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Rochester Institute of Technology

A Thesis Submitted to the Faculty of
The College of Imaging Arts and Sciences
In Candidacy for the Degree of
Masters of Fine Arts

Hidden Structure Revealed

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Hidden Cubes Revealed

Abstract

This MFA Thesis is based on the aesthetic philosophy that all forms and structures are essentially made from cubes. This premise has inspired and shaped my explorations over the last two years of graduate study.

Shape and meaning of ‘cubes’ can be simplified to the smallest molecular units of objects. The geometric forms I construct reflect this. I have mostly created vessel-oriented forms, but now I find that I can also make sculptures that reflect the same point of view.

The shape of the earth is a theme and inspiration for this thesis project. Craters, which show their inner side, are expressive. Landscapes, which are usually more organic than geometric or symmetric, correlated to the outer shape of my work. This outer shape contains craters. The geometry expressed inside the craters contrasts with the spontaneity of the outside shape. The use of contrasting colors is also an important factor in my work. An example is the use of gold on the geometric surface because of its metaphorical meaning of preciousness.

In terms of material and technique, I’d like to keep every possibility open, from cone 10 to cold finishing, from slip casting to hand building and wheel throwing. That way, the fabrication of each individual piece is based on its essential characteristics. This concept will also add visual variety across the entire collection of work.

Hidden Structure Revealed

Introduction

This thesis focuses on showing the hidden structure of objects expressed in a repetitive geometric manner. For me, geometric structures underlie our world, these include all organic and inorganic matter.

My interest in expressing the structure of objects goes back to the time when I was pursuing my first master's degree in ceramics at Seoul National University in Korea. At that time I was interested in analyzing the structure of objects. Having been influenced by the Great Wall in China and the Pyramids in Egypt that were built by bricking, I assumed that everything could be divided into collective cubes. I was a vessel maker, and with this premise naturally I started to build vessels made out of cubes. I was building them exclusively by slip casting, pursuing whiteness for the best effect of highlight and shadow.

My current thesis body of work at the School for American Crafts, Rochester Institute of Technology started with a strong connection and relationship with my previous work. New challenges and focuses, however, included the introduction of spontaneity to my work, the use of contrasting colors, and the conceptual development of my primary idea.

In the beginning of my school year here at RIT, I was making vessels made out of a collection of cubes in different building methodologies and different colors. I worked with the

vessel format because vessels have interior space which is less visible than the exterior space. I was assuming that the less visible(or invisible) interior was the space where the invisible structure is hidden. Soon I was observing the birth process and shapes of craters, and my interested moved toward the shape of craters. I started to make vessel-oriented sculptures that have craters on them, and for me the craters were the spaces to express the hidden structure. My definition of an object with craters expanded throughout my exploration, initially focusing on volcanoes, to landscapes, to meteorites, and, finally, the crescent moon. Apart from the diverse symbolic meanings of the crescent in different cultures, the formation and shape of the crescent were an ideal vehicle for the expression of my aesthetics. The resulting work deals with negative space, silhouette, and volume as major themes, resulting in the creation of pure sculpture.

Hidden Structure Revealed

Historical and Contemporary Influences

-Science in Art-

Reality is more than the thing itself. I look always for its super reality. Reality lies in how you see things. Pablo Picasso

I uncover and express the essence of objects. As mentioned in the Introduction Chapter, my perception of the world was shaped by my life in a big city. My aesthetic viewpoint that all objects can be divided into repetitive geometric modules started with observation of the Great Wall in China and the Pyramids in Egypt. These two structures are some of the oldest examples in the history of architecture. They were constructed by bricking, which is also one of the oldest and most universal building method in architecture and which has been used for thousands of years throughout civilizations. The Pyramids of Egypt (Figure #1) and the Great Wall of China (Figure #2) are especially interesting for the purposes of this thesis project because the relief on the outside of the structure goes beyond mere surface decoration: it also is a straightforward revelation of the inner structure. If we observe the top of a wall constructed by bricking, we can easily see from the outside that the bricks are the modules of the wall.

I imagined that a brick could be a basic unit to construct an infinite number of shapes. I simplified the shape of a brick, generally a rectangular prism, into the shape of a cube. If the size of the cubes is small enough, any shape could be formed by stacking and spreading them like

Lego blocks. Paul Cezanne wrote in his famous letter of 1904 to “see nature as cylinder, sphere and cone.”¹ I assume that everything is made out of repetitive geometric units, and thus everything could be divided into those same units. To me it is the *super reality* of an object that is invisibly hidden. This realization formed the basis for my personal aesthetic and is not a scientific theory. My personal aesthetic is based loosely on ‘fractal theory’ outlined in the coming pages.

The name ‘fractal’ comes from the Latin adjective *fractus*. The corresponding Latin verb *frangere* means ‘to break’ to create irregular fragments.² A fractal is a geometrical figure in which an identical motif repeats itself on an ever diminishing scale.³ A well-known example of this theory is what is called the Sierpinski Triangle (Figures #3 and #4). To make a fractal from a triangle, draw lines connecting the midpoint of the sides, and cut out the center triangle. Take the result and do it again, and again, forever iterate. Then a fractal looks the same over all ranges of scale. This is called ‘self-similarity.’⁴ The essential property of a fractal is indefinitely continuing self-similarity. Fractal dimension is just a by-product.⁵

This mathematical theory supports my aesthetics to a certain extent because I also try to analyze the world and perceive it as a collection of repetitive units. This cold-mathematical theory, combined with my hard-edge aesthetics, became an axis supporting my imagination and work process intellectually.

