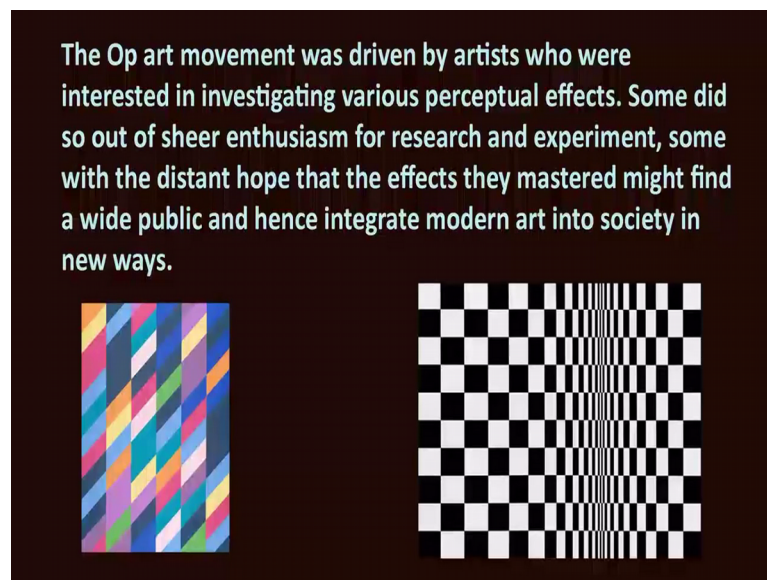


Introducing Modern Western Art : Movements and Artists
Prof. Soumik Nandy Majumdar
Department of History of Art, Kala Bhavana, Santiniketan Visva-Bharati
Indian Institute of Technology, Kanpur

Lecture - 18
Art & Optical Science: Op Art

Welcome viewers to MOOCs online course on Introduction to Modern Western Art. In this lecture today, we will be looking at Art and Optical Science with specific reference to a very different kind of art movement that took place around 1950s and 60s in Europe and America called Op Art Movement.

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Now op art as a movement was driven by artists who were interested in investigating various perceptual effects. And it is in this connection that they were looking at the recent developments in optical science and the science of perception, and they were also looking at how our brain, our perception is continuously kind of misguided and misled by the various operational factors. And they were also trying to find out whether it was possible to address these issues of optical science in their own art.

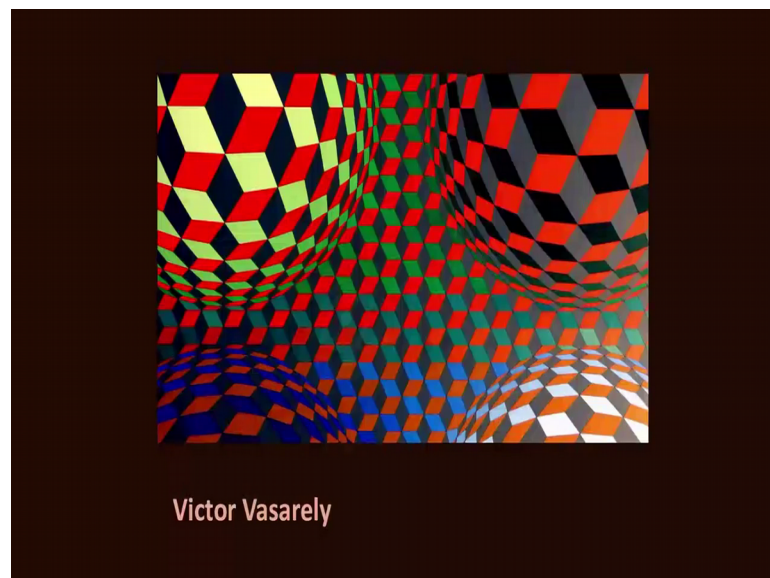
So, some of these artists they did it out of sheer enthusiasm for research and experiment, because op art movement gave birth to a number of art works which were basically experimental in nature. In the sense that because it is once again absolutely abstract and non referential in nature, because it was based on purely non representational elements

like lines, shapes and very certain movements of lines, and patterns so on and so forth.

Hence an artist working along the ideas of op art had to experiment a lot and go through a rigorous process before arriving at a satisfying work or art. Now there were also artists who got engaged with op art movement, but it is not hope that the effects they mastered might find a wide public acceptance, and hence integrate modern art into society in new ways.

So, that was the one of the hopes on part of these artists, because op art when you look at examples for example, like this.

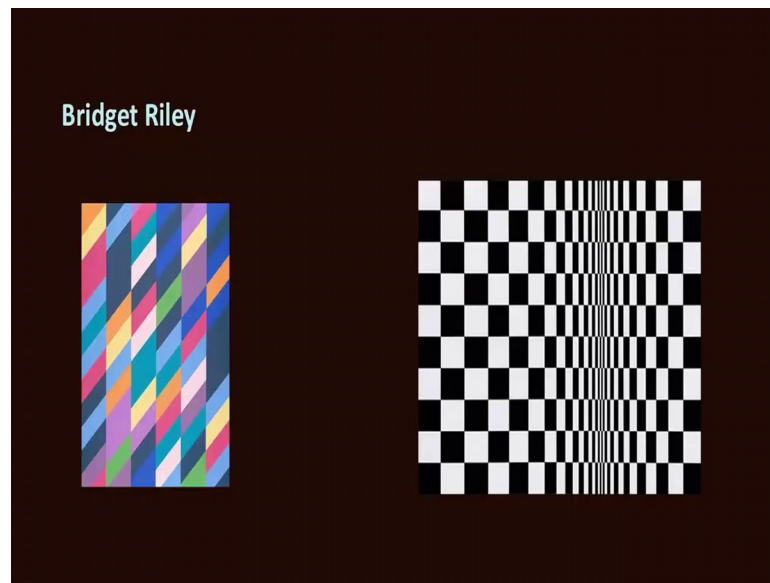
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An example of an op art painting by one of the pioneers of this movement called Victor Vasarely. Now Victor Vasarely was doing this kind of painting and many others basically addressing the perceptual effects optical effects of visual movements or visual patterns on our eyes on our perception and this is something that anybody could understand, this is something that anybody could actually appreciate, because these paintings do not have a major conceptual or philosophical content or bearing.

