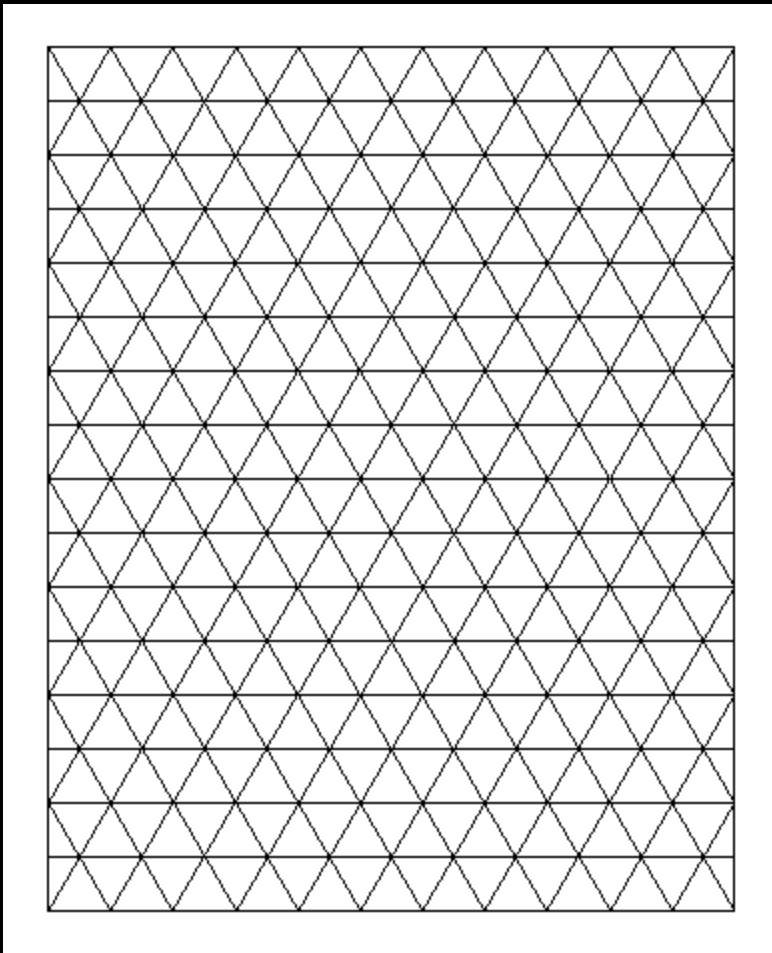
LET'S STOP FOR A MOMENT AND TALK ABOUT MATH.



GRIDS  
ARE  
GOOD™

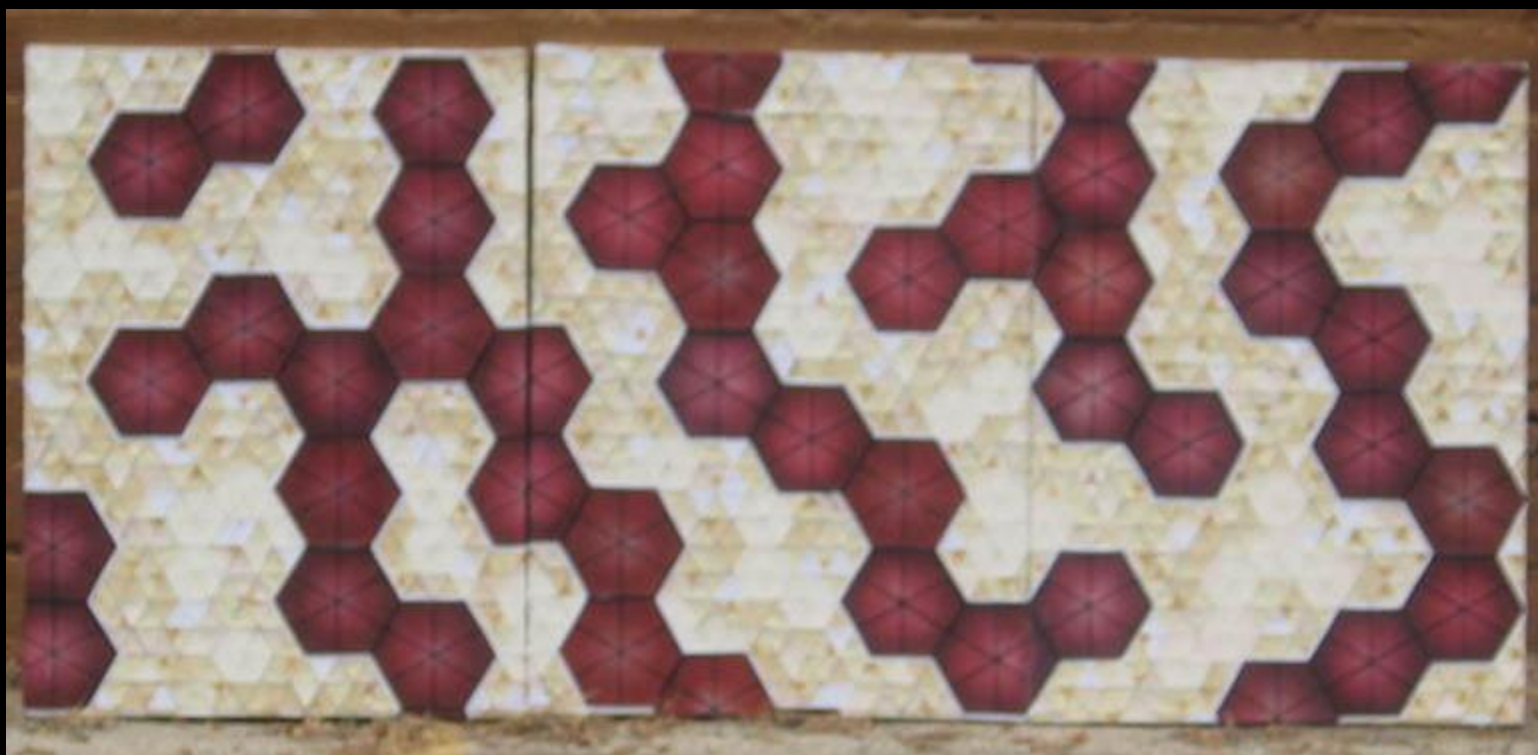
I just wanted to point out that these works by Bridget Riley and Victor Vasarely all make use of math and measuring. A lot of times fractions are used to help the artist determine where a line or shape should go. Many optical works start out with some sort of grid. Let's take a look.