George Seurat (1859-1891) is a good example of an artist who used analytic and calculative methodology as a means of creative activity. Unlike other Impressionists, he thought only of method based on mathematical and physical laws. The importance of Seurat in the

history of taste is due to his conviction that the origin of art is in the laws of science.⁶ He had rules for everything. His mental calculation of color harmony was so precise that he thought he could avoid the changes in the perception of color caused by artificial light. This ability has been admired as a sign of intellectual force; to us it seems rather a sign of fatal alienation from artistic feeling.⁷ If we understand his ‘scientific’ aesthetic, however, we can see that his theory is more subjective than objective.

Art is harmony. Harmony is the analogy of opposites, the analogy of things that resemble each other, of *tone*, of *color*, of *line*, considered in terms of the dominant and under the influence of light in combinations that are gay, calm, or sad...

Gaiety of *tone* is the luminous dominant; of *color*, the warm dominant; of *line*, the line above the horizon. Calmness of *tone* is the equality of dark and light; of *color*, equally of warm and cold; and for line, the horizontal. Sadness of tone is the dark dominant; of *color*, the cold dominant; and of *line*, lines which slant downward.⁸

It is easy to show that such a theory belongs to the domain of imagination rather than to that of thought, that is, it is... a preference of taste that can be judged only in relation to the artistic result. Harmony varies according to the fancy of the artist. A color and a line by themselves never correspond to a taste of mind that is fixed for all eternity; for their significance they depend not only on the individual but also on the fleeting moment in which the individual creates them. Their only universal character is that of being art. Therefore, if we consider the elementary and ingenuous nature of his theory, we begin to suspect that Seurat’s insistence on his method on his science was nothing but an illusion, a need to find an intellectual basis for his

work. And it need scarcely be added that such a basis could not exist or existed only at the moment of creation.⁹

In my opinion as an artist, seeing the countless dots he used to express the components of light, it seems that Seurat was depending on his own theory (which he deemed scientific) to justify and maximize his obsessive methodology. In other words, his theory triggered his obsession. Seurat used his own methodology to found the artistic movement of pointillism (Figure #5), proving that the true science behind the artist's method should not be a criteria for judging artwork. My theory is an intellectual and logical axis that brings balance among spontaneity, intuitiveness and premeditation that I am pursuing at the same time.

Similar mathematical and scientific approaches used by pointillists can also be found in the visual vocabulary of the movement Op Art.¹⁰ Vasarely started working in abstract Op Art between 1931 and 1938, then again after 1951 (Figure #6). The Venezuelan Soto (born in 1923) also developed Op paintings from the early 1950s. The *Groupe de Recherche d'Art Visuele* which included Le Parc and Morellet, was founded in Paris in 1960. In England, stimulated by the ideas of Harry Thubron in Leeds, interested in optical experiment spread significantly in the 1960s, and by this time the work of Peter Sedgley, Jeffrey Steele, and Bridget Riley (Figure #8) was becoming well known.¹¹

Op Art is a method of painting concerning the interaction between illusion and picture plane, between understanding and seeing.¹² Op artists pursued visual illusion created by use of repetitive geometric patterns, symmetry, and multiple grouping of units. In terms of the methodology, it is likely that the very essence of the form of visual expression seems to be paralleled also in mathematics. Perhaps Op Art is really a form of mathematics. We can,

therefore, be excused for questioning the validity of this form of artistic expression which could probably be produced by the machine operator just as easily as the artist- an arguable but valid point.¹³

This debate is perhaps the essential question that surrounds artworks created by such hard-edged aesthetics. Regardless of whether an artwork is created by an artist or a scientific model, it should be judged on the imagination of the artistic technique. While Op artists used mathematical theory as a means of their expression, the subject matter and resulting artwork were impacted by the artistic filters of the artist. As Cyril Barrett wrote, “The Elements in a work of Optical art, whether they be squares, lines, wire rods or neon tubes, are relatively unimportant. They have been described as ‘anonymous’. It is their very anonymity which produces the optical effect. The Optical artist is not primarily concerned with the relationship between elements: he does not build up a composition of which they are the stable components. If he did that it would be a very uninteresting composition indeed; little better than a chequered tablecloth. What he is interested in is the changing relations which occur between the elements and the ephemeral images they produce.”¹⁴

Artists who worked in Geometric abstraction¹⁵ also achieved their goals through the use of repetition and geometry as the essential factors of their paintings. Among the terms which Alfred H. Barr suggested ‘classical,’ ‘intellectual,’ ‘structural,’ ‘geometric’ has become by far the most common adjective in referring to this strain of modern abstraction. As with most art historical labels, however, it tends to isolate something out of a larger context, setting it in relief in a way that is perhaps unnatural. Geometry is seldom, if ever, the subject of painting but rather a means to a variety of ends.¹⁶

Piet Mondrian created his work by reducing the entire visual statement of the picture as well as its spiritual dignity to purely formal elements.¹⁷ During the 1920s and 1930s, he created grid-based paintings (Figure #7). While his premise and theory are based on logic, they represent his own personal approach to expressing nature. He said,

For me, the plastic relation is more alive precisely when it is not enveloped in the natural, but shows itself in the flat and rectilinear. In my opinion, this gives us a far more intense expression than natural form and color. But, to use more general terms, the natural appearance veils the expression of relations. When one wants to express definite relations plastically, one must show them with greater precision than they have in nature.

