

A Creative Representation of Cosmologically inspired Visual Arts

By

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Abstract

The theme of my work is based on the cosmological color's perspective. In which I have connected my art work with the astronomical images, combined with the lights of urban life. This article delineates my work on 'Cosmic art' that is a new genre of art which is very much supported by the modern science, and I have incorporated this art in my work. As all the artists get their inspiration from the images that are generated by the high-powered telescopes I also got inspired from these imageries and presented it in my own way through my works of art which include photography and painting. NASA also plays a vital role in this cosmic art. This cosmic art is rooted in the mythologies of old times and stemmed in the latest scientific discoveries. I got inspirations from different old artists for my work, and I infused these inspirations with my other inspiration of the lightening and speedy urban life, that resulted into something that was way different from the works of other artists. This art has lessened the distances between the human and the planets and solar system. In ancient times it had a deep sacred significance. Old civilizations did a lot of work on cosmic art, as man has interest in the happenings of the universe from the very old times; even it dates back to the pre-historic time period. An artist's intention to depict the building blocks of our universe, and to also give every person the experience of viewing the beauty and mysteries of space, that is why cosmic art is also known as the space art. There is a harmony and balance in the system of this universe which also serves as an inspiration. This inspiration is also directly related to the theories of physics, cosmology and biology. Cosmic art is directly related to science, for this reason, I can also call it as scientific art.

Keywords: astronomy, happenings, harmony, mythologies, mysteries, perception, pre-historic, space art, scientific art, universe, urban life.

Introduction

The article aims to go through a discussion, of the practice which is studio based which I went through on the theme of “Cosmology of Colors.” My interest in the topic of cosmology has been developing from last few years, as I got inspired by the vast night sky. I have tried to depict my topic through the medium of painting. I connected this inspiration of cosmos with my own surroundings, as in this modern-day urban life if we take an Arial view of our city it would seem like a night sky filled with dazzling stars. Roaming around on streets during these in between these dazzles inspired me so much, it seemed to me as a small universe in itself. So when I started to work this topic I depicted the same inspiration of moving colorful lights which lighten up our life at night as I infused these inspirations with my other inspiration of the lightening and speedy urban life that resulted into something that was way different from the works of other artists. Throughout the history artists have considered and reflected the relation of human being with this universe through thought provoking visual and sculptural renderings.

Understanding of the theme is necessary before going deep into the topic, what is Cosmology? What is the philosophy of Cosmology? What are Cosmic Colors? And how art has advanced science? and also what happens when the art and the astronomy get mixed up? When we take the name of this topic, there are two varieties of fields in one, firstly there is ‘cosmology’ which is related to the field of science, secondly there is color which is obviously related to the field of ‘arts’. So we’ll discuss, firstly, what is the relation between art and science? What is the relation between cosmology and culture? As culture has a great impact on art of some place. Lastly how cosmology and art co-relates? Before going through the dialogue of these relations, it is very important to understand the both separately.

Cosmology

Cosmology is a branch of astronomy that involve the origin and evolution of the universe, it is basically the study of components of the universe, and it also relates to the future of the universe. With the advancement of technology scientists have added much to the modern cosmology, according to them cosmology is the complete understanding of the universe based on observation. The definition of cosmology is divided into two types mostly, the first one is the scientific definition and the other one is anthropological. Further the scientific definition is also of two kind one that is to the point “study of the universe” and the other one is wider, “that branch of scientific studies which deals with the study of universe and also its organized system, and the laws under which it works, to be more precise, it is that branch of astronomy which deals with the evolution and organization of the universe. Whereas the anthropological cosmology is based on the concept that cosmology is an essential part of our culture and social system.

At the very first cosmology was considered as a pure branch of physics, but Smeenk argued that the main point of difference between cosmology and other branches of physics is uniqueness. [p.16]. Ellis reaches the same idea that the application of law of physics to only one object is uncertain. The laws of universe cannot be established which can be applied to all categories of objects. This argument proves that experiments on universe cannot be performed in some specified conditions as we can do in other scientific field, but the study can be done without experiments and cosmology cannot be totally exempted from science.

According to Helge S. Kragh (2007) cosmology traditionally refers to the study of composition of Universe. In nineteenth century, it was known as cosmography, the geographical study of Universe. The famous work of Ptolemy was published under the cover

of cosmographia. Cosmology is the study of the creation of universe and it also involves the time-based aspects.