These paintings in order to appreciate these paintings, you really do not need a philosophical knowledge about these paintings. What you need to do it simply engage with what you see that is optical illusions happening continuously on the canvas on the surface painted surface that you are looking at.

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Victor Vasarely then followed by Bridget Riley. Another extremely sincere engaged artist belonging to the op art movement, and both of them and many others they kept on producing some mind boggling paintings, which represent the op art movement now op art paintings.

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However, the style we now know as Op emerged from the work of Victor Vasarely, who first explored unusual perceptual effects in some designs from the 1930s. It was given a further boost by the group show *Le Mouvement* at Galerie Denise Rene in Paris in 1955, and later by a series of international exhibitions exploring what was known for a time as the "New Tendency."

Vasarely's work soon attracted followers across the world: Bridget Riley, who, like Vasarely, had worked in advertising, took up the style (soon achieving even more prominence than Vasarely) and many South American artists, mainly residing in Paris, also worked in an Op mode.

When you go through the examples one after the other can we see as an extension of abstract painting. As I have already mentioned because they are also altogether non representational and non referential without having anything to do with the real objective

experiential world. But on the other hand they cannot be simply seen as an extension of abstract painting mainly because they addressed some things that originally belong to the realm of science optical science, not to the realm of the language of art, not to the realm of the philosophical quest through abstract art. As we have seen that in abstract expressionist movement or as we have seen previously including into the start movements.

However, this time we now know as op or as op art style emerged from the work of Victor Vasarely, who first explored unusual perceptual effects in some designs from the 1930s onwards. It was given a further boost by the group show at le mouvement at Gallerie Deniserene in Paris in 1955 and later by a series of international exhibitions exploring what was known for the time as the new tendency. So, the term op art came into being slightly later.

Initially it was seen as the new tendency in painting and also in sculpture to a small extent, where the artists were primarily trying to create extremely complex and difficult optical illusions and optical effects through their work of art and that was their objective that was their motto that was what they were trying to achieve. Vasarely work soon attracted followers across the world, and now you have Bridget riley whose works we just saw who like Vasarely had already worked in advertising and took up the style and soon achieving even more prominent than Vasarely and many South American artists mainly residing in Paris also worked in an op mode.

So, op was a movement certainly, but it was also a tendency, it was also a mode of painting that caught the imagination of many artists across the continent, many artists across United States of America in 1950s in 1960s.

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The pinnacle of the movement's success was 1965, when the Museum of Modern Art embraced the style with the exhibition *The Responsive Eye*, which showcased 123 paintings and sculptures by artists such as Victor Vasarely, Bridget Riley, Frank Stella, Carlos Cruz-Diez, Jesus Rafael Soto, and Josef Albers. Many museum attendees were intrigued by the collision of art and optical science.

However, Op art movement faced serious criticism regarding their plausibility as serious art. Many critics considered this trend as merely optical and nothing conceptual or philosophical in content.

In fact, the pinnacle of the movement success was in 1965, when the museum of modern art embraced the style with the exhibition called the responsive eye. Which showcased 123 paintings and sculptures by artists such as Victor Vasarely, Bridget Riley; Frank Stella, Carlos Cruz-Diez, Jesus, Rafael Soto, Josef Albers and many others. Many museum attendees were intrigued by the collision of art and optical sights. So, it was a collision it was a new kind of amalgamation of the theories of optical science with art. So, art was basically making those optical signs theories manifest in a variety of ways, and it was also in the sense very engaging for the viewers because what they were looking at once again was not a story, not a narrative, not a description, but a happening as it was taking place right in front of you on the canvas that you were looking at.

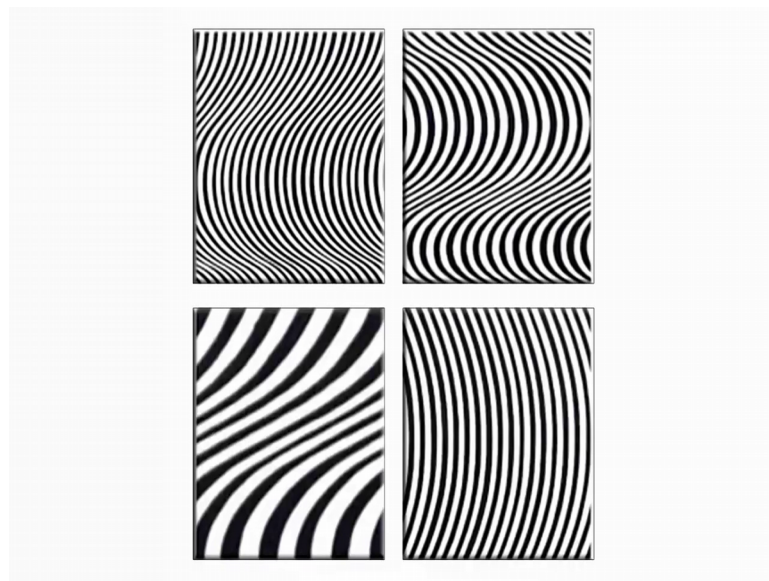
However op art movement faced serious criticism as well regarding their plausibility as a serious art, because op art did not have any deep profound conceptual content or idea and that is why some of the art critics thought it was a passing phase, it was a shallow kind of art movement. But really speaking and before we get into this criticism we must also admit, the fact that these artists belonging to the op art movement had put tremendous efforts, and a huge amount of intelligence mind, time and also they put new ideas which were significant or relevant not only to the op art movement only, but it definitely and it did leave a great impact on the succeeding developments in art.