**VASARELY USED AN ISOMETRIC  
GRID FOR DUO # 2.**



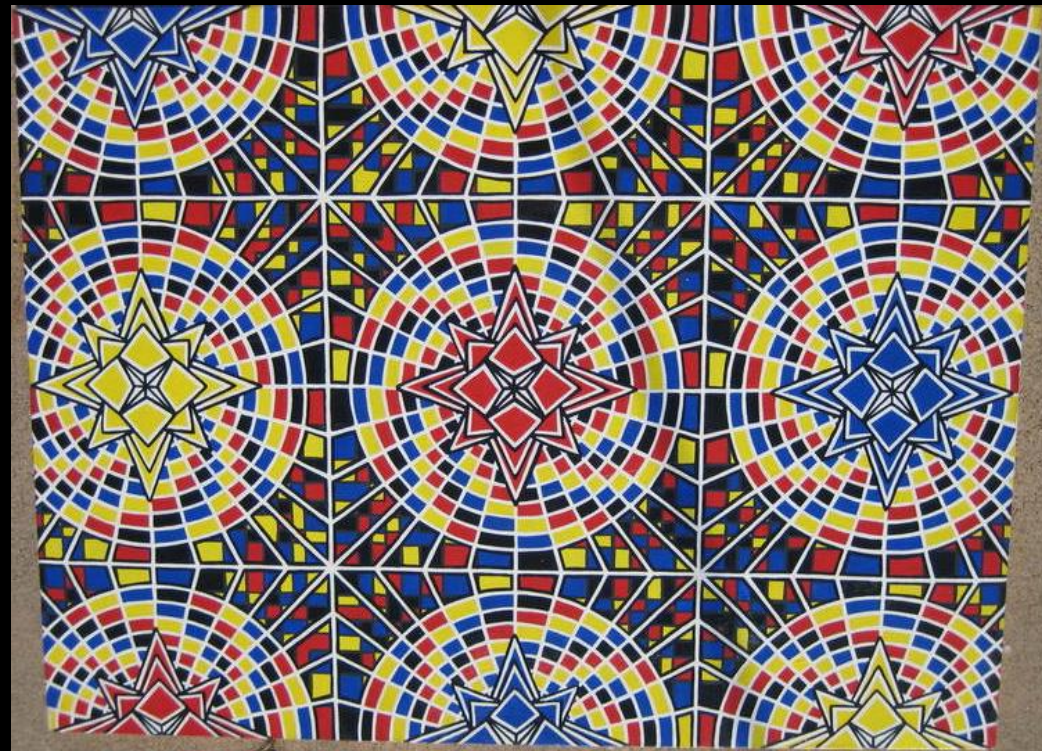
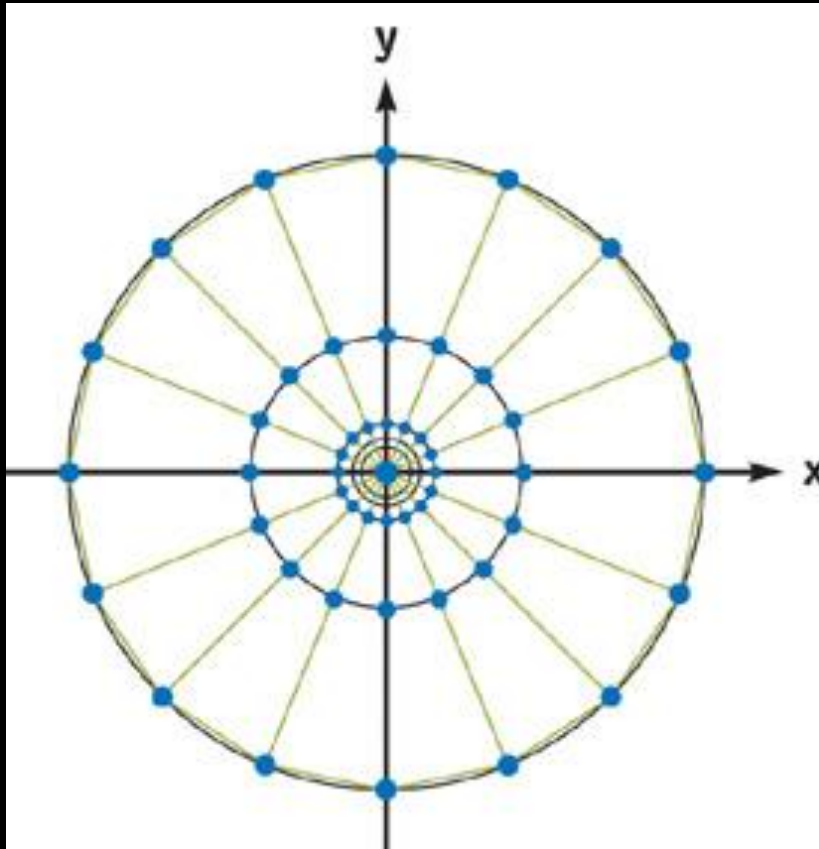


I USED AN ISOMETRIC GRID IN THIS COLLAGE





HERE IS AN EXAMPLE OF A RADIAL GRID. MANY OF ARTISTS MAKE USE OF THESE KINDS OF GRIDS TO CREATE LINES THAT CONVERGE. WHEN AN ARTIST USES THIS KIND OF GRID THEY ALSO CREATE RADIAL BALANCE IN THEIR ART PIECE.