But the term is not in use for a long period of time. [p.1]

Philosophy of cosmology

According to Theodossiou and Manimanis (2010) “the views and the theories of the ancient pre-Socratic philosophers from Ionia indicate the relation of the ancient Greek world with the mother-Earth and the natural environment, Cosmos. The pre-Socratic thought has much to reveal to us as a kind of travel back to the primal sources. The pre-Socratic philosophers of Ionia were carefully observing in the 6th century B.C. the natural phenomenon and their contribution to the challenging of myths was crucial. They attempted to extract all possible conclusions from the observation of nature by using mainly their logic”. [p.204]

“Thales the founder of the Ionian school and the first theoretician of geometry and astronomy, was the first to express the opinion that the polymorphic world of natural phenomenon has single base, originating from one creative common natural entity, the water according to him”.

According to Theodossiou (2007) “Anaximander believed that in the Universe there is a kind of natural law, a cosmic “justice” keeping the four principle elements in balance, as they are in continuously inn state of antagonism due to their different essence and texture”. [p.18] Different schools of thought generated during the time period of Greeks, in which one of belongs to Plato, according to him the universe could be described in mathematical instead of myths, he further explained that these mathematical truths cannot be invented they are just Discovered. Pythagoras as well as Plato both of them was the first to develop cosmological worldview.

Science and Art

Since the origin of different civilizations, scientists and artists are contributing together for the foundation of visual communication. With the emergence of technology art and science have merged together. In July 1969, after the first moonwalk, Forneist Myers immediately created the ‘Moon Museum’ where he got displayed six drawings by the leading artists of that time. NASA also initiated its own program in 1962, in which there was an unofficial collaboration between artists and scientists. And NASA also commissioned famous artists of that time.

The famous physicist and science writer Graham Farmelo (1955) “Much like a work of science, a work of art represents both more and less than a simulacrum of pleasure – it is foregrounded by the values relative to the value-maker, attest to multiple layers of possible meaning, is only inevitable only in that it privileges the mores of a particular culture at a particular time in history and within its shifting temporary context, it is ripe for continual reinterpretation and validation”. [p.15]

According to Ede (2005) “there is something unsettling about the fact that experience can be caught ass an image on a brain scan. New brain imaging techniques offer rich opportunities for scientists to study which areas are involved in making or responding to art”. [p.15]

At another place (2005) Ede says “the role of memory is essential to art making and investigations into many areas of the brain involved in coordinating different kinds of memory feedback are becoming fascinating”. [p.88]

Garfield (1989) says, “Just as technology – whether in the form of seventeenth-century microscopic or more modern developments – changed the way science was done (and will surely continue to change it), so did technology change art. One such technological development was invention of photography in the early nineteenth century. Photography provides another means of recording and interpreting the world – an activity, as we noted earlier, that is fundamental both artist and scientist.” [p. 57]

Science represented through art is not a thing that we only see in the old civilizations, this connection can also be seen in renaissance time period where masters belonging to that time also used science in their art works.

Literature Review

Many authors and artists have put their efforts towards the fields of cosmology and its relation with colors and art. Firstly I went through the literature while wondering about the creation of what is cosmos and there are writings about cosmology and its relation with us and art, and what has been its importance throughout the history. Before doing my studio-based work there was a brief literature review which I went through so that my art work could be supported.

As Greeks were the first ones to think over it philosophically, Theodossiou and Manimanis (2010), “ancient Greek natural philosophers were preoccupied by the ‘cosmic riddle’, i.e. the questions of the origins, the structure and the construction of our universe. At the same time a sudden rather unexpected shift took place, from mysticism and religious world view towards reasoning thought; a switch with very deep consequences for humanity”. [p. 1]

While we if we go into the color theory of this galaxy, Mo, Bosch, White (2010), “two most straightforward explanations for the color gradients are radial gradients in the stellar populations and radial variations in the amount of reddening due to dust extinction”. [p. 537]

Sagan (1983), “the ancients knew that the world is very old. They sought to look into the distant past. We know the cosmos is far older than they ever imagined. We have examined the universe in space and seen that we live on a mote of dust circling a humdrum star in the remotest corner of an obscure galaxy”. [p. 17]

Campion (2017) “Anthropological cosmologies are based on the proposition that ideas about the cosmos are integral part of human cultural and social systems” [p.5]

Berlin argued, “The astronomical revolution’s abandonment of the old crystalline planetary spheres in favor of a universe without boundaries encouraged the emergence of the chaos and adventurism of Romantic art. Painting began the shift towards the abstract with the extraordinary work of Joseph Turner, who drew on both esoteric wisdom and the latest science in the portrayal of light”. [p.43]