...Yes, all things are part of a whole. Each part receives its visual value from the whole, and the whole receives its visual value from the parts. Everything is constituted by relation and reciprocity. Color exists only through another color, dimension is defined by another dimension, there is not position except by opposition to another position. This is why I say that relation is the primal thing.

...But in the end, the artist can express the beautiful without referring to nature. When he becomes conscious of the universal, in other words, when individuality has lost its preponderant influence, he can, now that he has achieved greater consciousness, directly express plastic beauty, perfect harmony, in short, that which is the goal of art.¹⁸

According to Mondrian, his mathematical and analytic method is a vehicle for reaching his artistic goal. Michel C. Lacoste writes, “The logic of form is nothing without intuition. In art as in physics, the infallibility of the positive method is subject to caution. Neither reason nor

logic should be banished from art, but at the same time it remains essential to make constant adjustment in the light of irrational.”¹⁹ This means that an equilibrium between logic and illogic, ration and emotion, and premeditation and spontaneity gives artistic vitality to hard-edge artwork that uses cold geometry.

Since the mid 1960s those artists including Sol LeWitt, Donald Judd, Robert Morris and Carl Andre started experimental art named Minimal Art. Artists involved in Minimalism²⁰ showed an extreme use of geometry and deduction of form. Sol LeWitt states, “The most interesting characteristic of the cube is that it is relatively uninteresting... it is best used as a basic unit for any more elaborate function, the grammatical device from which the work may proceed... The form itself is of very limited importance; it becomes the grammar of the total work.”²¹ LeWitt’s works made in the 1960s are simple, as they use a repetitive, rectilinear cubic structure. This artist used universal and predictable vocabulary, but his sculptures are not predictable. The edges of the sculptures imply, for me, that the structures are not just limited as expressed there, but are continuously growing invisibly and endlessly (Figure #9). As Donald Judd said, “It isn’t necessary for a work to have a lot of things to look at, to compare, analyze one by one, to contemplate. The thing as a whole, its qualities as a whole, is what is interesting.”²²

Minimalists exclusively pursued repetitive geometric modules, which do not reflect the personality of the artist. They do not reflect the artist because repetitive geometry is a universal and *anonymous* visual language. In 1966 Darby Bannard pointed out:

As with Pop and Op, the ‘meaning’ of a Minimal work exists outside the work itself. It is part of the nature of these works to act as *trigger* for thoughts and

emotion pre-existing in the viewer and conditioned by the viewer's knowledge of the style in its several forms, as opposed to the more traditional concept of the work of art as a *source* of beauty, noble thought, or whatever. It may be fair to say that these styles have been nourished by the ubiquitous question: "but what does it mean?" These styles are made to be talked about. That is one good reason for their popularity.²³

Michael Craig-Martin explains and characterizes Minimalism as the following:

Minimalism seeks the meaning of art in the immediate and personal experience of the viewer in the presence of a specific work. There is no reference to another previous experience (no representation), no implication of a higher level of experience (no metaphysics), no promise of a deeper intellectual experience (no metaphor). Instead Minimalism presents the viewer with objects of charged neutrality: objects usually rectilinear, employing one or two materials, one or two colours, repeated identical units, factory-made or store-bought; objects that are without any hierarchy of interest, that directly engage and interact with the particular space they occupy; objects that reveal everything about themselves, but little about the artist; objects whose subject is the viewer.²⁴

If it was the intention of the Minimalists to have anonymity and to depend on the meaning of their work based upon the response of the viewers, I respond to them with the terms '*condensed metaphors*.' Metaphor is a term borrowed from the humanities and is created by connotation or relation in context. If an object has an implicational meaning, that object is metaphorical. If that object is abundantly metaphorical, it becomes the object and subject for

expressing and describing human lives. The Minimalists showed that the use of cold and dry rectilinear prisms could create the most metaphorical objects possible. These objects would have as many meanings as the number of viewers (Figure #10).

I believe that using scientific visual vocabulary, manifesting itself in repetitive geometry throughout this thesis project, therefore, could be an ideal methodology for expressing my imagination. To me *hard* and *cold*, usually used for describing geometry, are relative terms. For me, rational and logical visual language becomes *soft* and *warm* when it is combined with irrational and illogical imagination.

Hidden Structure Revealed

The Moon

-The Symbol of Cyclical Phenomenon-

In Korea where I was born and raised, the Moon has a strong symbolic meaning of affluence. The Moon personifies a female, while the Sun personifies a male. The symbolism of the Moon, therefore, is combined with the meaning of woman, birth, water, and plants. The Moon stands for the Goddess controlling the Earth, bearing every organic and inorganic creature. In traditional agricultural societies such as ancient Korea, the first day of the year (January 1) was set to coincide with the full moon. *Chooseok*, August 15th in the lunar calendar, is the Korean Thanksgiving and also the day when the Moon is full. On Chooseok People still pray for abundant harvest as well as for their desire under the moonlight.