When we look at contemporary art scenario today of course, there is nothing called op

art as such today, but we do come across several such tendencies happening right now across the world where op art mode has been adopted or incorporated to express may be something different. However, op art movement faced serious criticism regarding their plausibility as serious art, but many critics considered this trend as merely optical and nothing conceptual or philosophical in content, but that did not discourage these movements or the artists belong into this movement at all.

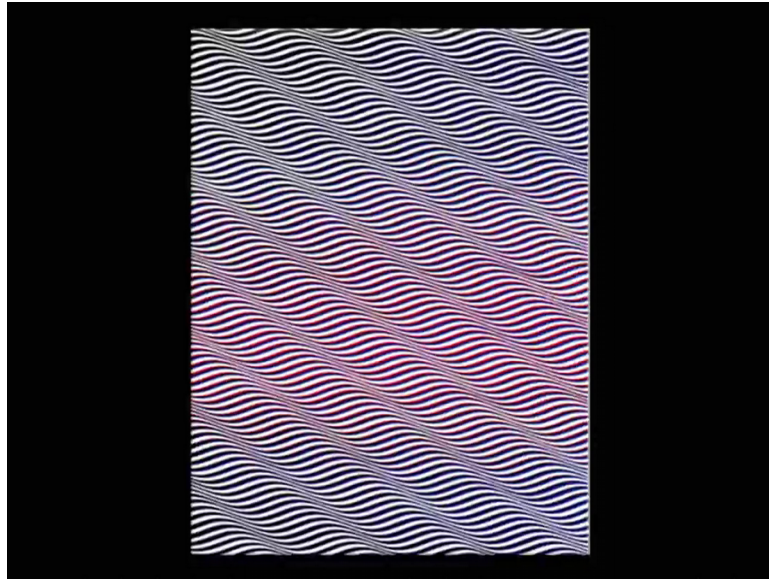
They carried on with their experiments.

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Now, maybe there is a monotony, when you look at several examples of op art, but it is a very interesting also to take note of the slight variations and the differences that these op artists were trying to create in each and every work through different movements in the patterns different directions in the lines and of course, the optical effects the intended optical effects in this paintings are often very different from one another.

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Now op art also has this expectation let us say. From the viewers that viewers need to tune their eyes and mind in a certain way to let the perceptual effect, leave some impact on your mind. So, op art demands are certain engagement on part of the viewers, it is not simply just to be looked at, but one has to be very keen on the affects each and every op art painting is trying to create on your eye one has to discover that.

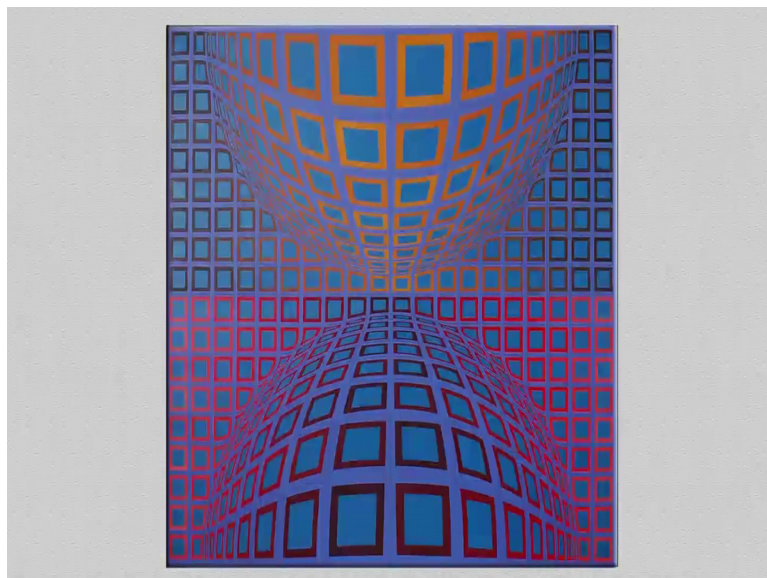
So, when you look at a painting like this by Bridget Riley, and when you see this very very subdued shuttle waves running across the painting and creating certain sensations on your eyes, you know that what you are looking at is a flat piece of canvas, but the effect is unfolding as it were in time. So, this is an illusion an optical illusion that is being generated through a certain arrangement of paint patterns and directions on the canvas.

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So, definitely these are discoveries coming up from optical science researchers, but look at the wonderful ways in which artists like Vasarely and Bridget Riley, are utilizing these discoveries of optical science in different ways.

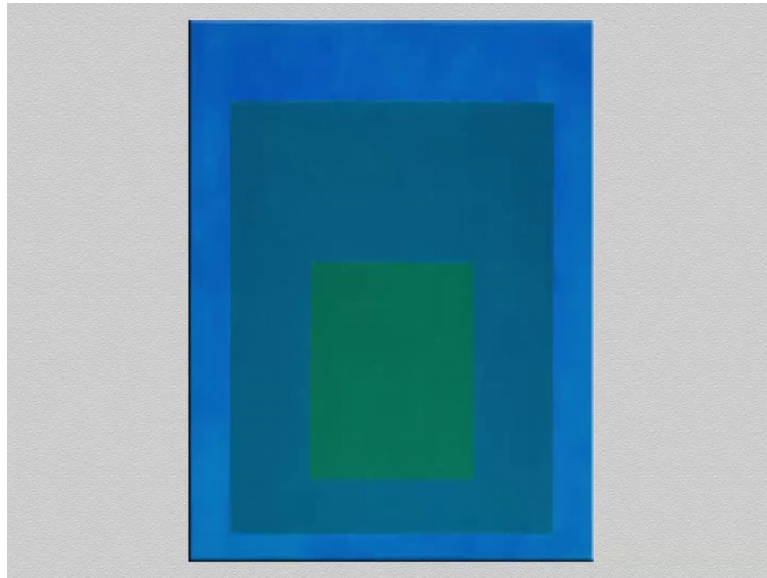
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Then look at this painting by Victor Vasarely, again it is an affect of optical science or a perceptual kind of game that is played upon our brain, while looking at this canvas. So, this illusion of spear that you get in this painting is a complete illusion, it is something that is not actually true after all the canvas is flat dead flat, but by applying certain

