

**INTERDEPENDENCE AND BIOLOGICAL INTERACTION OF SPECIES
AS ALLIES-A CALL FOR IMPROVED COHABITATION**

BY

**VICTORY EBERECHUKWU CHUKWUMA
ART1800695**

**UNIVERSITY OF BENIN
BENIN CITY**

SEPTEMBER, 2023

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**A PROJECT WRITTEN IN THE DEPARTMENT OF FINE AND APPLIED
ARTS, FACULTY OF ENVIRONMENTAL SCIENCES, UNIVERSITY OF
BENIN, BENIN CITY, IN PARTIAL FULFILMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE DEGREE
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SEPTEMBER, 2023

CERTIFICATION

This is to certify that this project work was carried out by Victory Eberechukwu Chukwuma with MAT NO: ART1800695 of the Department Of Fine And Applied Arts, University of Benin.

Mrs Esther Esizimotor
Project Supervisor

Date

Dr. Kennedy J. Eweka
Head of Department

Date

Prof. Clifford Nwanna
External Supervisor

Date

DEDICATION

This project is Dedicated to the sustenance of nature, its longevity and posterity. To my mother, Mrs. Patricia Chukwuma, and brother Mr. Peace Chukwuma, who have been pillars of immense support all through. And above all, to God Almighty who makes all things possible.

In loving memory of Lt Mr. Linus U. Chukwuma, my father who may have found his place as one of the species and earthling.

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Ad Majorem Dei Gloriam (to the greater glory of God) for making this project a successful reality.

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ABSTRACT

The interdependence and biological interaction of species as allies-a call for improved cohabitation (symbiosis) is an attempt to effect closer attention of the relationship which exists between species such as man, plants and animals. It emphasises the interrelative roles of species for the sustenance of each other, against actions that would lead to a collective suffering and threat of possible extinction for the community. In our world today, we are plagued with increasing need for extension of habitation prompted by the advent of the new medicine "technology" which fires up the unsatisfied tastes of man, wanting artificial comfort at all costs, hereby displacing his neighbour species from their own natural breeding environment. And to this effect, nature, being the victims of devaluation turns hostile towards man, dividing the world by two 'the predator and the prey'.

"Allies" is a term which seeks to align (or realign) species to a more natural and safer life of cohabitation, seeking respect for individual habitation to promote general thriving of the elements of nature. This objectives is achieved in the exploration of acrylic colours on a canvas measuring 5 x 6 feet to depict the idea as a practice-based research methodology.

The painting featured the primates of life, man and ape, at various ends of their distinct breeding environment, sharing a common tree branch stemming from the wig of matter nature was a successful and laudable result that nature have regained alignment and is safely cohabited.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Interdependence and interaction are two cognitive factors of sustenance and cohabitation within our world of distinct species (biodiversity). While "interdependence" motions us to the values of close relationship with our neighbour species and nature at large, "interaction" emphasises the exchange and effects of the relations between species. It suggests the promotion and posterity of the biological life cycle.

But, sadly, our world has an ever increasing need for extension and dominance, gingerly seduced with the advent of technology which has an uneven impart to other species in their natural habitat. And this impart returns with retribution for the entire body of existence, leading to death, sickness, infertility, and extinction at most.

"Biodiversity is essential for the processes that support all life on earth, including humans. Without a wide range of animals, plants and microorganisms, we cannot have healthy ecosystems."(The Royal Society, 2023).

1.2 Statement of the Problem:

The world as always has existed for the purpose of cohabitation, and the human primates (man) who have advanced in civilisation and technology oppresses and threatens the existence of his neighbour species to satisfy his quest for extension and

knowledge. Man's activities have led to the devaluation of the soil, eg, bush burning, flooding, waste dumping, plastic littering etc; even cases of animal brutality , deforestation, pollution, oil spillage etc , and even unhealthy research and release of toxic substances and organisms to the environment have led to a spread of viruses and disease which threatens the existence of man , animals and even plants e.g corona virus, among many others. Man's insatiable nature has moved him to invent new methods of satisfying himself not regarding the dangers his actions would cause for the species around him.

This study seeks to shed light on the vagueness of the excesses of man to the detriment of nature which exists to accommodate and survive him. To inform them of the possible retribution of his excesses in future, which is already taking a toll on our world through climatic conditions like global warming, soil infertility, extinction of livestock, pollution of water which leads to mass mortality of aquatic life, toxic gases in the air which causes illness for man and animals alike, flooding, poverty, among others. Stressing the need for the improved habit of respecting nature at its natural state against devaluation, even as man basks in the benefits of civilisation and advancement.