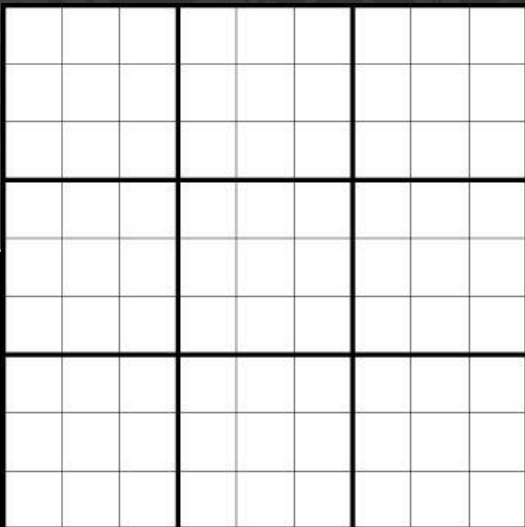
RADIAL BALANCE IN  
BOTH OF THESE

**WORKS. ANOTHER  
THING TO NOTE IS**

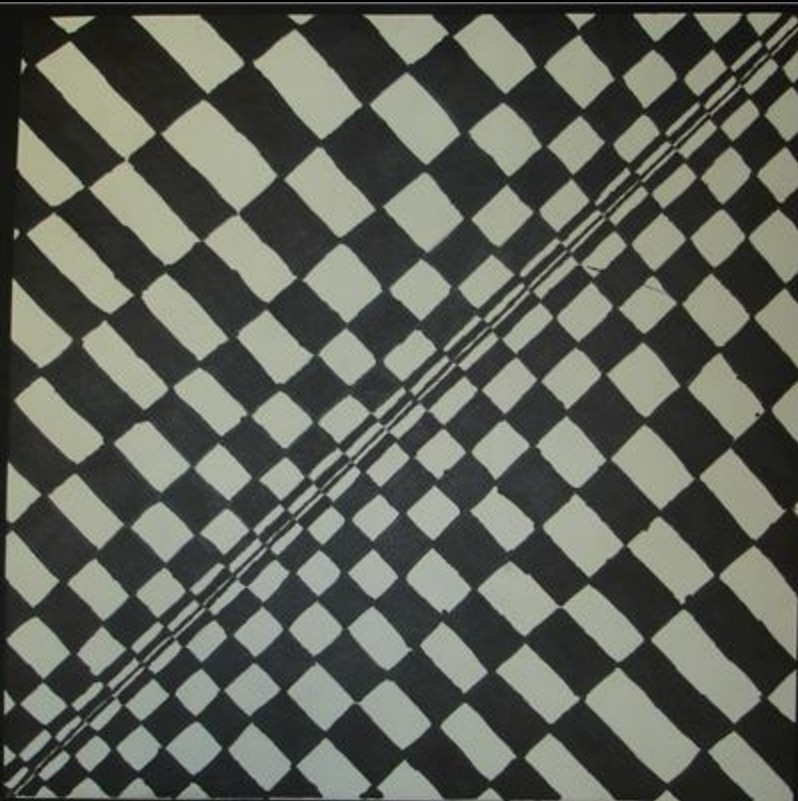
THAT THEY BOTH  
ALSO HAVE A  
VANISHING POINT