Campion (2017) “Representations of the sky, stars or cosmos in visual arts dates back from the Stone Age and are familiar throughout the ancient world. They may be symbolic, as in Egyptian astronomical ceilings, or take on human form, as Roman images of planetary

deities. Later they might be decorative, as in Renaissance star maps, or attempt accuracy as in modern star maps, or be entirely abstract, as in twentieth century surrealism. The sun and the moon make regular appearances in Western painting, as one would expect". [p. 11, 12]

J. Dick, L. Lupisella, (2009) "since Darwin propounded his history of evolution by natural selection, evolution has been much more than a science. It has been a worldview that has affected culture in numerous ways and different cultures in diverse ways. [p. 36]

Liddle, (2003) "galaxies are the most visually striking and beautiful astronomical objects in the Universe, exhibiting a wide range of properties. However, in cosmology the detailed structure of a galaxy is usually irrelevant, the galaxies are normally thought of as point like objects emitting light, often broken into sub-classes according to colors, luminosities and morphologies". [p. 5]

Kragh, (2007) "life in general, and the existence of humans in particular, came to play a surprising role in cosmological thinking with the formulation of the anthropic principle in the 1970s. The general idea of anthropic principle is that the observed universe is conditioned by the fact that there exist human observers". [p. 238]

Boeke, (1957) "the sun is only a faintly lighted strip right across the sky: the Milky Way. It is usually called the galactic system and contains many thousand millions of stars". [p. 29]

Coles and Lucchin (2002) "Observational cosmology is concerned with the distribution of matter on scales much larger than that of individual stars, or individual galaxies. For many purposes, therefore, we can regard the basic building block of cosmology to be the galaxy". [p. 69]

Ede (2005), "Australian artist Lynette Wallworth respectfully uses the images of professional science-imagers to make unique artworks which immerse the viewer in a moving experience of a nature that is normal beyond perception". [p. 177]

There are a number of artists who have working on it since long back history, Piper (1956), "I discovered that dozens of cosmic artists create best while intuiting an impulse or influence which seems to spring from a spiritual or divine agency beyond them but which manifests and operates in the shoreless depths of their own consciousness. They feel themselves to be the channels, instruments, or servants of a higher power". [p.73]

Methodology

In this studio-based research I have worked in a multidisciplinary way with painting, photography and collage. In painting I have used the medium of oil paints on canvas as well as collage from colored paper. During this studio-based practice I also explored the topic through photography. My research involved my observations which were observed directly. I have also collected data from known author's publications and practiced under the light of these writings. I also sourced material through email and web searches. I analyzed my work according to my study of different authors.

Discussion

I have worked under the title of “Cosmology of Colors”, and that cosmology is the study of the universe, like position of the plants, stars in the cosmos. Similarly, the colors involved in this play of universe are the cosmological colors. The sky we see at night has a black background, which I discussed earlier why, and it is filled bright stars which lighten up the sky. I took the connected this inspiration of cosmos with my own surroundings, as in this modern-day urban life if we take an Arial view of our city it would seem like a night sky filled with dazzling stars. Roaming around on streets during these in between these dazzles inspired me so much, it seemed to me as a small universe in itself. So when I started to work this topic I depicted the same inspiration of moving colorful lights which lighten up our life at night. In all the three art works below I have tried to depict this idea of cosmos which I find around me through moving lights and colors these moving lights show the speedy life. As in in the cosmos too everything is in a constant movement and changing colors.

In the fig. no 1 there is a representation of the galaxy through the splashes of colors, it may seem like a representation of a galaxy but I have tried here to portray the feel of the lightening night of urban life.



Fig.1 3 1/2' oil on canvas

Like in our solar system everything is revolving around the sun and everything in this universe is in a continuous movement in fig.2 I have depicted that round movement, it is basically an image of night full of artificial lights, I changed that image into an image with a swirling movement just like our solar system has, so in that way I have merged the two approaches in one painting.



Fig.2 2'2' oil on canvas

In fig. 3 also there is a depiction of a shadow of a planet in between a cluster of stars actually a manipulated image of an urban night lights. There in every painting I have used a black background to depict the infinity universe, as everything in the universe is black in background.



Fig.3 1.5'1' oil on canvas



Fig.4 4'5' oil on canvas

In the above image fig.4, I have depicted an urban landscape from an aerial view I took this image of light passing through a broken glass. I call this painting as starry night, but this is not the starry night that Van Gogh painted as I got its inspiration from the artificial lights of today, as i roam around the streets at night it gives me a feel of modern starry night.