1.3 Objectives of the Study

The aim of this study is to educate the (Nigerian) society of the need for management of the environment in respect for the habitation of other neighbour species that exist with us.

1. To achieve tonal values in creating a 3- dimensional effect (painting in the round) upon a 2-dimesional surface.
2. To achieve artistically the aesthetics of nature in it natural state as well as elements that consist of the painting in a realistic approach through a painting medium (acrylic paint).
3. To deliver the project progressively and precisely in a 4 feet by 6 feet canvas using acrylic paint medium.

1.4 Significance of the Study

The study is significant for the following reasons:

1. This study will encourage young and older people to appreciate and practice the core conservational values of nature and build positive responsibility for the environment.
2. Artists will be able to define nature properly in it's most refined and aesthetic state in future, using the study as reference.
3. It would help speak volumes of the need for cohabitation of species to limit environmental issues that threatens the existence of the elements of nature.

4. It would guide prospective researches on issues bordering on the environment and need for cohabitation.

1.5 Scope of the Study:

This study is delimited to our country Nigeria . The scope of the research includes:

- (1) Representation of "Allies" in pictorial composition.
- (2) The use of acrylic colours to achieve tonal values for the creation of a 3 - dimensional value.
- (3) Execution of the painting " Allies" on a 4 by 6 feet canvas using acrylic paint.

1.6 Definition of Terms:

ALLIES: The word "ally" from the Merriam Webster dictionary is defined as "one that is associated with another as a helper", or a person or group that provides assistance and support in an ongoing effort, activity, or struggle. This can be further explicated as people or identities who relate for a common purpose, and as such to this study, man, plants and animals are the main allies for the continual sustenance of nature. (www.Meriamwebster.com~ally).

SYMBIOSIS: The word ' symbiosis' by Merriam Webster has the following meanings:

- (1) The living together in more or less intimate association or close Union of two dissimilar organisms (as in parasitism or commensalism)

(2) A cooperative relationship (as between two persons or groups) @
www.meriamwebster.com ~symbiosis.

Mutualism: "mutualism" is defined as an interaction between individuals of different species that results in positive effects on per capita reproduction and survival of the interacting populations. (www.sciencedirect.com)

Amenalism: This is the association between organisms of two different species in which one is inhibited or destroyed and the other is unaffected. (www.sciencedirect.com)

Parasitism: This is a relationship between two species in which one benefits at the expense of the other, sometimes without killing the host organisms. (www.sciencedirect.com)

CHAPTER TWO

LITERATURE REVIEW

This chapter deals with the review of related literature .The review was carried out under the following :

- Concept of biological interaction
- Reduction of human impacts and excesses on species and natural systems
- Biodiversity
- Extinction
- Speciecism
- Zoophilia
- Pictorial composition
- Element of Art
- Principle of Art
- Color
- Draughtsmanship

2.1 Concept of Biological Interaction

In ecological study, it is said that a biological interaction is the effect that a pair of organisms living together in a community have on each other. They can be either of the same species (intraspecific interaction) or of different species (interspecific

interaction). These effects may be short term or long-term, both often strongly influence the adaptation and evolution of the species involved.

Biological interactions range from mutualism (beneficial to both partners), to Competition, (harmful to both partners). And then, that Interactions can be direct when physical contact is established or indirect through intermediaries such as shared resources, territories, ecological services, metabolic wastes, toxins or growth inhibitors. This type of relationship can be shown by net effect based on individual effects on both organisms arising out of the relationship. (Ecology @wikipedia.com)

2.2 Reduction of human impacts and excesses on species and natural systems:

"The recent Paris accord on global climate change is a key step in acknowledging biophysical limits to human actions, but the challenge of respecting the biosphere's ecological limits remains underrated. We analyse how respecting these limits squarely conflicts with an economy centred on growth and technology to mitigate environmental stress. The need to mitigate human impacts on species and natural systems has made conservation science a major multidisciplinary discipline. Society and conservation science have tried unsuccessfully to resolve this need within the growth paradigm. We show that its resolution increasingly demands profound shifts in societal values. Our aim is to identify the nature of these necessary shifts and to explore how they define future paths for conservation science.

