

PARADOX ON COSMOS

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Abstract: Old cultures used monosingular principle as a harmony opposition. This monosingular or paradoxical principle is what attracts Author to process forms with harmony or arrangement inspired by nature's forms, using aforementioned monosingular pattern as the approach used in this work. In ancient people or traditional society's mind, all forms existing in this world come from "oppositional pair". These forms are divided into macro cosmos and micro cosmos realms. Cosmology is a discipline studying macro cosmos and micro cosmos that helps in understanding human-nature relation as a whole spectrum of human-nature attachment.

Paying special attention to speculative and imaginative cosmology, we attempt to create a new pattern to bring back art and spirituality into modern science field. Today's technological development we have allows us to spot patterns in nature and universe. Modern science and technology that used to be considered diminishing religious nature's mystery now once again heading back to spirituality. Forms made using symbols, patterns and geometrical shapes representing natural arrangement principle that is monosingular. This is due to the fact that geometrical and circular forms as center point are considered as an old principle form that accentuates cosmic living, where symbols representing the intangible and unmeasured can be used as means of communication to supernatural or spirit world. Furthermore, representation of contemporary world that is technological is displayed using medium and work using electronic devices.

Keywords: *Paradox, Cosmology, Symbol, Pattern, Technology*

1. INTRODUCTION

The Author's intrested in the idea that today science is again looking back to the past idea, where the myth takes a very important role, the old and being excluded ideas because these idea seem primitive and can not be explained by logic. Slowly but sure our perception about nature is change, for example the satellite technology change our perception as one big family that rode the "the big spaceship" called the planet Earth.

The relationship between the science, technology and nature is change over the time. This relationship is interact with two ways: the rationally and the non-rational. Formerly the rational, the intellectual changing the non-rational because the rational is considered not intelectual it cannot explained the nature phenomena that occur happens scientifically clearly. Even so the non-rational response is a way that using the inner spirituality that arise, inside it is myth, stories that came from religious sensitivity. Often in the past these two relationship seem contradictory. but the current relationship between the science, technology and nature have these paradoxical nature that complementary. The rational in science is back to the way of spirituality. We could say now we believe that the rational could be irrational and otherwise the irrational can be rational.

Based on the previous text that mentioned before, the interesting point for the Author, is how the irational naration who's becoming the dislocation for the consciousness and the unconsciousness and then becoming a notion that has more than one intepretation, such as the natural and supranatural, reality and fantasy can be transformed into an artwork? And how to delivery the idea, the concept that is based on scientific research that represent the beauty and harmony in the universe with the idea that came from the narrative past knowledge can be used to transform into the imaginative artwork who could raise awareness of the divine order of the nature.

1. THEORETICAL BACKGROUND

When we talk about the natural science today, we are talking about a specific vision created within West culture, about knowledge and about vision of that knowledge, a vision of natural science and of nature. We can find the trace of the Western scientific tradition of rational science and philosophy in the ancient Greece. In those days, any problem, decision, question, argument and proof, must be clear to some principles or practice. They developed thereby the method, they introduce the conception of a rational scientific reason. But today natural science is complex diffusion from the physical and the metaphysical, imagination and scientific speculation, the idea that is being used even before by their great ancestors. The philosophy of nature and human cosmology. How human have attach with nature and how the nature is affects the human mind, this thinking is having a relationship with the philosophy and scientifically thinking in the past whose rise once again (Crombie, 1996).

One of the most theme that runs in 20th century is the presumption if the nature is work in order or in divine order, with some characteristic that are important for the continuity of life. The order itself is very important for the continuity of the life. The life itself is part of the orderly arrangement, with each species has an essential role in the nature, all became the part that is needed to be part of the entity.

1.1 Cosmology and Harmony

Cosmology can be regarded as the knowledge about the origin or the beginning of this Universe. Cosmos in general refers to the space, this word derived from ancient greek kosmos means woven (embroidery), would not that mean that the universe is like a room full of celestial object that are not connected but have structure order and harmony from the patterns just like an embroidery.

It is an old perception if the nature is constructing some events, just like the cosmos rule the space and time. We can say, there is a grand design or the interconnectedness rising and could be amazingly rationalize. While some people may think advanced and think if the material world is an illusion of mind or simply just the changing of the consciousness. But an Artist as a someone who's often playing with metafor and trying to seek the interconnectedness and also the reversibility of the grand design, even better if you go beyond or at least mimicking the conflict nature. While relying on the intuition to find solution or make the ambiguity of the interpretation, to be someone who shape the world with image and text, movement and sound, artist specifically can respond the idea if the nature is in order (Ascott, 2006).