As mentioned in the previous chapter, repetition is an important part of my daily life, as it is for most people. Recurrence, routine, cycles, and rituals are universal principles that structure nature and human existence. I find there is a symmetry and geometry in these types of cyclical patterns. My work changed as I was working, and my interest in shape moved from craters (Figure #11) to meteorites (Figure #12), and eventually toward the shape of the Moon (Figure #13). This approach was originally due to the shape of the objects: however, as the shape changed, the metaphorical and mythical meaning of the Moon also shifted into focus. As a Korean artist influenced by Korean tradition and mythologies, the Moon is a mysterious and

metaphorical object. Yeongtaek Park, an art critic and professor, describes the nature of the Moon in the preface of an exhibition:

...so we can say that the night sky is the first canvas of human being and the Moon and stars are the origin of all images. Seeing the surface on the Moon people created myths and legends. So were painting and literature created...People dreamed of overcoming gravity and of flying to the sky seeing the Moon. Without the Moon we must have lost all our dreams.²⁵

For all ages and all cultures, the sight of the full Moon rising, ablaze in the dark night sky, has been a captivating vision.²⁶ In Jules Cashford's book, *The Moon: Myth and Image*, she explains the meaning of the Moon from a humanistic point of view:

Perpetually moving- from crescent to full to crescent to dark to crescent- the Moon tells one fundamental story: birth, growth, fullness, decay, death and rebirth. It is the story of transformation. Like human beings, the Moon is born out of the dark and grows to the peak of its powers when, unaccountably, like them, it begins to wither and decay- to 'fall away', as the Bushmen say- until it dies, vanishing back into the darkness from whence it came. For three nights the Moon is dead and the sky is black. But on the third day the Moon comes back to life; it rises again: it is a 'New Moon'.

Death was not the end for the Moon; it was a prelude to a new beginning that would end in a new death, in an ever-recurring sequence which began again each time at the beginning. Gradually, this rhythm of births and deaths becomes predictable and an image forms of a cycle which stays in the mind as memory. For

the cycle, as the invisible totality, can never be seen in any one moment, so it has to be held in the mind as an image of the whole. All that can be seen are the moving phases, following night after night an unerring pattern. Eventually, early people must have come to see and interpret every part of the cycle from the perspective of the whole.

...So the Moon's story of birth, death, and rebirth becomes, in its perpetual repetition, the story of time which is lived by human beings on Earth. The Moon's story is then (at the same time) a human story, a story of human consciousness.²⁷

The cyclical phenomenon of the Moon parallels my perception of the world, a repetitive world perfectly. The phases of the moon imply the myth of reincarnation, a myth used throughout history and across regions to explain repetitive circles of life. The Moon itself is the object that represents recurrence, routine and the rituals that structure nature and human existence. The Moon has been the source of mythology, religion, literature, and art, and to me it is still a magnificently artistic object veiled by mysteries from time immortal.

Hidden Structure Revealed

-Crater, Meteorite, the Moon and Crescent-

As mentioned previously, my work started from making vessels. A vessel has both interior and exterior spaces. The interior of a vessel is a space containing something, usually less visible than the exterior, sometimes invisible. My perception of the world was that everything was made out of cubes, and the cubes are the hidden structure of every object. Naturally, I tried to use the interior of vessels as a hidden space to express the cubes as the hidden structure.

When in Korea I was making slip-cast white porcelain vessels in very geometric and symmetrical shapes (Illustration #1, #2). My new body of work here at RIT started as a continuation of my previous work, but I wanted to change it and attempted a new approach. I analyzed the visual vocabulary I had previously used, and I concluded that the use of different colors, asymmetrical forms, and different building methodologies could result in the change of my work (Illustration #3). My work since 2006, therefore, has focused on exploring a range of production possibilities, from molds to hand-building to wheel throwing, from high and low-temperature glazing to cold-finishing (Illustration #4).

My first vessel at RIT was built by wheel throwing and hand building. I placed each of the cubes on the inner surface of the vessel by hand. The shape of the vessel was asymmetrical because I deformed it, but because of my past influences the cubes were arranged in a systematic manner. The second vessel was created using hand-building

techniques. As a result, both the shape of the vessel and cubes, as well as the arrangement of cubes, became looser than in the first vessel.

As I mentioned I was using a vessel format because vessels have interior space. I found that, in nature, *craters* also have natural interior and exterior space just like vessels. My interest in form moved toward craters, and I made some vessels in the shape of craters (Illustration #5). But these vessels were no longer containers. Freed from the concept of a vessel, I was eager to create landscapes- the natural home of craters (Illustrations #6, #7, and #8). Thinking about landscape as a vessel maker, for me, was a huge leap in terms of the scale of the object I was choosing. Since each piece I made needed a tremendous amount of time and intensive work, my work changed slowly. But I had a lot of time to think about my current and next work when I was working on individual pieces, and as I was making a landscape with craters on it a *meteorite* came to my mind (Illustration #9, #10). A meteorite is usually an object with craters on it, and it was a compatible object with my interest in form. Building meteorites with craters allowed me to show the hidden structure of them, as well as opened the theme of orbits and orbiting. I was thinking about orbiting planets in the universe, and eventually my thought reached to the Moon, the closest heavenly body to the Earth.

My interest in the Moon as a mystical object was outlined in the previous chapter. I was fascinated by the different shapes of the Moon caused by its various phases. The phases, the waning and waxing of the Moon, create the shapes of crescent, half moon and full moon. Initially I was drawn to the form and shape of the full moon (Illustration #11),

but soon I was exploring the possibility of the crescent moon. A crescent moon is made by the shadow created by the light which falls partially on the surface of the Moon. I imagined that the shadow, the dark and invisible side of the Moon, was the space where the invisible structure was hidden, like the interior of a vessel. Therefore, to me, the border of the shadow and the lit surface, the inner curb of the crescent, was the very space where the hidden structure could be revealed. To visualize this imaginary assumption, I made a group of crescent shapes that have sharp geometric surfaces on their inner curves. I termed this surface a geometric surface because although it is not formed from exact cubes, it nonetheless utilizes repetitive geometric modules.