Increasing human population interacts with local and global environments to deplete biodiversity and resources humans depend on, thus challenging societal values centered on growth and relying on technology to decrease environmental stress. Although the need to address the environmental crisis, central to conservation science, generated greener versions of the growth pattern, we need fundamental shifts in values that ensure transition from a growth-centered society to one that acknowledges biophysical limits and centered on human well-being and biodiversity conservation. We discuss the role conservation science can play in this transformation, which poses ethical challenges and obstacles. We analyze how conservation and economics can achieve better consonance, the extent to which technology should be part of the solution, and difficulties the “new conservation science” has generated. An expanded ambition for conservation science should reconcile day-to-day action within the current context with uncompromising, explicit advocacy for radical transitions in core attitudes and processes that govern our interactions with the biosphere. A widening of its focus to understand better the interconnectedness between human well-being and acknowledgment of the limits of an ecologically functional and diverse planet will need to integrate ecological and social sciences better. Although ecology can highlight limits to growth and consequences of ignoring them, social sciences are necessary to diagnose societal mechanisms at work, how to correct them, and potential drivers of social change." (Martin, Maris, & Simberloff,2016)

2.3 Biodiversity

The term "Biodiversity" refers to the adequate distinction which exist amongst species . It encompasses the wide range of plants, animals, (flora and fauna) and organism that exist in thier own distinct kinds and habitats.

Management of the issues of Biodiversity:

It has been discovered over the years through research that man impacts the planet's biodiversity in more than one way, either consciously or accidentally. The biggest threat to biodiversity to date has been the way humans have reshaped natural habitats for the purpose of extension for agricultural space, or to obtain natural resources, but as climate change rapidly grows unevenly it will have an increasing impact on ecosystems. And to this effect, nature is left to bear the brunt of hardships and dire constraints in its entirety.

The most prevalent and clear cause of biodiversity loss is the rapid change of land utility (primarily for large-scale food production) which drives an estimated 30% of biodiversity decline globally. Second is overexploitation (overfishing, overhunting and overharvesting) for things like food, medicines and timber which drives around 20%. Climate change is the third most significant direct driver of biodiversity loss, which together with pollution accounts for 14%. Invasive alien species account for 11%.

Some environmental factors predict that climate change will become the primary cause of biodiversity retreat in the coming years. . The impact of all the main factors of biodiversity loss is increasing hastily and, as a consequence, so is the pace of biodiversity decrease. The growing need for natural resources due to the increasing human population, more rapidly increasing overall consumption rates has meant that more natural habitat are being used for agriculture, mining, industrial infrastructure and urban areas.

Key areas of human activity causing biodiversity loss include:

- (1) **Deforestation:** Tropical rainforests are particularly rich in biodiversity and are being destroyed. This destruction will eventually lead to scarcity of the properties that species need to survive. The unregulated cutting down of trees for the purpose of utility (for man) have further displaced species who depend on the trees for the sustenance of their kind e.g birds, monkeys etc.
- (2) **Habitat loss:** Through increasing and uncontrollable encroachment such as that caused by urban extension, species are sentenced to banishment from their breeding space and natural environment. As civilisation spreads and technology increases, man has moved from the residential areas into the wild to fashion a desirable comfort of shelter for himself. This comfort per se has hereby caused the exile of species who were the original occupants of the wild .

- (3) **Pollution:** pollution associated with widespread pesticide use and overuse of fertiliser and strong chemicals which are 6 and 12 times greater than they were before 1961 respectively. These chemicals which enhances the quality of agriculture or assists against the factors that threatens it inturn puts other species in the environment at risk of possible death and extinction.

Pollution from plastic waste has a long-term effect on biodiversity and an example is the pollution of the water bed and aquatic life , where toxic plastic wastes are washed into the river , e.g from human activities on beaches , and causes harm to the life underwater e.g swallowing of plastics by fishes which results in eventual death

- (4) **Agriculture:** It is estimated that half of the species at risk are threatened by agriculture. Since agriculture deals with the production of plants and livestock , it is supposedly seen as a soothing practice for all species , but this is not totally the truth. The progress agriculture has made in times is weighed by the massive amount of livestock and species sacrificed .One practice of agriculture is bush burning, and this inturn consumes the lives within the environment (their natural breed) and saps off the nutrients from the soil. It has made the community inhabitable for species other than man. For example, what would a grass cutter think of man (farmer) who is preparing the land for farming , setting it ablaze and hereby destroying the homes and its family even?