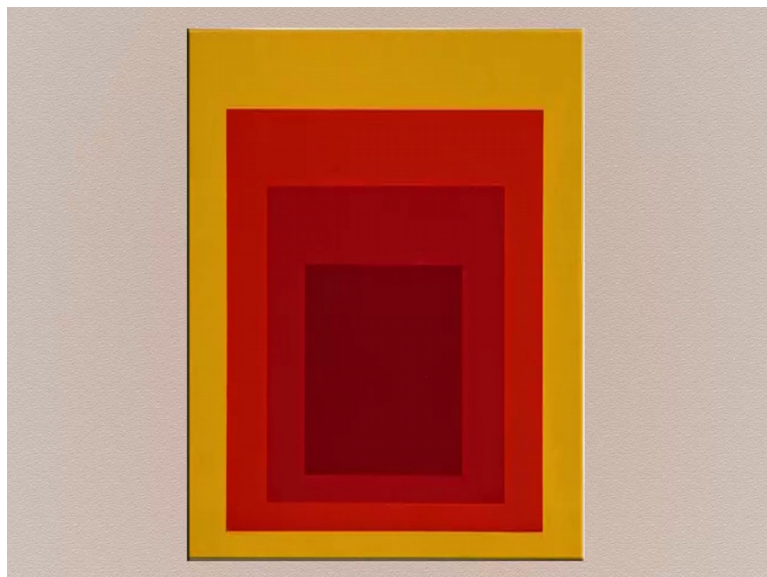
perceptual patterns and ideas, and certain kind of arrangements. Victor Vasarely is able to create certain illusion which is actually not so much a pictorial illusion which was invented during the renaissance time, but it has got more to do with the optical illusion in connection to the discoveries of optical science.

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Then somewhat you like Josef Albers who would go own years up to years researching on the relationships between various shades of almost the same colour, various stones of the same colour, but in terms of squares and rectangles.

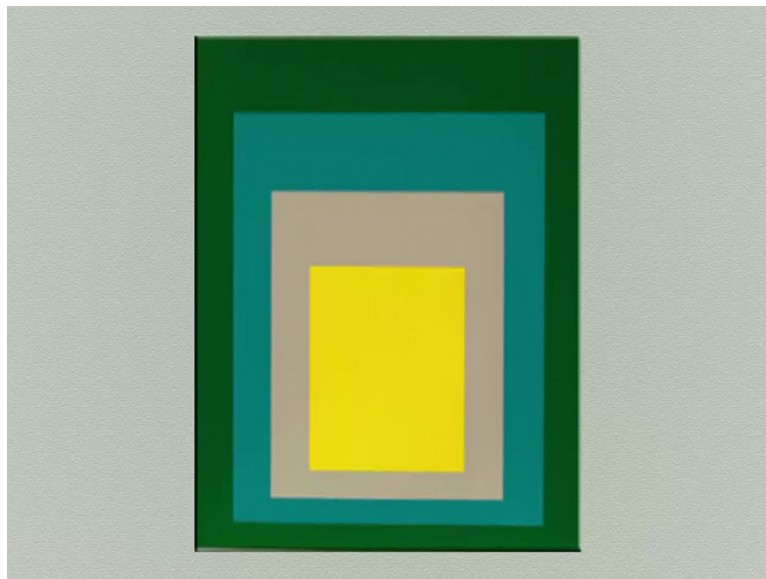
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So, though in his paintings Josef Albers do not apply any kind of colour perspective or even linear perspective, but once again he is playing with the possibilities of optical illusion that when you paint these squares using certain traditions of tones of almost the same colour of similar colour, you do not create literally the depth in the canvas, but the curtain recession of space is created on our mind. Our brain thinks to read the differences in the tones in terms of distance, though it is not intended by the painter.

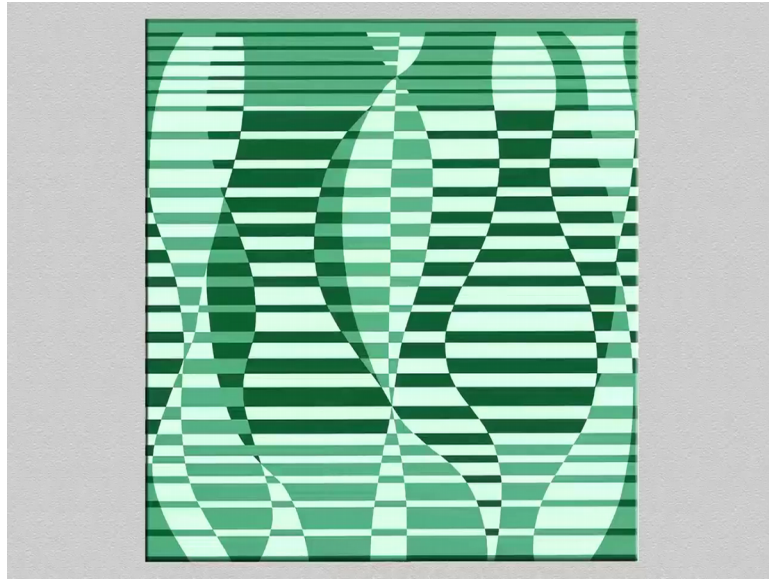
So, Josef Albers in fact, as the whole series of paintings done in 1960s and you call them homage to the square. Taking up a single motive like very very simple motive like square, he does paintings after paintings addressing the very existence of square and the magic these squares in different tones can play on our brain.