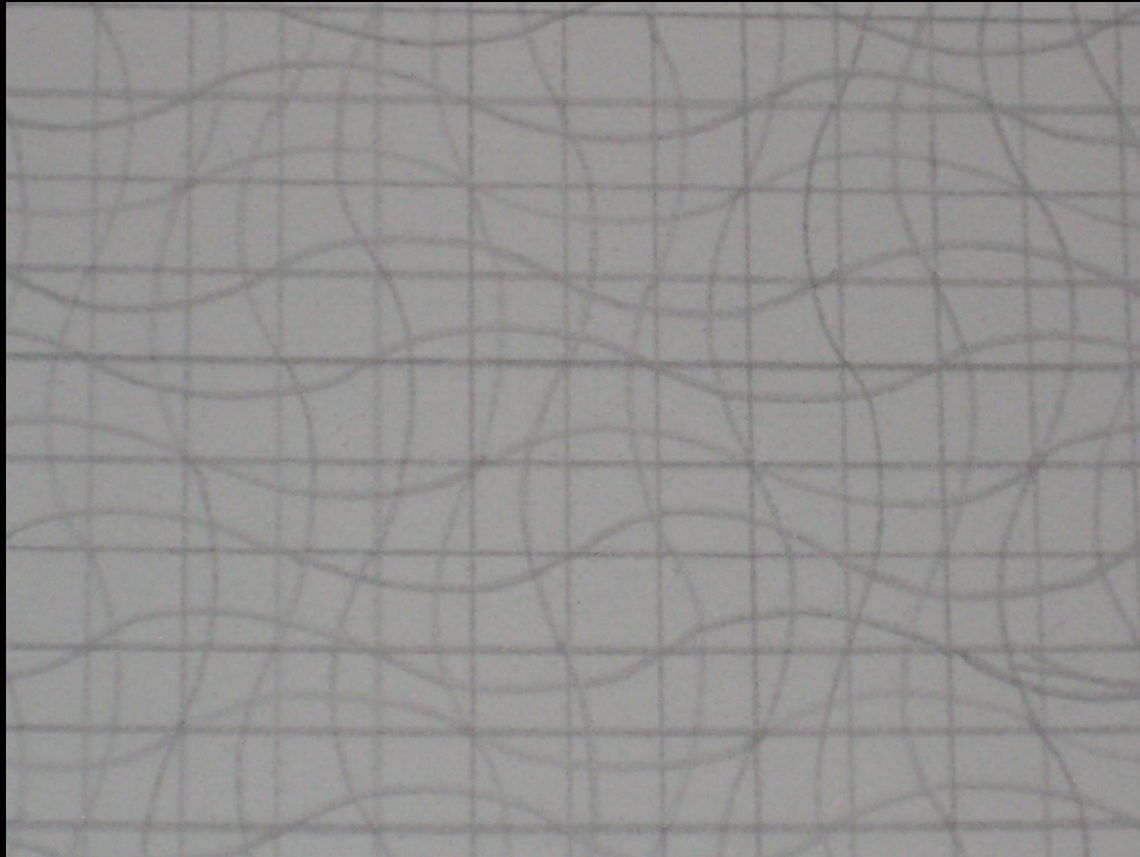




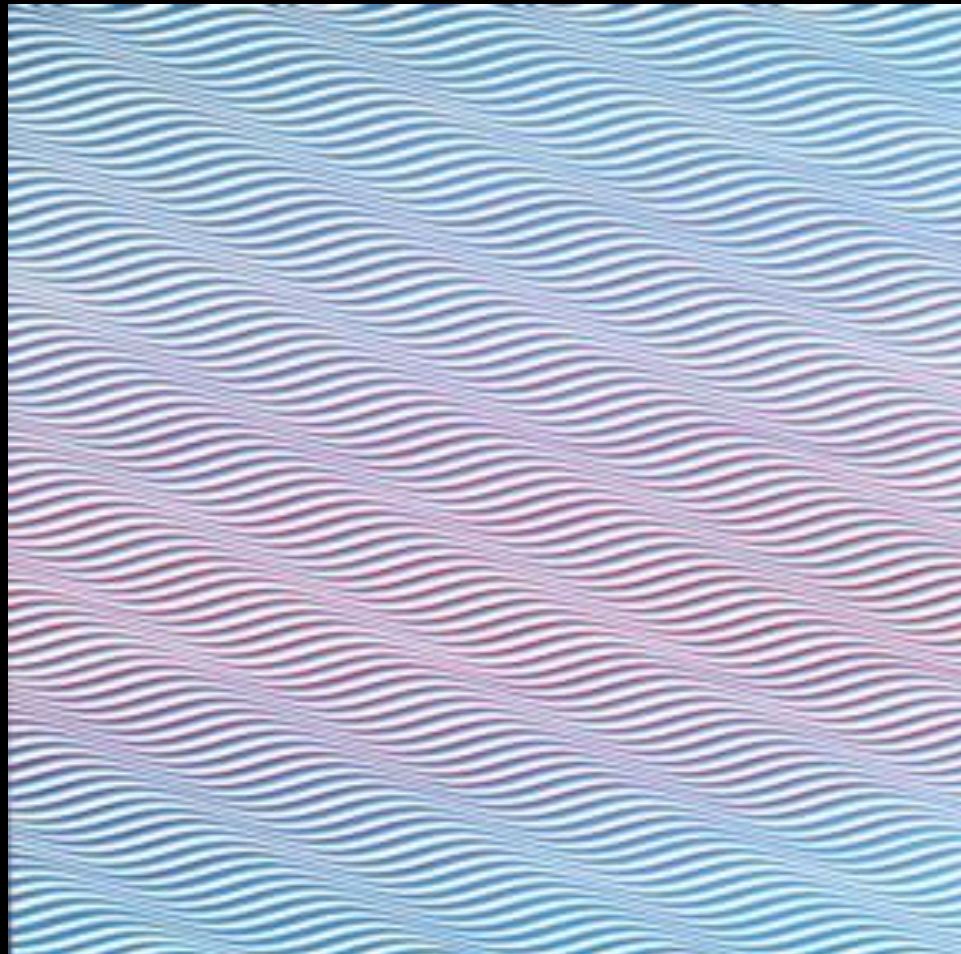
**MANY ARTISTS USE STRAIGHT GRIDS. HECTOR USED STRAIGHT GRIDS IN BOTH OF THESE ARTWORKS.**



BRIDGET RILEY USES A LOT OF WAVY  
GRIDS. THESE KINDS OF GRIDS START BY  
USING A STRAIGHT GRID.