- (5) **Water usage:** It is relatable in these times that dams and irrigation has reduced water channel systems in their natural forms. Now save for technology , man has been able to harness the gift of water to his own, channeling it through industrial pipes and fittings to soothe himself. These channels are mainly from natural water systems like rivers, ponds, lakes, oceans etc which suppose to serve the entire community. But for the "selfishness" of man, water bodies have been displaced or oppressed into a life of subjection to an uncomfortable aquatic environment.
- (6) **Hunting:** The over-exploitation of species such as in wild capture fisheries but also for wildlife trade. Poaching has been one of the maltreatment of nature in the wild life , and consistent hunting causes scarcity of resources and extinction of livestock . And that in turn affects man by ways of scarcity of means of consumption.
- (7) **Climate change:** Issues of global warming and changing rainfall patterns has long altered species diversity and number of class of species previously existing in our world. And the underlying water and chemical cycles which define current ecosystems has become more toxic to the longevity of species over time, thanks to the unchecked technology of man. he Royal Society, (2023).

2.4 Extinction:

"In the Human Actions and the Sixth Mass Extinction it was reviewed that Over 99 % of all species that ever lived on Earth have gone extinct. Five mass extinctions are recorded in the fossil record. They were caused by major geologic and climatic events. Evidence shows that a sixth mass extinction is occurring now. Unlike previous mass extinctions, the sixth extinction is due to human actions.

Some scientists consider the sixth extinction to have begun with early hominids during the Pleistocene. They are blamed for over-killing big mammals such as mammoths. Since then, human actions have had an ever greater impact on other species. The present rate of extinction is between 100 and 100,000 species per year. In 100 years, we could lose more than half of Earth's remaining species."

Causes of Extinction

The single biggest cause of extinction today is habitat loss. Agriculture, forestry, mining, and urbanization have disturbed or destroyed more than half of Earth's land area. In the U.S., for example, more than 99 percent of tall-grass prairies have been lost. Other causes of extinction today include:

- 1) Exotic species introduced by humans into new habitats. They may carry disease, prey on native species, and disrupt food webs. Often, they can out-compete native species because they lack local predators.
- 2) Over-harvesting of fish, trees, and other organisms. This threatens their survival and the survival of species that depend on them.
- 3) Global climate change, largely due to the burning of fossil fuels. This is raising Earth's air and ocean temperatures. It is also raising sea levels. These changes threaten many species.
- 4) Pollution, which adds chemicals, heat, and noise to the environment beyond its capacity to absorb them. This causes widespread harm to organisms.
- 5) Human overpopulation, which is crowding out other species. It also makes all the other causes of extinction worse.

Effects of Extinction

The results of a study released in the summer of 2011 have shown that the decline in the numbers of large predators like sharks, lions and wolves is disrupting Earth's ecosystem in all kinds of unusual ways. The study, conducted by scientists from 22 different institutions in six countries, confirmed the sixth mass extinction. The study states that this mass extinction differs from previous ones because it is entirely driven by human activity through changes in land use, climate, pollution, hunting, fishing and

poaching. The effects of the loss of these large predators can be seen in the oceans and on land.

Fewer cougars in the western US state of Utah led to an explosion of the deer population. The deer ate more vegetation, which altered the path of local streams and lowered overall biodiversity. In Africa, where lions and leopards are being lost to poachers, there is a surge in the number of olive baboons, who are transferring intestinal parasites to humans living nearby.

In the oceans, industrial whaling led a change in the diets of killer whales, who eat more sea lions, seals, and otters and have dramatically lowered the population counts of those species. The study concludes that the loss of big predators has likely driven many of the pandemics, population collapses and ecosystem shifts the Earth has seen in recent centuries. (Simberloff,1989)

2.5 Speciecism

"This is a term used in philosophy regarding the treatment of individuals of different species. The term has several different definitions within the relevant literature. A common element of most definitions is that speciesism involves treating members of one species as morally more important than members of other species in the context of their similar interests. Some sources specifically define speciesism as discrimination or unjustified treatment based on an individual's species membership, while other sources define it as differential treatment without regard to whether the treatment is

justified or not. Richard Ryder, who coined the term, defined it as "a prejudice or attitude of bias in favour of the interests of members of one's own species and against those of members of other species." Speciesism results in the belief that humans have the right to use non-human animals, which scholars say is pervasive in the modern society. Studies increasingly suggest that people who support animal exploitation also tend to endorse racist, sexist, and other prejudicial views, which furthers the beliefs in human supremacy and group dominance to justify systems of inequality and oppression. Philosophers argue that the differential treatment of cows and dogs is an example of speciesism.