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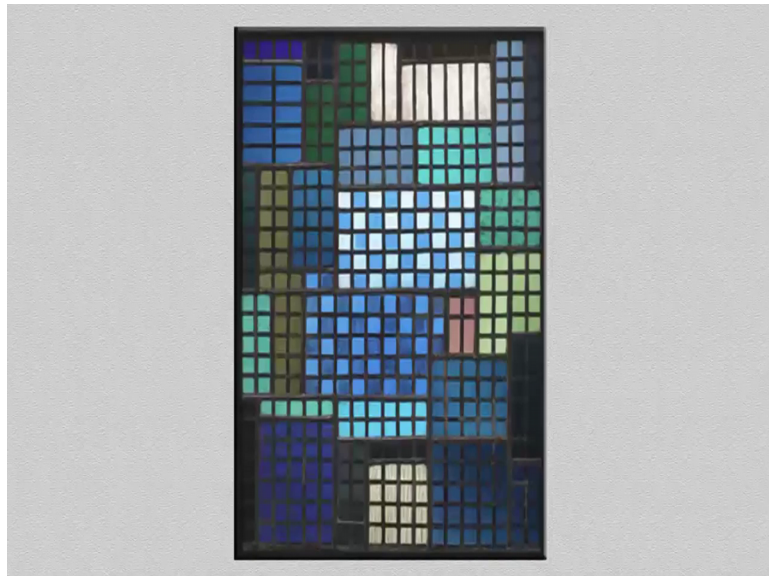
One more painting by Josef Albers here of course, the squares have different colours, but again the colours have been chosen very carefully, the colour have been juxtapose also very carefully. So, as to create an exceptional kind of space a special experience only through squares and its colours with and otherwise a very minimalist approach, with no other association with no other fringe.

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This is one more work by Josef Albers having a slightly different take because here he is not working with squares, he is working with horizontal lines with slight shifts in the positions and definitely with varying degrees of tones and shapes of the same colour. And the affected is for us to see what is happening after this kind of application.

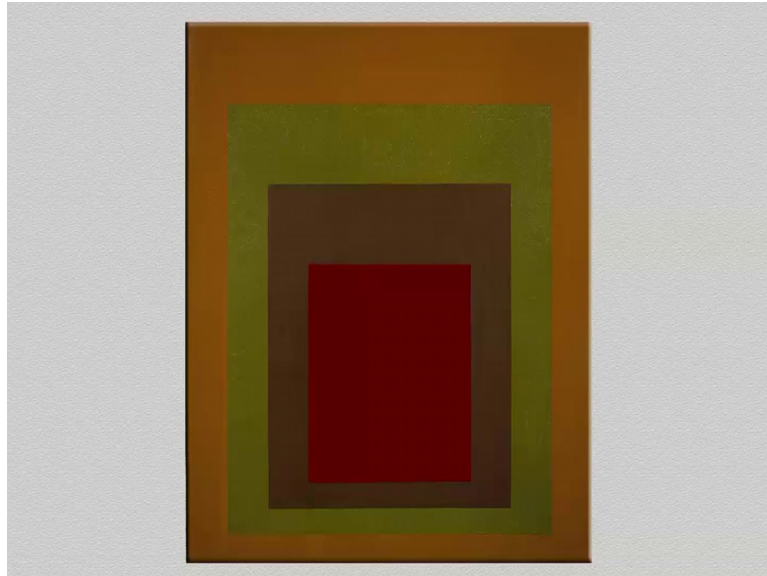
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Josef Albers called this painting park painted in 1924, to what extent this painting has a relationship with the experience of the real part in our neighborhood it is not very clear, it is possible of course, that a park or looking at a park from a top floor might have

triggered off a pictorial idea that Albers gradually transformed into this particular pictorially image.

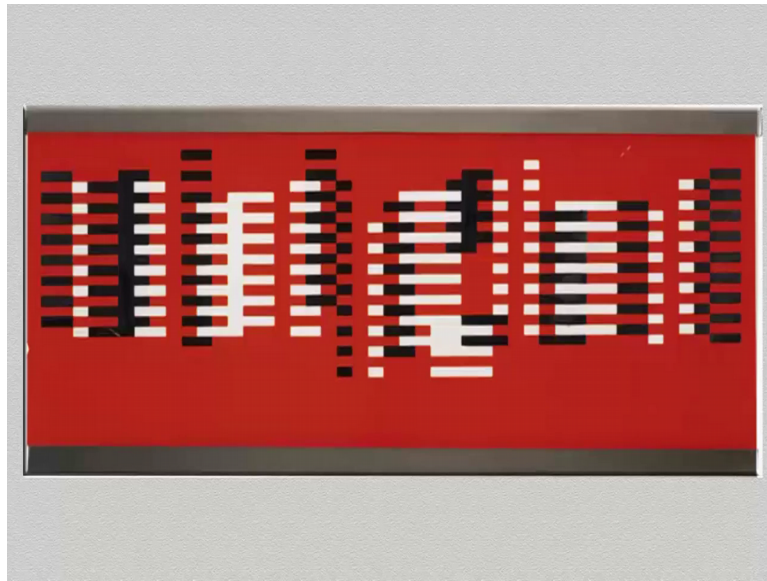
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One more example from the homage to the square series by Josef Albers, so, when you look at many such examples from this series called the homage to the square by Josef Albers. In the first claims the painting may appear to be the same composition, but with slightly different colours, but then one has to be very sensitive and responsive to the changes in the colours and the tones, because despite the fact that the scale size and shape of the squares remain almost the same in each and every painting.

Because of the changes in the tones and changes in the colours that affect between the squares and the affects of the jester position of the squares on our mind, keeps changing drastically from one painting. In other in order to understand this you just need to give time to be paintings keep looking at them and find out yourself; that why it is not exactly the same painting, why they are to be treated as painting with slightly different impact on our optical perception.

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One more painting by Albers which he calls class, now this is a sculpture.