It is in our nature as a human that we are addicted to the pattern, we are thinking about the pattern into everything that we do, and this pattern is the key for us to see many aspect of character or the behaviour and its natural sense. Nowadays technology has allowed us to seek inside and out the space to reach and construct the pattern that has meaning, rhythm, cycle, correspondency. The computational system has guided us to understand how the world design and its construction. An old way with a new method

1.2 SYMBOL

The symbol is one of culture phenomenon. Along with myth, sites and the mediator, in the past this four element is interconnected element that connect to systemic unit. Symbol is a concrete sign where the signifiant is not present because of the motive (same as analog and association) with the signifiant (Levi-Straus, 1997)

The existence of the symbol cannot be separated from the myth, the minds of the past always repeats itself and full of associations , this is one way to broaden the sense of the sacred. For the past symbols mind not only reveal a structure of reality or dimension of existence , but at the same time gives meaning to human existence. Because the symbol indicates the human situation into cosmological realm .

2. Working Process

The author's is always interested in art specially with the painting medium and the themes that come from the past. From that stand point the Author try to expand what is interesting for the Author. Not only limiting from the visual art theme the Author is develop the interest in the more general themes such as old science and the cosmology

2.1 Prototyping

To avoid error, mistakes and to minimize the cost, several prototype were made to try out the various possibilities that can be created with the medium that the Author's used. A variety of medium ranging from wood, aluminum, fry pan, fibreglass, resin is used to look for new form that can be used to convey the visual ideas. Due to one and many things, in the end not all the prototype is look like the end results, but the prototype is capturing the "big" ideas. so even though the prototype is different from the real finished works but the prototype have different quality and different approach that could be work like a sketch in drawing.

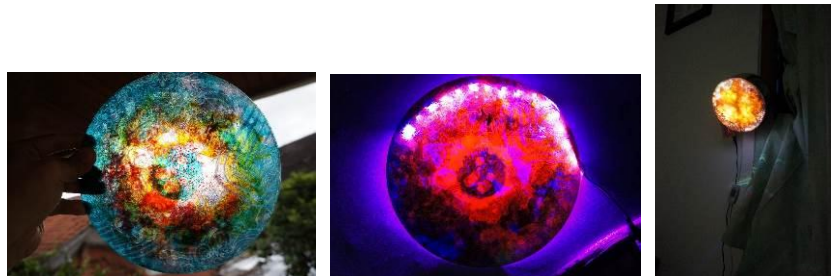


figure 1 the prototype

Source: Personal Documentation

2.2 Coloring the artwork

After the "sketch" or the prototype is completed, the next step is coating the fibreglass which had previously cut into the shape of a circle with diameter of 80 Cm, using the medium of a fibreglass paint, the pattern made with the sketch that have been designed before. The first and the third layer painting was using monochrome color. While the second layer using the vibrant and rich color.



figure 2 the coloring process

Source: Personal Documentation

at this stage the reference for the author is the digital image of the satellite portrait, the use of translucent color and also the shapes that resemble the Universe is intended to capture the speculative and imaginative vision of the "unseen" realm that our satellite technology try to portrait.

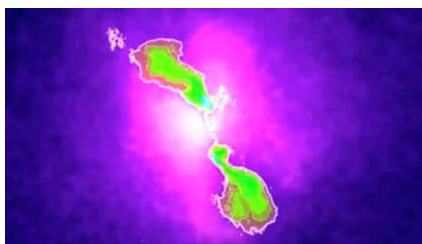


figure 3 the satellite image

Source: screenshot from documentary movie “The Largest Blackhole in The Universe”

2.3 Engraving the artwork

After the painting and coloring process is finished. Now the pattern is made by engraving technique. using the small drill bit, the author makes detail engraved with patterns derived from the basic shape of the moon's surface. Some of the pattern is based on the sketch, but some is made intuitively a free form, only the first and the third layer was engraved with the pattern.

The engraving pattern using the round shape and the shape is transform its curve and its diameter. This form is based on the moon cater. The process of creation of patterns rely on intuition to establish the composition that is consistent with the patterns formed beforehand. The pattern fulfill with the biomorphic circle.



figure 4 the engraving process

Source: Personal Documentation

meanwhile the work motives is from the shape of the realm and the Universe that have being transform to digital image such as the digital visualisation from the sound, the symbol, and also the satellite image of the black hole in the outerspace.