Also, Philosophers have argued that there is a normative relationship between speciesism and other prejudices such as racism, sexism, homophobia and so forth. As a term, speciesism first appeared during a protest against animal experimentation in 1970. Philosophers and animal rights advocates state that speciesism plays a role in the animal–industrial complex, including in the practice of factory farming, animal slaughter, blood sports (such as bullfighting and rodeos), the taking of animals' fur and skin, and experimentation on animals, as well as the refusal to help animals suffering in the wild due to natural processes and the categorization of certain animals as invasive, then killing them based on that classification. Ryder has even argued speciesism is a form of discrimination that constitutes a violation of the Golden Rule because it involves treating other beings differently to how they would want to be

treated because of the species that they belong to." (Horta, Singer, Wise, Francione, Joy, Nibert, Best & Newkirk, 2009)

2.6 Human-Animal marriage (Zoophilia?)

In many, if not most, jurisdictions, there is no legal precedent for marrying an animal, however; several individuals claim to have done so. In 1992, an American man named Mark Matthews married his horse. He wrote a memoir describing the concealment of his zoophilia from his Methodist family. In 2005, an American man ordained with the Universal Life Church married humans and their pets. A British woman who married her dog created the website marryyourpet.com after she became ordained to marry humans with their pets, and has performed about 100 ceremonies. In 2005, another British woman reportedly married a dolphin.

The Sudanese goat marriage incident made headlines in 2006, when a man was forced to marry a goat after being caught in a sexual interaction with it. Other reports of marriage include animals such as dogs, cats, frogs, and a dolphin. Other incidents of human animal relations took place in 2010, when 18-year-old Balinese man Ngurah Alit was found having sexual intercourse with a cow, who he claimed flirted with him. As part of a Pecaruan ritual, the man was forced to marry the animal. The ceremony was thought to cleanse the village of the immoral act of bestiality. The cow was

drowned in the ocean, while Alit's clothes were symbolically submerged in the sea as well.

In 2013, a Brazilian man reportedly married a goat in a Satanic church after his plan was rejected by his evangelical church. In 2014, a man reportedly married his pet dog at Chapel of Our Lady at the Presidio in San Francisco, which was an Episcopal chapel.

(B) MEXICAN MAYOR MARRIES ALLIGATOR LIKE REPTILE WHO HE CALLS PRINCESS GIRL:

In the month of June 2nd,2023 there was an occasion of human-animal marriage. A Mexican mayor that goes by the name Victor Hugo Sosa stated that he loves a reptile and it loved him too, and that he accepted responsibility out of their love for eachother. The mayor had married the female alligator like animal in a traditional ceremony which is believed to bring good fortune to his people . So in wedding the caiman reptile called "Alicia Adriana" he reenacted an ancestral ritual .

The Mexican local lore and tradition calls the creature the " princess girl" . At the event the people clapped and danced in San Pedro Teuamelula , a town of indigenous chontal people in Oaxaca state , southern Mexico , as they entered into " holy matrimony" .

Marriage between a man and a female caiman had taken place there for 230 years to commemorate the peace between the Chontal and Huave indigenous groups. So the Mayor who represents the Chontal king marries the reptile, which symbolises a Huave princess girl, therefore unifying the two communities.

Before the ceremony, the animal is carried from house to house so locals can hold her and dance. The reptile is worn a green skirt, a colourful hand embroidered tunic and a headdress of ribbons and sequins to make her come off as a well decorated bride for wedding. Her snout is bound shut so there would not be any mishap during the wedding ceremony. And then, she is later dressed in a white bride's costume and taken to the local town hall for the wedding. (News.sky.com.Uk, 2023)

2.7 Pictorial Composition:

In painting, composition generally refers to how the parts of an image relates to each other to create a whole. This includes the placement of objects on the picture plane, the relationship of these objects to each other , and how both components contribute to the expressive content of the image . It deals with patterns, depths, curves, lines, frames, contrast, color, veiwpoint, negative space, filled space, foreground, background, shapes to make a total picture.

2.8 Element of Art:

There are seven main elements of art that artists can use to create their work. An element is an aspect of an artwork that, taken with other elements makes up the whole of a work. No art can be created without the use of at least one of these Elements, and most artists use many or all of them when completing a piece. The seven elements of art are:

Line, Shape, Space, Value, Form, Texture and Color. (Fineart ~Wikipedia) Elements of art are basically the necessary features to be caught by the perceiver of an art piece. It is like the description given to an artwork .The elements are distinctively used by the artist to soothe their expectations on the work they create.