The series of crescent moons I created are three-dimensional sculptures. Their shape, however, is commonly thin, flat, and linear. I pursued the two-dimensional shape of the Moon in the night sky in three-dimensional sculpture. The resulting sculptures are thin and linear, sometimes a little two-dimensional even if they're definitely three-dimensional pieces. They have negative spaces inside the form, and the silhouettes decide the shapes of them. The coarse and rocky surface of the Moon led me to create textures on the surface of my work. My work, therefore, is also partially about the contrast between spontaneous outside surface and solid geometric inner surface. I intended to draw the viewer's attention to the negative space by expressing solid geometry on the inside of my sculptures. The geometric surface on the negative space was glazed or painted mostly with rigid colors, sometimes with metallic gold, to denote preciousness (Illustration #12).

Even though my work evolved far beyond my thesis proposal, my intention to be open to all kinds of possible building and finishing methodologies stayed the same. Since I was trying to escape from slip casting and mold-making processes that I had used for a long time, I wanted to create my work by wheel throwing and hand building. Wheel throwing was my main working process, especially when building vessels. Some *Crater*, *Meteorite*, *Full Moon*, and, earlier *Crescent* pieces were made using wheel throwing. Yet later the shape became linear, long, and asymmetrical, and hand building became a major process. Because of the scale and shape of my work, I mostly used coarse stoneware clay body (Illustration #15), but also I needed to make some pieces with finer surface for visual and physical variety in the collection. I therefore made several prototypes out of plaster, made molds of them, and slip cast them (Illustrations #13 and #14).

Because the forms of the work are linear and sharp, I wanted to protect against deformation during the firing process by maintaining a temperature below cone 2 (I ended up using cone 03-06.) To improve the physical strength of the pieces, most works were fired at a higher temperature during the bisque firing (cone 2-1). To pursue different possibilities in colors and surfaces, I used acrylic, enamel paints and glazes (Illustration #20).

I also minored in wood during my study of ceramics at the Rochester Institute of Technology. Wood allowed for the exploration of possibilities that were not supported by ceramic material. As a result, I was able to build some *Crescent* pieces to be hung on the wall. To prevent those linear and pointy shapes from warping in the future and to keep

them straight, I used extremely dense exotic wood and coated the entire surface with lacquer (Illustration #18 and #19).

Conclusion

-The Crescent Moon, The Sun and The Universe-

My initial work attempted to express the hidden structure of objects by focusing on the interior space of a *vessel*. I then moved to an exploration of craters. Like vessels, they have both interior and exterior spaces. Thinking about objects that have craters on them led me to build the shape of landscapes with volcanoes. My idea leaped from a vessel as a single object to landscape in larger scale, and soon I was thinking about meteorites. The idea of meteorites carried with it the idea of celestial bodies, inspiring my exploration of the Moon. The phases and shape of the crescent moon became an ideal vehicle for expressing hidden structures. The format of my work changed gradually from vessel to sculpture.

When I was researching the cultural meanings of the Moon, I also found that the Sun has mythical and symbolic meanings throughout cultures. Once I have time to fully study the cultural symbolism of the sun, it will surely inspire work related to the sun and the moon. In addition, stars and other planetary bodies in the larger universe will most likely become the theme of future work.

In closing, I would like to extend my sincere thanks to thesis advisors Rick Hirsch, Michael Rogers, and Rich Tannen, whose critiques and advice helped to direct

this project. I especially would like to express my wholehearted appreciation to professor Rick Hirsch who, with his warmest heart, as well as with unlimited knowledge in art, advised and guided me to find the direction of the new aesthetic and subject matter which now I am exploring and pursuing.

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- ¹⁰ Op was first coined by a writer in *Time magazine* in 1964.
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- ¹⁴ Barrerr, Cyril. An Introduction to Optical Art. Studio Vista Ltd, 1971. 30-33.
- ¹⁵ Geometric abstraction... is used to describe purely abstract painting and sculpture which is chiefly concerned with the square, the rectangle, the triangle, the circle and geometric volumes such as the cube cone, cone, etc. The forms do not usually relate to subject matter. They are often arranged architecturally and suggest geometry. Primary colors are frequently used. Aesthetic aims are often deeply involved with search for ultimate reality, understanding of nature, psychic intuition, etc.; Gordon, John. Geometric Abstraction in America. The Whitney Museum of American Art, 1962. 9.
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Fig. #1: The Pyramid in Egypt