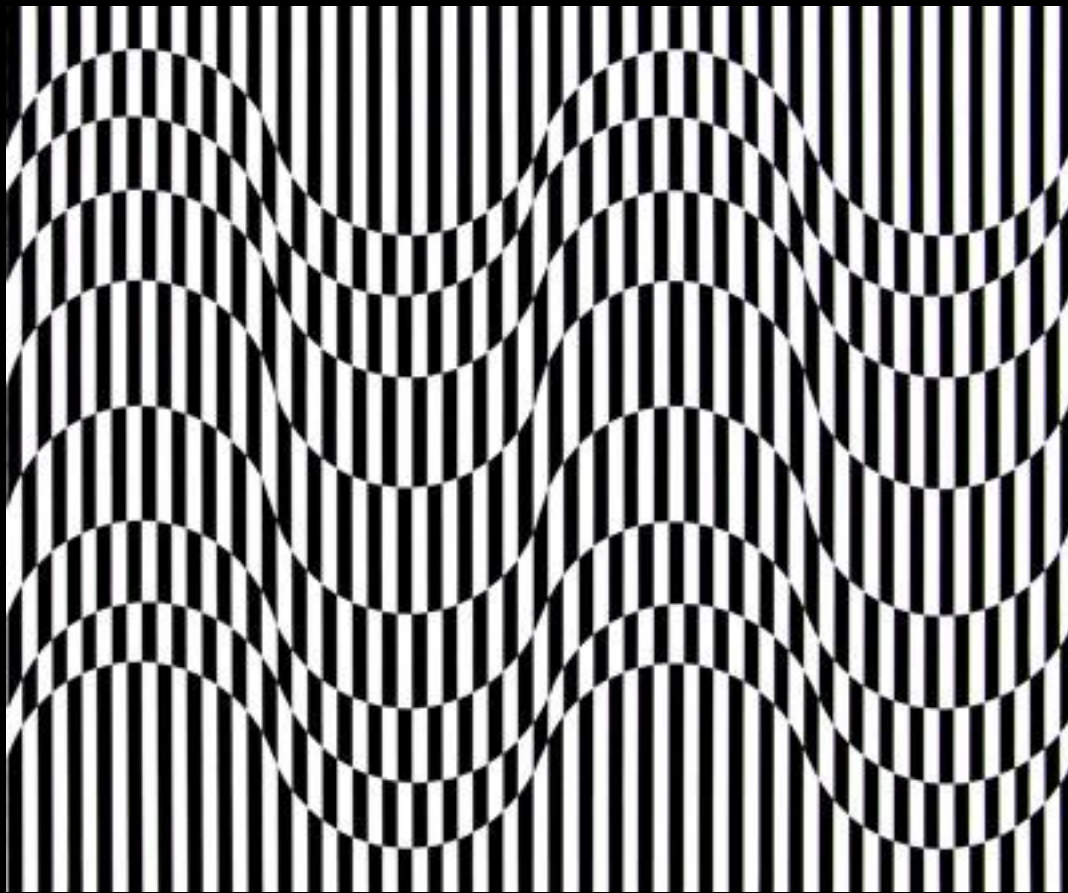


BRIDGET RILEY, *CATARACT*



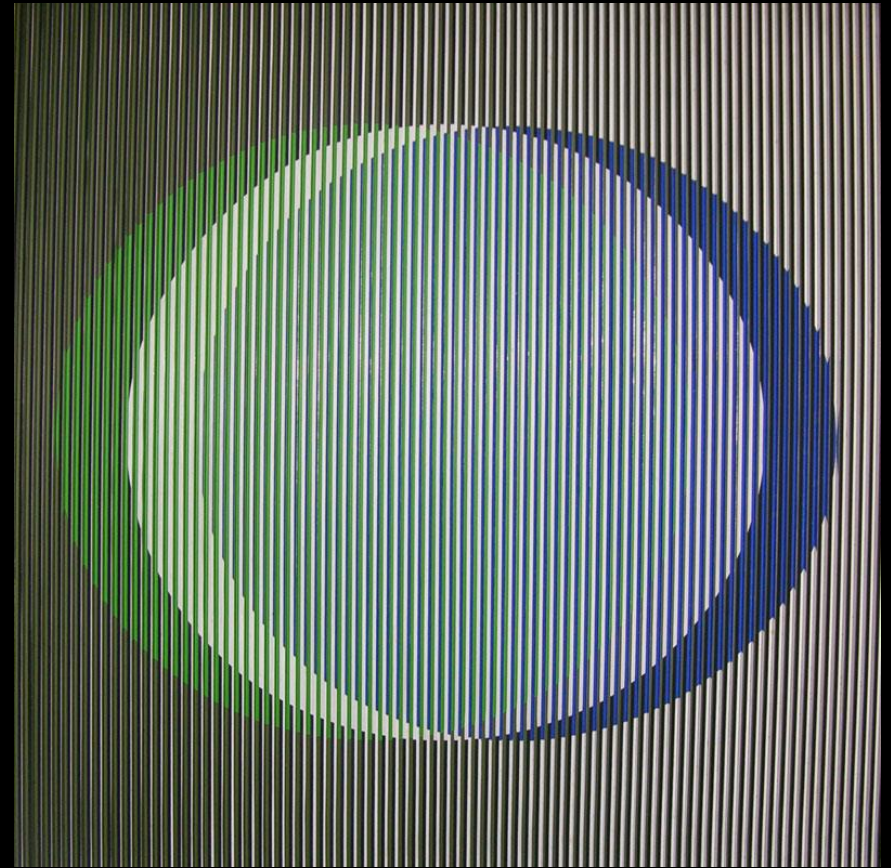


You can also create cool op art by simply switching the color of your lines. Your sketch of the week is a perfect example of this. Lets look at some more examples.



**BRIDGET  
RILEY, *LOSS***

CARLOS CRUZ DIEZ



# JOSEPH ALBERS

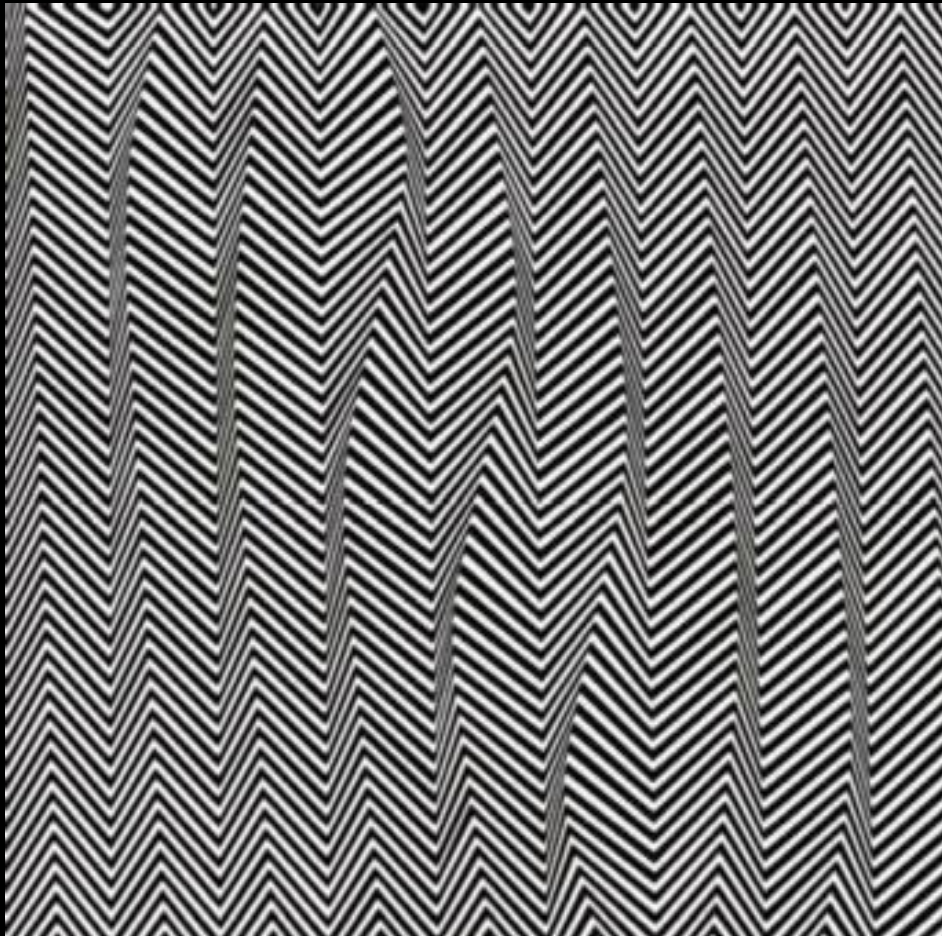




LOOK AT THIS WORK BY BRIDGET  
RILEY. IT REALLY LOOKS LIKE IT'S  
MOVING DOESN'T IT?