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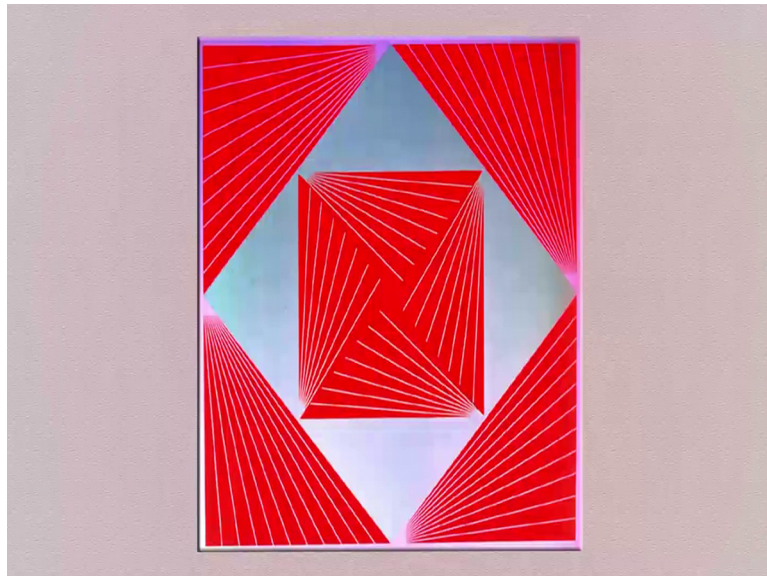
Interestingly a sculpture which is a flat sculpture, but creates a huge amount of illusion of depth and real space, and the illusion of solidity volume. So, this is one example which goes to show and suggests that op art was not confined to painting, only there were sculptures who were also making sculptures with a similar idea of creating optical illusion following the laws and discoveries of optical science and its perceptual affects on our mind and brain. And interestingly this is by the same painter victor pasarely.

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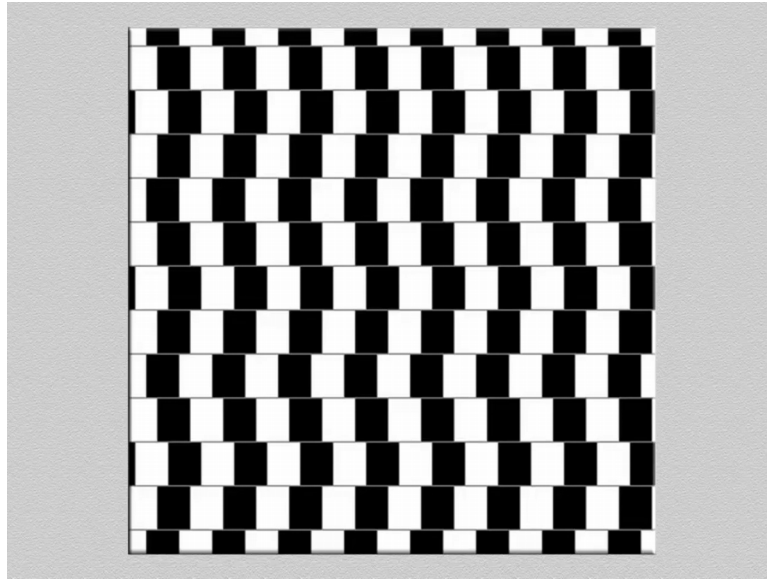
Now, op art got extended, I mean op art did not end with the end of the movement itself. It is true that till today as I have already mentioned you see extensions of op art, redefinitions of op art happening even amongst the young generation of artists, and there are quite a few artists across the world who are reclaiming the position of op art.

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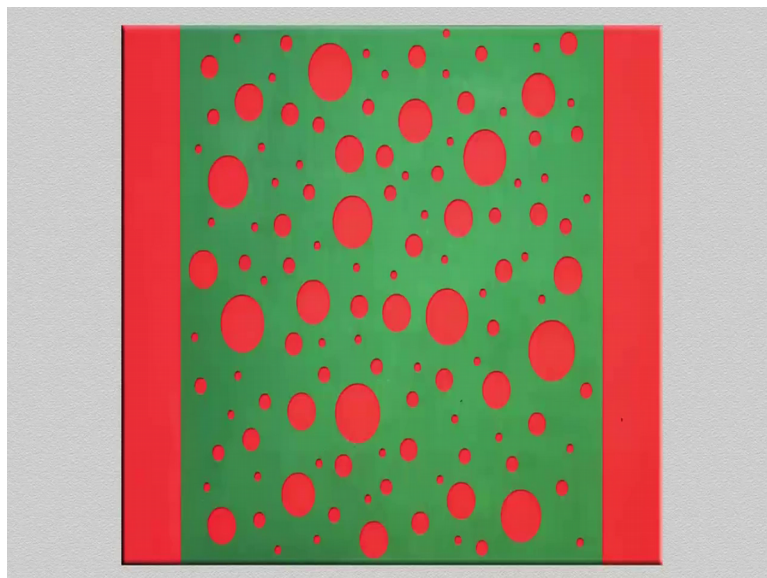
Op art can be seen applied or the trends of op art can be seen applied to commercial art, to publicity art, interior decor and many other such spaces where this kind of optical impact has a great presence in a public space.

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These are the patterns that we might have come across in our science books, but at the same time it is true this is the kind of imagery, that many of the artists belonging to the op art movement were trying to create.

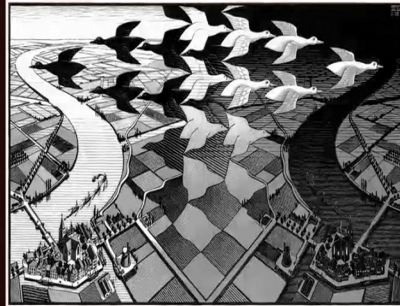
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Now, we have one interesting example.