Fig. #2: The Great Wall in China

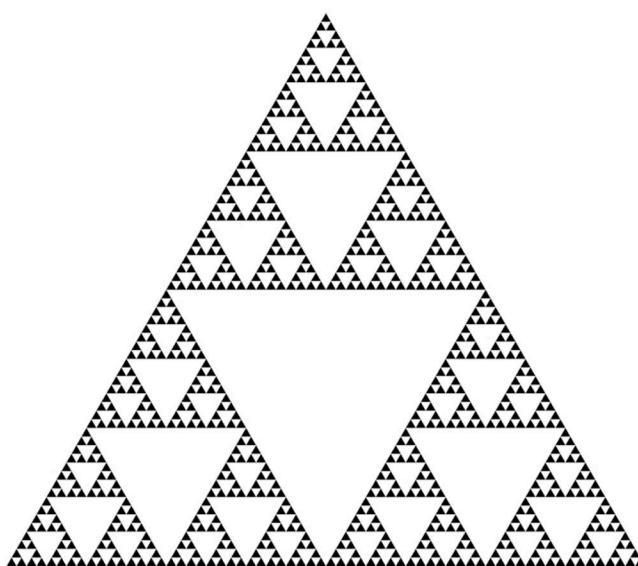


Fig. #3: Sierpinski's Triangle

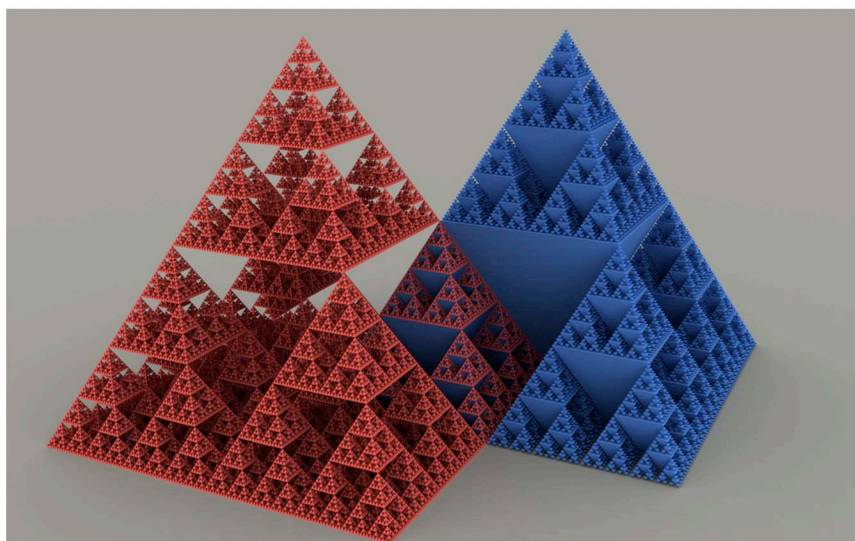


Fig. #4: Sierpinski's Pyramid



Fig. #5: Georges Seurat, *A Sunday Afternoon on the Island of La Grand Jatte*
Oil on canvas, Art Institute of Chicago

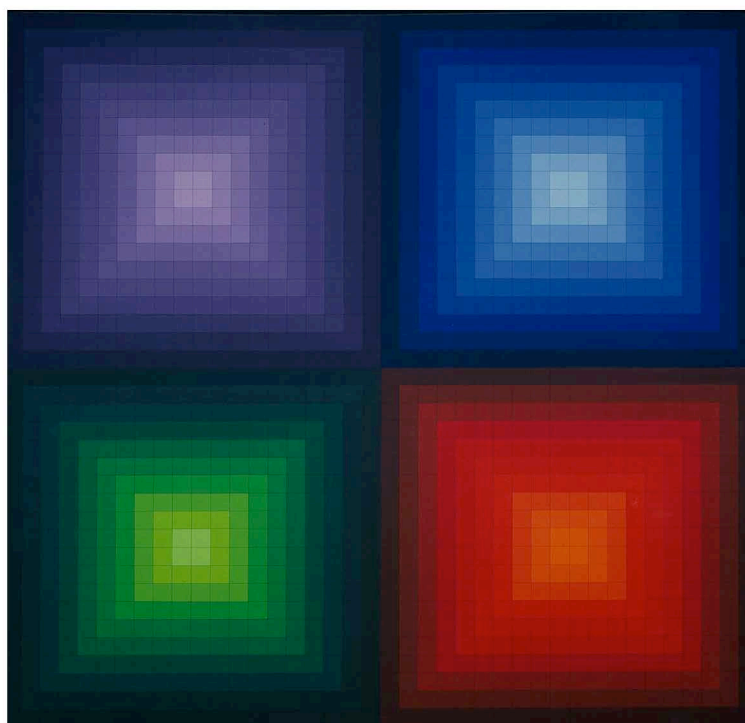


Fig. #6: Victor Vasarely, *Arcturus II*, 1966, oil on linen,
Hirshhorn Museum and Sculpture Garden

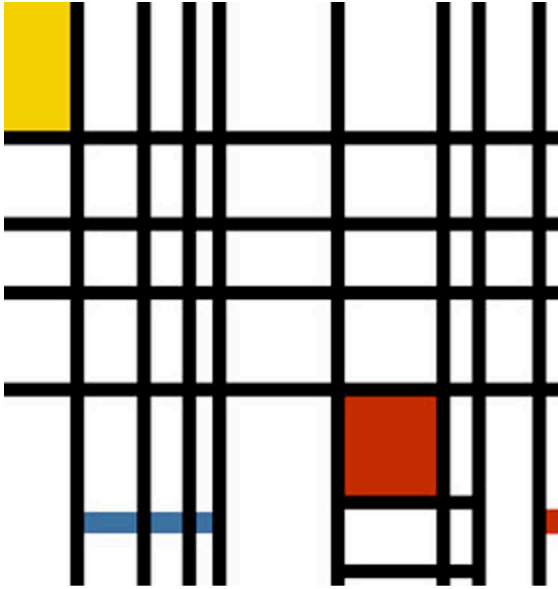


Fig. #7: Piet Mondrian, *Composition with Yellow, Blue, and Red*, 1921, Tate Gallery, London