### *Descending*

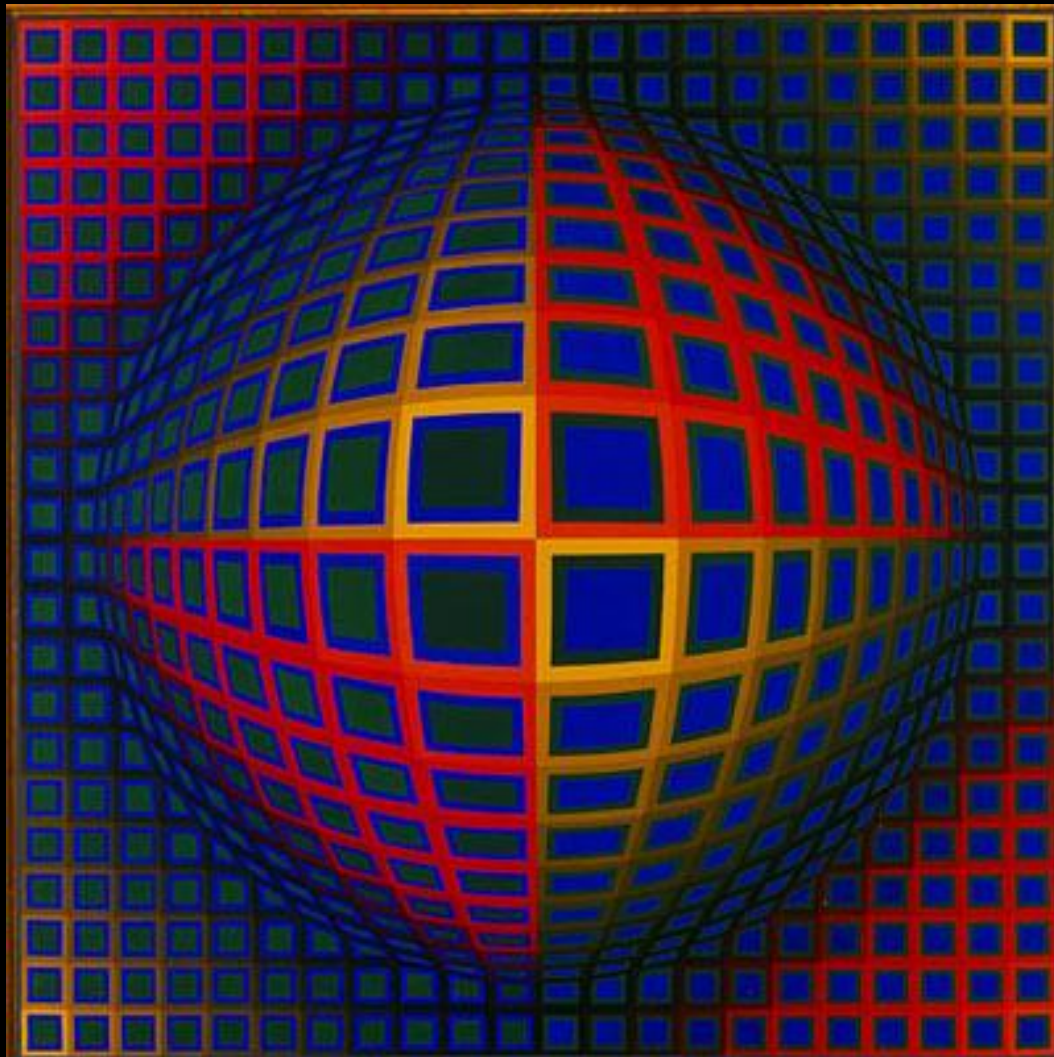
Let's look at how this piece was made. First, there is a lot of contrast, because she uses black and white. There are also a lot of lines. As the lines move across the page there are dramatic angular turns. All of these things combined create the movement you see here.



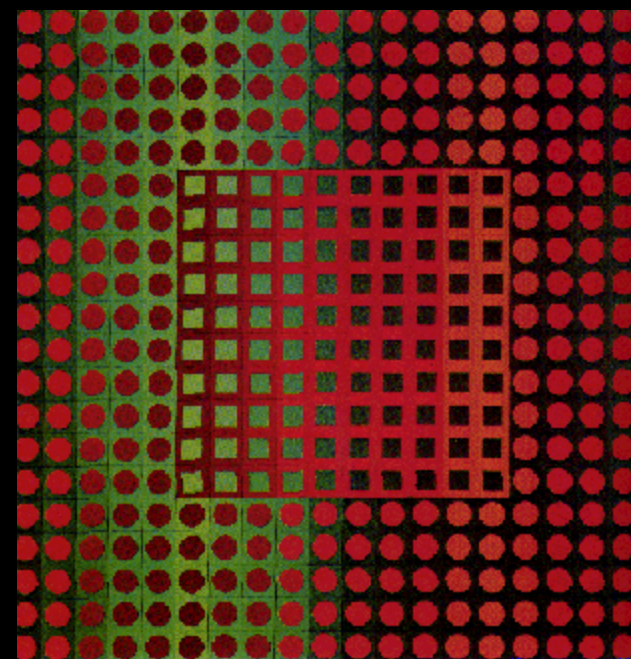
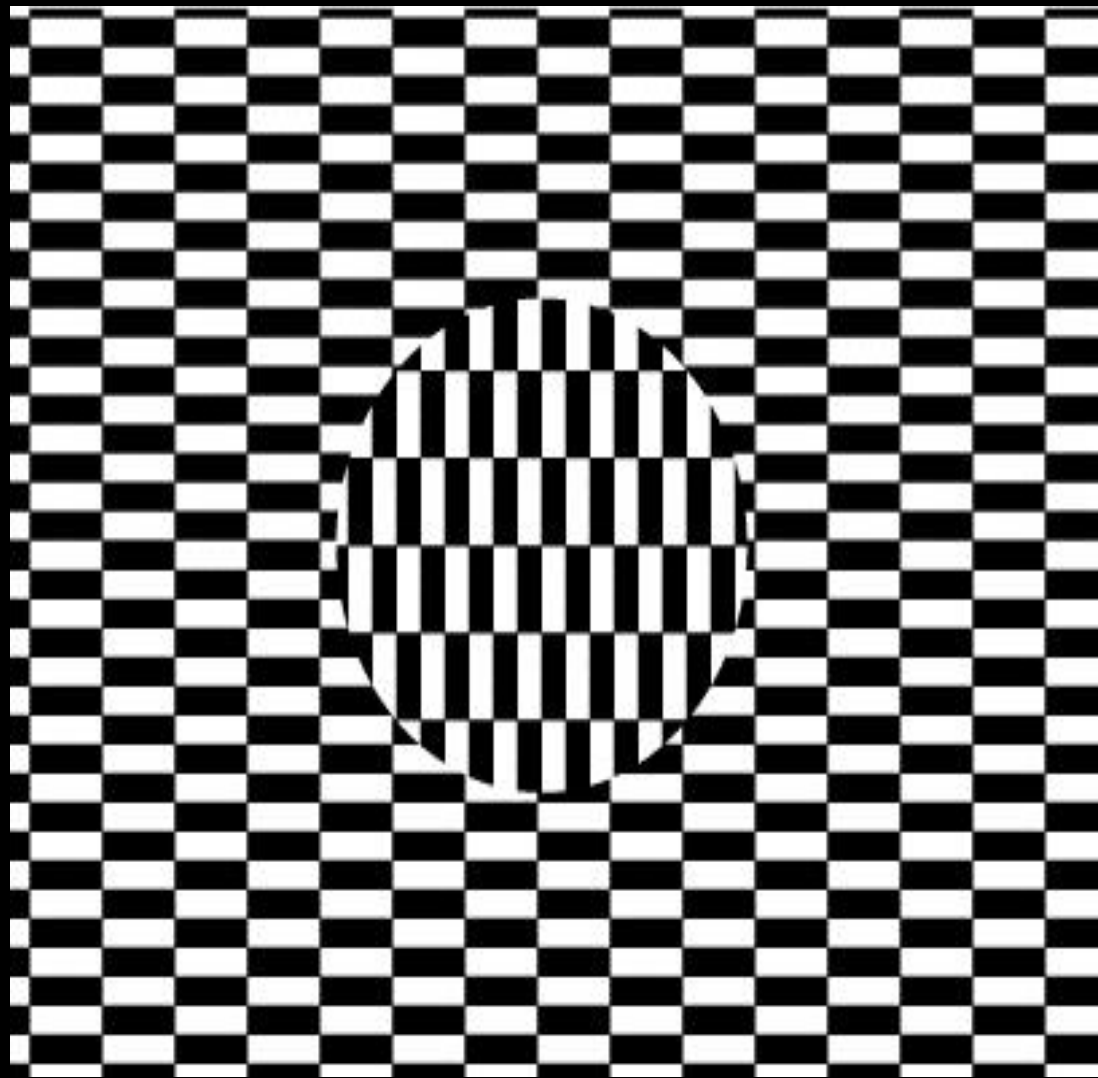