Further in my works I explored the same effects of beautifully traveling artificial lights that we experience every day, that has a unique beauty in itself, due to pollution these days we are no more able to look at the beautiful milky ways and heavy clusters of stars in the old days when skies were way more clear.

As from fig. 5 to 9 I have followed the same theme with the same kind of inspiration and painted them on small pieces again with a black background. There are small depictions of the traveling light with speed of reflecting on the water accumulated on the roads after rains which always have given me an impact of a small portion of the beautiful lightening cosmos above us. The difference which I made through my work is that everyone sees stars and beauty of the cosmos in the skies above , and I see the same kind of beauty all around me.



Fig.5 2''/2'' oil on canvas



Fig.6 2 1/2" oil on canvas

When light reflects in the raindrops at night it gives a beautiful impact of galaxies which I see everywhere around me, and I want to experience the viewer the same feeling as we usually ignore these small elements of beauty.

In the fig. 7 there is a depiction of a beautiful reflection of reddish yellow street lights on the water on a road, which seems to me like traveling of mature red stars in the sky as we studied above in the cosmological theories. This is my way of painting cosmic art.



Fig.8 Nebra sky disk

Besides this disk there are many other findings like there are many pieces of rocks founded by the archeologists on which drawings of stars, sun moon and astronomical factors made.

Anthropologists believe that cosmology is a fundamental need in our traditional cultures, as it is the cosmology that answers the questions of our existence.

Garfield (1989), “Just as technology – whether in the form of seventeenth-century microscope or more modern developments – changed the way science was done (and will surely continue to change it), so did the technology change art”. [p. 57]

The relation of art with the cosmology is nothing new it is as old as the knowledge of cosmos itself is. In the old days there were many art pieces that were made depicting the cosmos but at that time these artifacts were not made for the sake of art, but these were made as a record of the natural forces. Times since pre-historic these supernatural events were recorded not only the pre-historic and the civilizations afterwards, the artists from renaissance and our modern day artists have also done a lot of work regarding cosmology.

Piper (1956), “the mission of cosmic artists is to generate concrete forms with charm, intensity, and suggestiveness as will compel us to feel more vividly, truly, and joyously some of far reaching, value-full linkages with transcendental realities, especially with that Invisible Spirit who controls the connecting threads of all things”. [p. 36]

There is also a term developed for this kind of art that is called the ‘Cosmic Art’ this cosmic art can also be called as the space art. This art implies the same order, discipline and beauty of the universe as it was described by the ancient Greeks. It cannot be said that the cosmic art is only an ordinary classification of art; it is the modern way of life also. The connection between these three things in our lives is very important, human, art and the universe. By practicing cosmic art I implied the relation of human with the mysteries of this universe. Even before the scientists doing any work about the creation of this universe artists were the first ones who pointed their paint brushes towards this subject. But these images were those which could be seen with a naked eye, as the technology advanced and the telescopes got invented and got better with the advent of the technology so as the work of the cosmic artist. Cosmic art which is also called the space art is that kind of art which attempts to portray the miracles of the cosmic universe. Now as the artists know how our earth and the other planets and galaxies actually look like, they are now more able to depict it in their works. These kinds of artworks are now growing in their fame day by day, and number of fans of this art growing.

My work is a kind of an exploration of our universe, its infinite forms, which inspires me as well as every human being. There are endless possibilities while working on nature specially the cosmos as it has many unsolved mysteries hidden in it. These explorations fascinate me as well as the viewer. Art not only serves as an object of beauty, it also makes us think over the issues regarding our nature, as art has the ability to communicate with the viewer with its appealing beauty. This art helps us to appreciate the astonishments of our surrounding and the universe.

Before doing all my work regarding this topic I also went through the artworks of different artists which inspired during my way through cosmic art.

Conclusion

The efforts done by me to portray the colors of cosmology was not an easy task keeping in view the acceptance of the society. as before scientists artists started to observe their surroundings first and started to record all the happenings in the sky as they witnessed it. The development of my interest in the astronomy started from the past few years. For many centuries great philosophers started to theorize the mysteries of the universe which were unknown to everyone, but when the artists and scientists worked together and paired for this work, it was only then that those mysteries were brought alive. With the advent of the

technology and astronomy, there was an advent in the style of art also as technology encouraged the artist and other people to look deeper into the cosmos. But for most of the people even after the advancement of the technology universe is still a mystery to be solved. Even though the artists started to depict the universe in their work long before in the form of visual arts but it became a lot more realistic with the advancement of technology, setting a precedent for the more detailed depiction of space art.

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