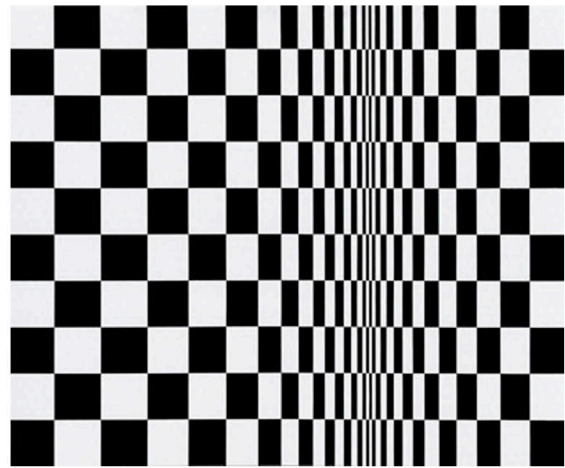


Fig. #8: Bridget Riley, *Movement in Squares*, 1961

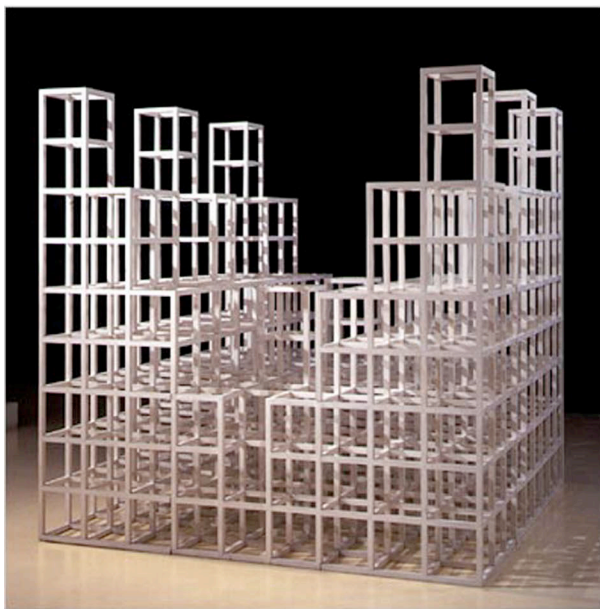


Fig. #9: Sol LeWitt, *Inverted Xix Towers*, 1987

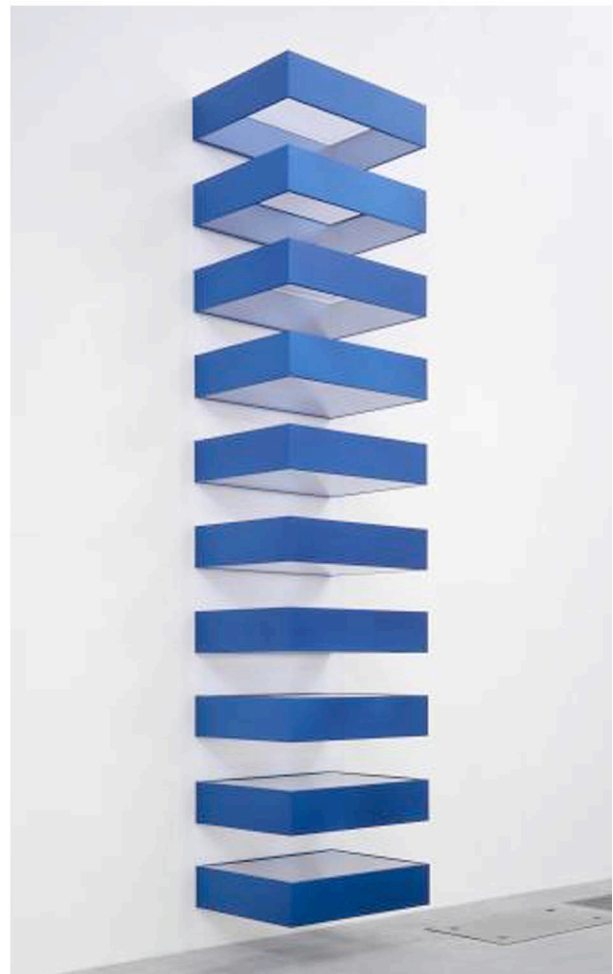


Fig. #10: Donald Judd, *Untitled*, 1990, Tate Gallery, London



Fig. #11: Craters, Mount Cameroon, Cameroon



Fig. #12: The Willamette Meteorite, the American Museum of Natural History, New York



Fig #13: The Moon (top), the phases of the Moon (middle), crescent moon (bottom)

Hidden Structure Revealed

Work by Minkyu Lee



Illustration #1: *Hidden Structure Revealed* #8, slip-cast poecelain, cone8, clear glaze, 12"ht*8"w*8"d, 2006



Illustration #2: *Hidden Structure Revealed* #9, slip-cast poecelain, cone8, clear glaze, 6"ht*10"w*10"d, 2006



Illustration #3: *Hidden Structure Revealed #13*, glazed stoneware, cone03, 12"ht*16"w*14"d, 2007



Illustration #4: *Hidden Structure Revealed #15*, glazed stoneware, cone05, 12"ht*11"w*11"d, 2007