# SOMETIMES THINGS POP OUT AT YOU!

Vasarely, *Vega Nor*

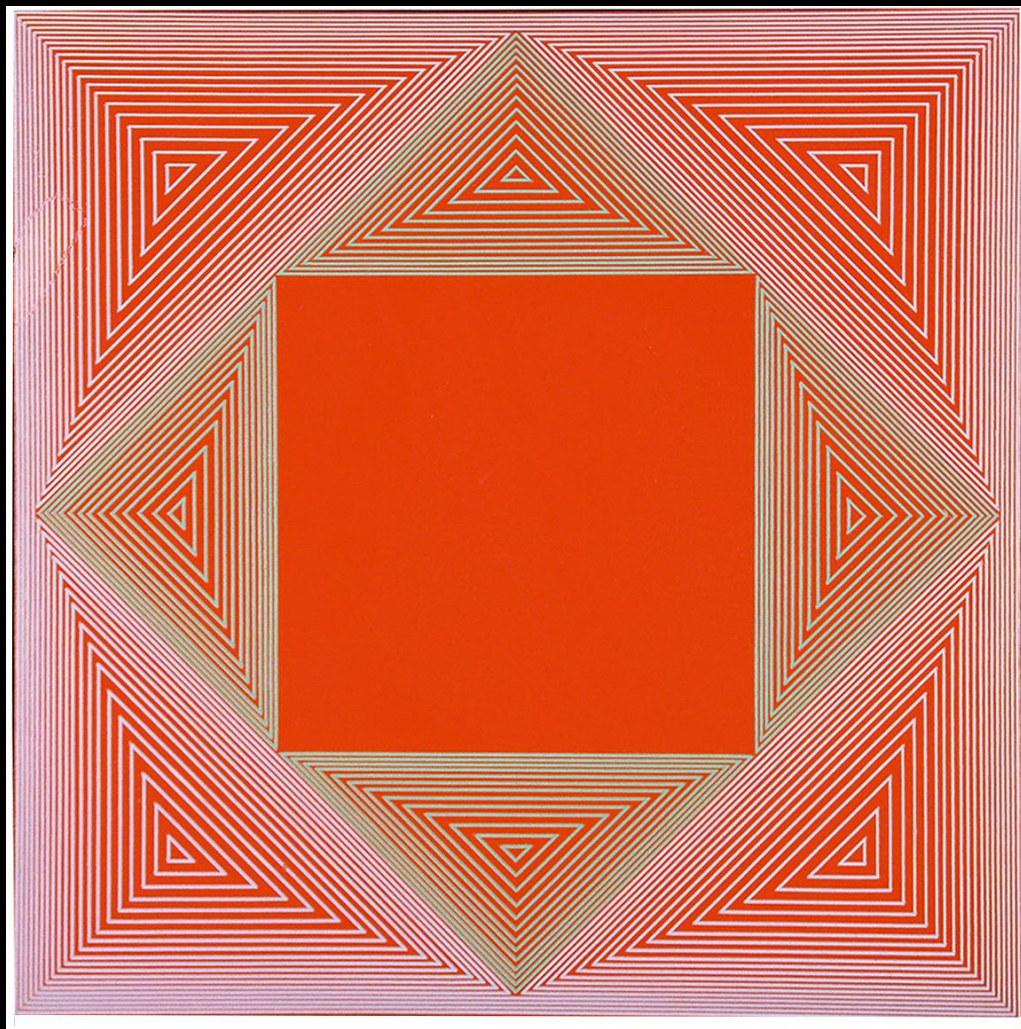


# SOMETIMES THINGS HOVER





RICHARD ANUSZKIEWICZ



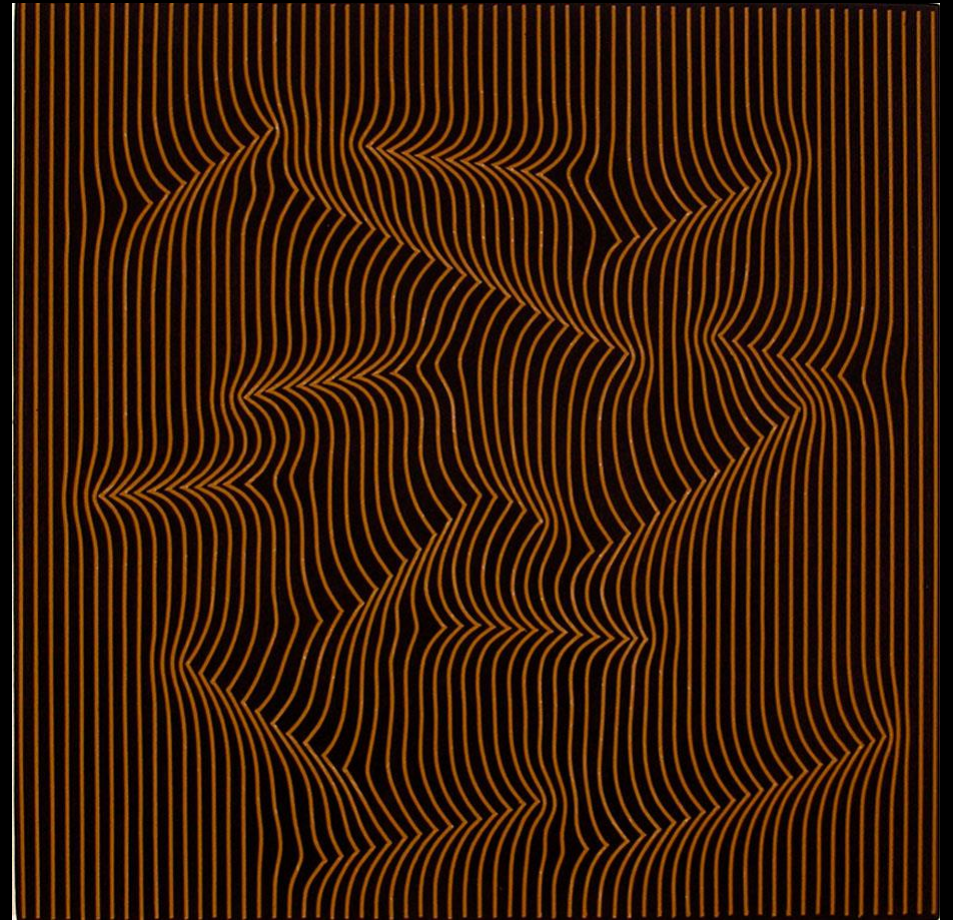
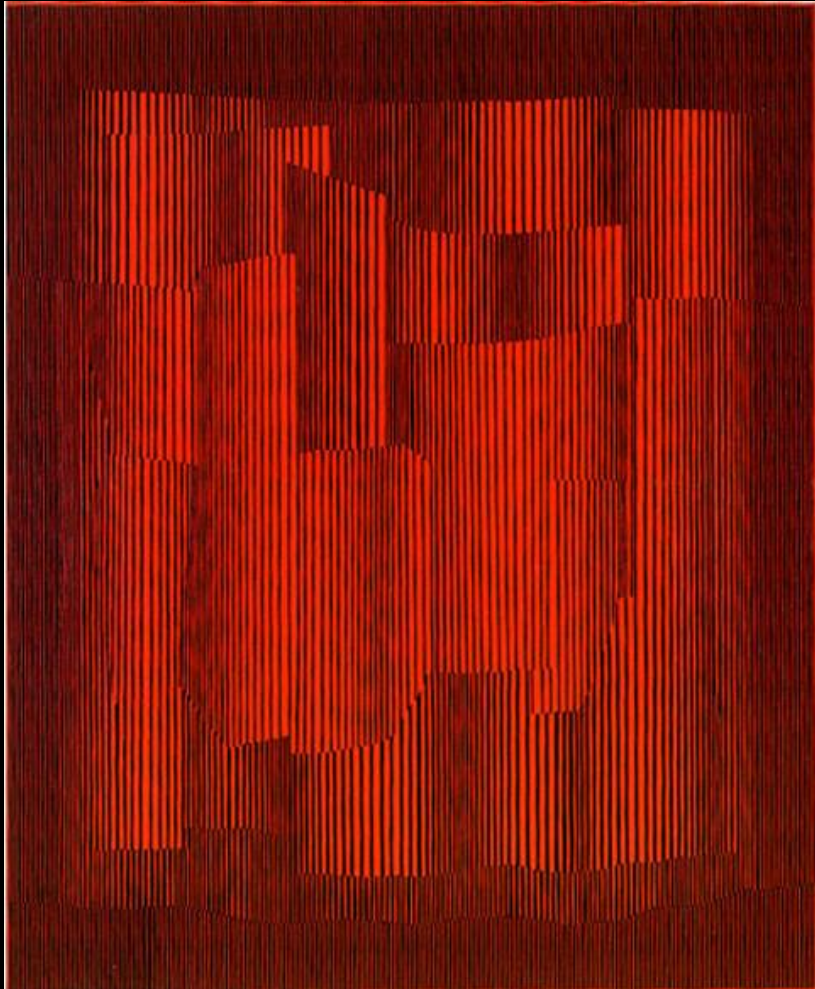


JULIAN STANCZAK





JULIAN STANCZAK



RICHARD ALLEN





## SO WHAT'S IN IT FOR YOU??

- You will each receive a work book that has different kinds of grids and op art designs.
- I will show you how to draw these designs and you will try some of them out on the grids in your workbook.
- After that you will choose one idea and recreate it on a bigger sheet of paper.
  - You will use sharpie for one of your colors. The other color can either be the white of your paper or you can use one colored pencil.
- After it's all said and done you will have a super cool original op art piece that will make other people say **WOW THAT'S CRAY!**