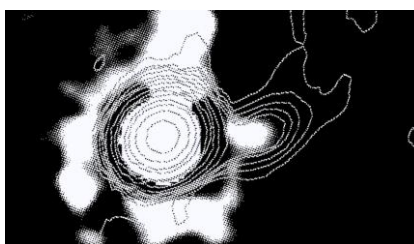


figure 5 the satellite image of the blackhole in the Universe

Source: screenshot from documentary movie “The Largest Blackhole in The Universe”

2.4 Frame Design

After the coloring process and the engraving process is finished, next is the frame designing. In this steps, the work using the electronic device a LED strips, the frame material is aluminium plate and also stainless that has been painted with black color. This color is used to accented the circel inside the LED, so when the light is on, the work makes this circle silhouette.

The aluminum plate for the LED is chose because it can used as a heatsink for the LED. The LED strip is attached inside the aluminium frame



figure 6 the frame design
Source: Personal Documentation

2.5 LED attachment

After the stage of painting, engraving and design of the frame has been completed, the next process is the installation of LED lights and the framework that has been created. In this process the author tries to make variations of light at each work. The LED is controlled by the microcontroller built specially for this project. The LED is blinking differently each layer to create the illusion.



figure 7 the LED RGB that can be adjust its brightness its color
Source: Personal Documentation

3. RESULT AND DISCUSSION



figure 8 The finished work

Source: Personal Documentation (Title: *Somnium*; Medium: Mixed Media; Size: Diameter 84 Cm)

The work title is *Somnium*, a latin word for dreams. The work has 2 sides, on the first sides we have this 8 different lines, geometric shapes that has eight corners. This depiction of geometric shape is inspired by the ancient people symbols who tried to reconstruct the moon phases, this symbol is came from the Middle East, at the beginning the rise of Islam. The Muslim using this symbol as their representation of time for them to praying. Because of the Islamic calendar based on the moon, their religius place is also decorated by this geometric ornament and symbols.

The geometric shape using the perfect angle, this is also the representation of the harmony and the order made by human. We can say the geometric symbols is representation of the human in his quest to understand the nature in form of order

Meanwhile in the second side the work is the development from the pattern on the first side. Where if in the second side we add four circle overlapping. The overlap circle form a pattern that looks like a flower, a blossoming flower. This symbol is know as the “*Flower of Life*” motif. This symbol is used to connected with the spiritual in many different ancient civiization and culture. Mathematician and scientist learn the pattern to uncover the nature to understand the nature. The nature itself is in the internal foundation of the principal archetype symbolize by number, shape and its arithmetic and geometric relation

LED color in this work are white and yellow, just like a moon in the full moon phase. This two colors is also the representation of order where this two color appear alternately, bringing the illusion effect to the geometric pattern

4. CONCLUSION

The reason the Author uses the philosophy of cosmology, because not only it can be read philosophically and saintificaly but also mythologycaly. Cosmology help us to explaining the relationship between the human and its nature. The origin, the everydays, and the world creation, the night and day, the life and the death, the spectrum of interconnectedness of human and its nature. Today, unfortunately we tend to underestimate the interconnectedness, thinking that the irrational is the ancient and past mindset its like a superstitious, a myth, supranatural and unexplained by a logic. This secular society today think if they understand the power of the Nature. Because we have the “label”, the theory, the terminology, the experiment, the parameter, the advanced formulas and also the amazing technological tools. With this habit of literal thinking, we have difficulties to trust the mythopoetic imagination can be a valid and a serious knowledge

This moment can be called as our opportunity for us to reopen the door in the past to pave the way toward the future. If in the past we see the fragmented fact so we cannot see the whole harmonic pictures, we are just searching in the world that we consider dangerous and chaotic, but the real Nature is harmonic and he waits for our cooperation. If only we could see with the eyes of our ancestor.

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REFERENCES

- Ascott, R., 2006. *Engineering Nature Art & Consciousness in The Post-Biological Era*. Bristol UK: Intellect Books
- Crombie, A. C., 1996. *Science Art and Nature in Medieval and Modern Thought*. USA: Hambledon Press
- Levi-Straus, C., 1997. *Mitos, Dukun dan Sihir*. Yogyakarta. Kanisius
- Lovejoy , M., 1997. *Postmodern Currents Art and Artists in The Age of Electronic Media*. New Jersey: Prentice Hall
- Terry, S., 2011. *Contemporary Art World Current*. Hong Kong: Laurence King Publishing

Wiker, B., and Jonathan, W., 2006. *A Meaningful World (How Arts and Sciences Reveal the Genius of Nature)*. USA: InterVarsity Press