Illustration #5: *Hidden Structure Revealed #16*, glazed stoneware, cone05, 13"ht*12.5"w*12.5"d, 2007



Illustration #6: *Landscape*, stoneware, glaze and acrylic, cone02, 6"ht*36"w*24"d, 2007



Illustration #7: *Crater#1*, glazed stoneware,
cone02, 19"ht*11"w*12"d, 2007



Illustration #8: *Crater#2*, glazed stoneware,
cone04, 26"ht*17"w*16"d, 2007



Illustration #9: *Meteorite#2*, glazed stoneware,
cone04 11"ht*11"w*11"d, 2007



Illustration #10: *Meteorite#3*, glazed stoneware,
cone04 12"ht*10"w*10"d, 2007



Illustration #11: *The Moon*, glazed stoneware, acrylic, cone02, 18"ht*18"w*18"d, 2007



Illustration #12: *Crescent #1*, glazed stoneware, enamel, cone05, 23"ht*25"w*4.5"d, 2008



Illustration #13: *Crescent #3*, slipcast stoneware, glaze and enamel, cone04, 21"ht*21"w*2.5"d, 2008

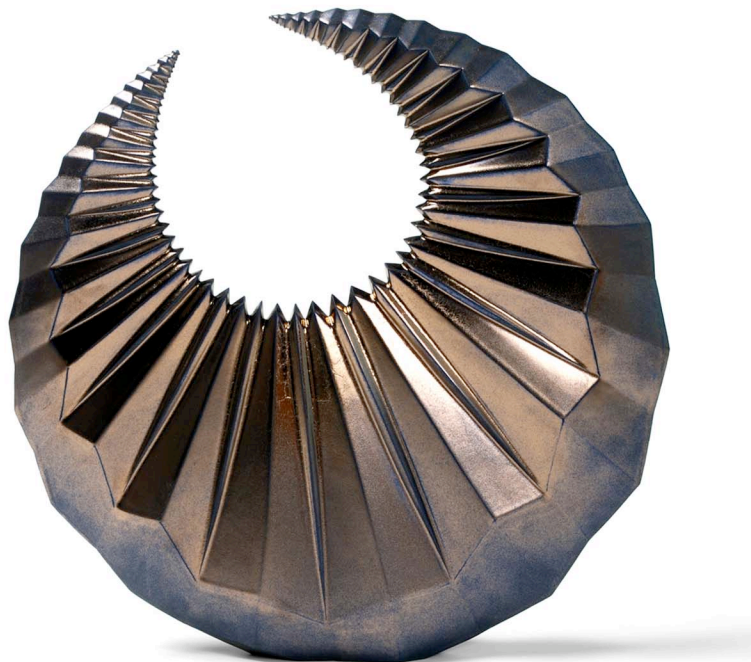


Illustration #14: *Crescent #2-1*, slipcast stoneware, glazed, cone3, 19"ht*19"w*2.5"d, 2008



Illustration #15: *Crescent #7*, stoneware, glaze and acrylic,
cone2, 44"ht*30"w*5"d, 2008

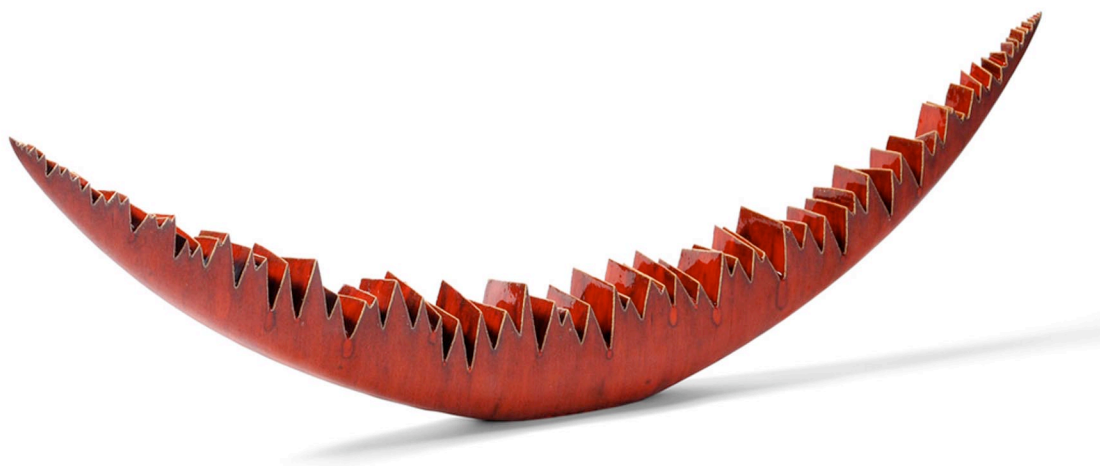


Illustration #16: *Crescent #6*, glazed stoneware,
cone04, 13''ht*41.5''w*3''d, 2008



Illustration #17: *Crescent #5*, glazed stoneware,
cone04, 19''ht*37''w*5''d, 2008



Illustration #18: *Moonrise*, painted Wenge
(wooden piece),
58.5"ht*2"w*8.5"d, 2007



Illustration #19: *Moonset*, painted Wenge
(wooden piece),
50"ht*2"w*8.5"d, 2008



Illustration #20: *Crescent #4*, glazed stoneware, enamel,
cone3, 34.5"ht*26"w*4.5"d, 2008