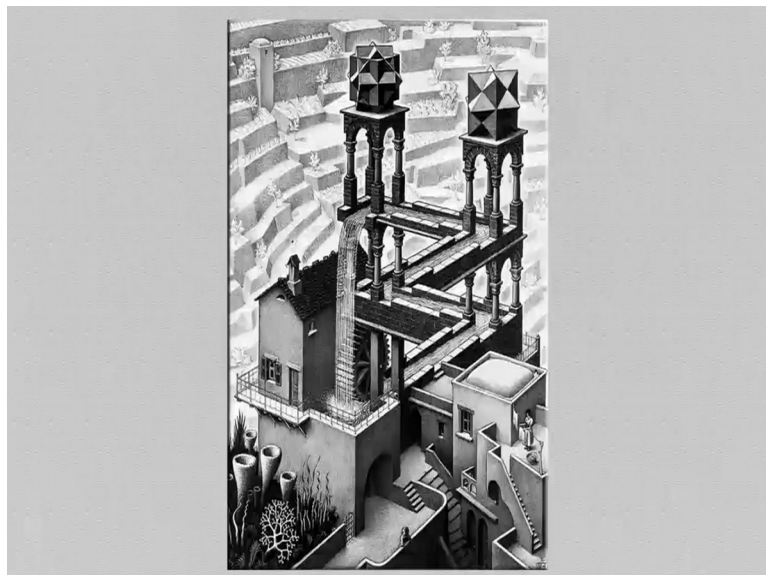
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Dutch artist M. C. Escher (1898 - 1972) carried on with the experiments of optical art and took it to an extraordinary innovative level. He created impossible constructions in his drawings, creating illusions impossible to avoid.



A very exceptional I would say example of an artist called a Dutch artist M.C Escher who lived once again because he was born in 1890 or 8. So, he is a twentieth century artist who carried on with the experiments of optical art and took it to an extraordinary innovative level by infusing recognizable elements representational elements in his drawings paintings and graphic prints.

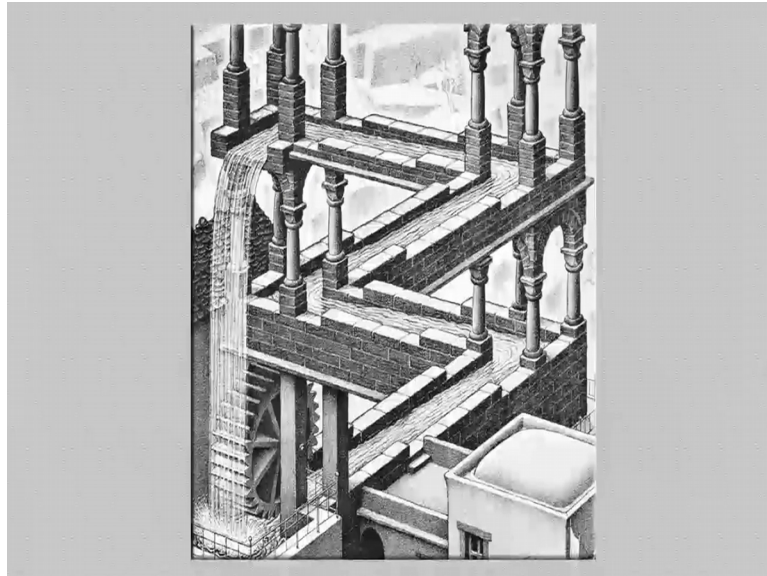
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Now, in that sense he is very different because op art is belonging to the op art movement, where strictly confined to abstract patterns, but Escher on the other hand is

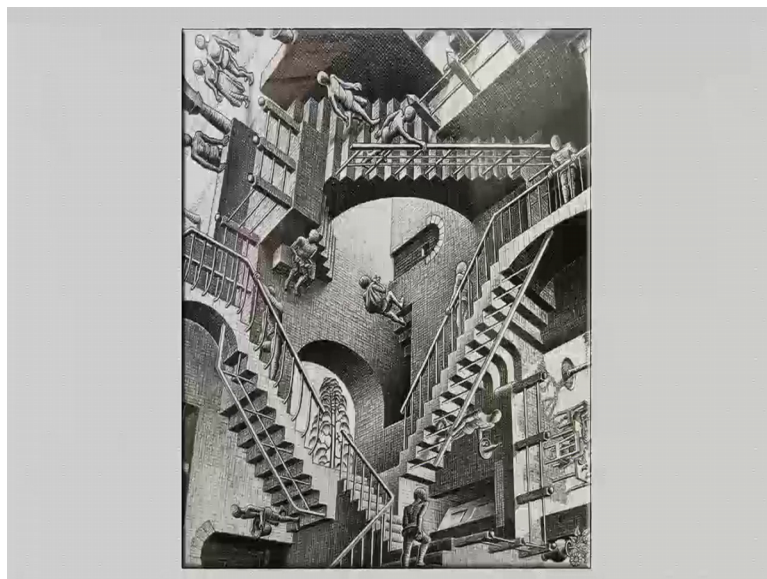
making very representational works, where each and every object can be easily recognizable.

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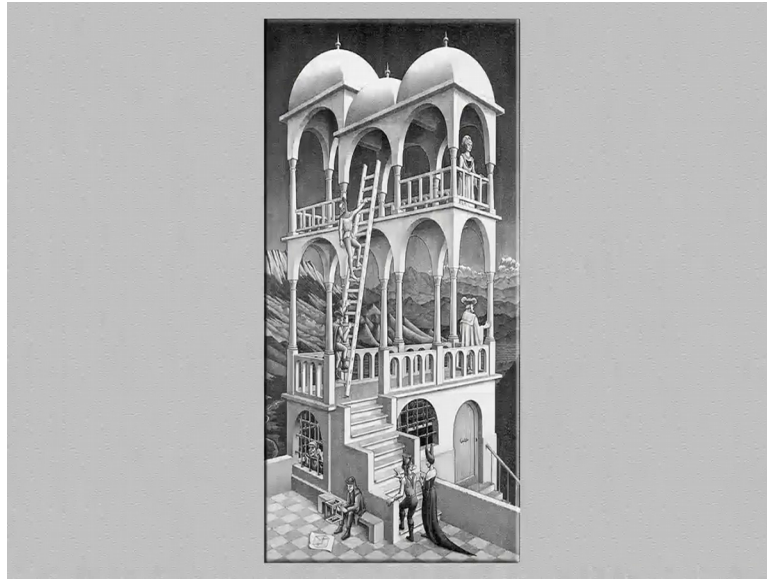
But what is very difficult to fathom and accept in his works is the kind of difficulty, the kind of impossibility that he is creating by using once again the parent paradoxes of optical art the paradoxes of optical science.

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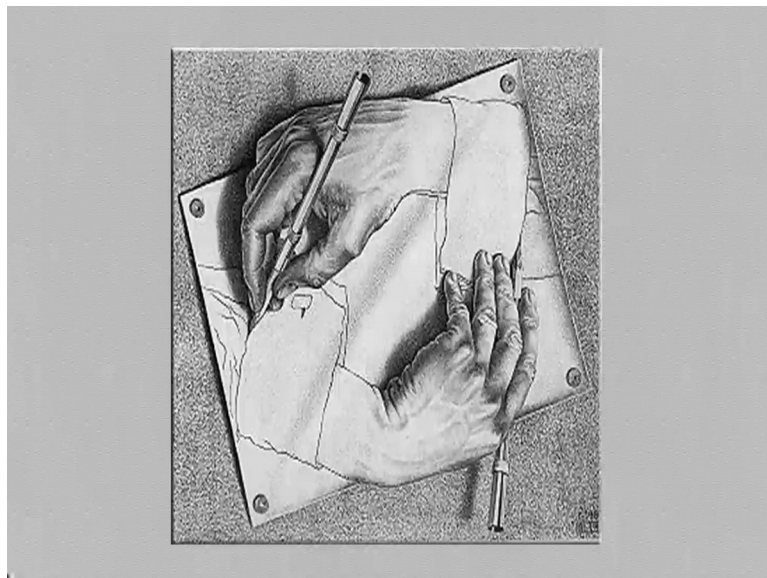
So, Escher keeps on creating extremely difficult and impossible constructions like this. In terms of a picture making it is logically possible, but because it is representational art.

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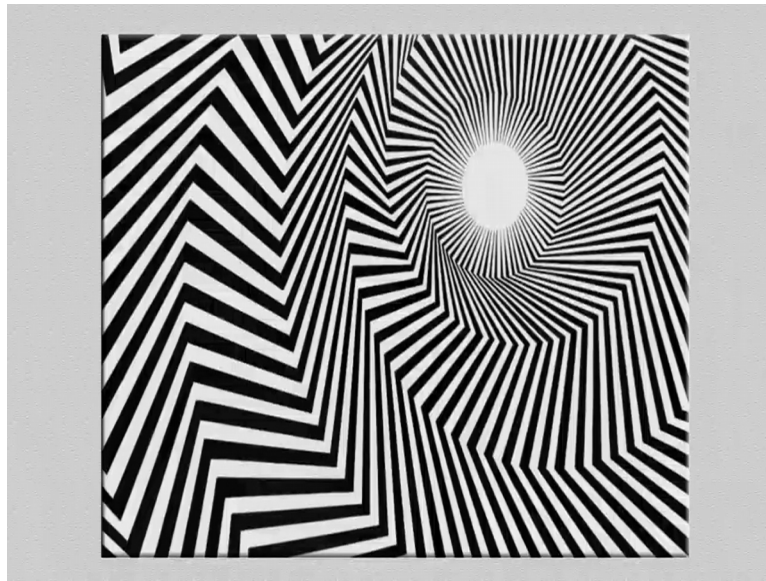
When you apply these visions to the real world, you know that it is impossible. It is impossible to accent and decent at the same time.

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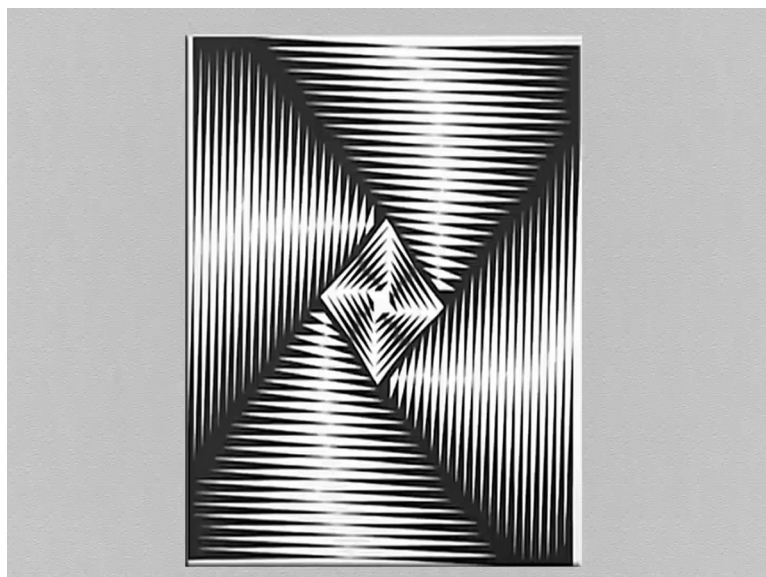
It is impossible to draw your hand with the same hand that is holding the pencil, to draw the hand again.

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So, there is a kind of vicious cycle that he creates in terms of perception and he is extremely intelligent person who has been kind of rare example, who has applied the paradoxes of op art on to representational compositions like this; but then as I have said today after that movement of op art, paintings and sculptures with a similar tendency has never stopped.

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Even today you can find an umpteen number of works in painting a sculpture more or less following the same logic of optical illusion and perceptual absurdities or difficulties,

that our brain and eye confront almost every other thing.

Thank you.