2.9 Principle of Art

Principles are the basic laws guiding the artists when using the elements of art. It is the means an artist uses to organize elements within a work of art. They are:

Balance, Emphasis, Harmony, Movement, Pattern, Proportion, Repetition, Rhythm, Unity, and Variety. (Wikipedia) In art, there are several movements or means of expression like impressionism, abstraction, realism etc, and all of these movements all bear the principles of art according to their specifications. For example, Balance relates to the equity and relative settlement visible in a work of art. Harmony describes the relationship of elements of art over an art piece, for example, in painting, Harmony

is the adequate use of color in relation to tones seen in a painting. And movement describes the manner and attitude of the character(s) within a work of art etc.

2.10 Color

Color is the element of art that is produced when light, striking an object, is reflected back to the eye. Color has three main characteristics: Hue (red, green, blue, etc) Value (how light or dark it is) , and Intensity (how bright or dark it is). Colors can be described as warm (red, yellow) or cool (blue, gray) depending on which end of the color spectrum they fall. (Wikipedia).

Color is used to depict and describe a subject in art by an artist. Colors are further dissolved into values and tones or gradients to soothe the complexity of shades from the reference being worked on. For the paint artist, color is a basic tool to achieve his aim from a painting. Colors are of a number of variation, from the water colors, Acrylics, pastel chalks, textile ink, to the more popular oil color.

2.11 Draughtsmanship:

This is the ability to draw well or the art of drawing. Drawing, for an artist, is the preliminary step to the world of the arts. The better drawings one produces, the better artist he becomes. Drawing often starts with creating shapes with pencil or lid materials on paper, before extending to the use of paints and canvasses. So it is a first approach for any successful artist and this marks or weighs the efficiency of the artist

along his vocation . To reference the point above, an example of draughtmanship is sited in processes of project painting in chapter four, Plate 3.

CHAPTER THREE

METHODOLOGY

This chapter deals with the systematic method of research adopted in achieving the project. It is subdivided into the following categories:

- Subject matter
- Instrument for data collection
- Sample and sampling method
- Population of the study
- Description of the materials
- Procedure (studio production process)
- Description of method of visual Analysis

The design of this study is a practice-based research methodology. "Practice based " deals with the practical aspect of the research over a(sole) theoretical approach. It involves man-power or activity that leads to the final result of the research.

Subject Matter

Interdependence And Biological Interaction Of Species As Allies -A call for improved cohabitation.

Instrument For Data Collection

The methods of data collection includes science records , journals, news , and other electronic devices as cameras and the internet.

Sample And Sampling Technique

The sampling technique used is the simple random sampling technique.

Population Of The Study

My research sample captures the natural global element as Man, animals and plants canvassed in their breeding environment.

Description Of Materials

- (1) **Stretcher:** This is a wooden frame that serves as a base for stretching a canvas. It is usually made by fastening four edges together with binders, nails or staple guns.
- (2) **Canvas:** This is a durable (cloth)material suitable for painting, other than wood panels, papers or chipboards . It is what painters usually apply paint on in the studio.
- (3) **Staple gun:** This is a top made of light metal used to fasten canvas to a stretcher .within it has pins.

- (4) **Top bond glue:** This is an adhesive used in measured combination with emulsion paint for sizing a canvas in order to cover up pores to prevent paint leaking from behind the canvas.
- (5) **Emulsion paint:** This is a general household paint used for domestic room paintings. It is used in calculated quantity with the glue size for priming a canvas.
- (6) **Brushes:** These are basic painting sticks used for administering paint upon the canvas. It is made up of various sizes and shapes.
- (7) **Palette knife:** This is a tool, usually blunt, that is used for mixing and applying paint. It could be used instead of brushes to paint.
- (8) **Palette:** This is a tool with surface used for holding paints. It can be made of wood, ceramic, rubber, plastic or paper. It is also a base for mixing paints before application on the canvas.
- (9) **Easel:** This is a device upon which a canvas is placed for painting. It is made of either wood, steel or iron.
- (10) **Rag:** This is a piece of cloth material used in cleaning paint brushes after a paint session.

CHAPTER FOUR

PROCEDURE (STUDIO PRODUCTION PROCESS)

This is the studio production process and it deals with the detailed pictorial description of the stages of carrying out the work .

STAGE 1: Preparing The Painting Ground

Step 1: Plaining of the stretcher (chassis): This is when the edges of the wooden frame is smoothed with a sand paper to ensure a smooth plain for the canvas .

Step 2: Stretching of the canvas: The stretcher used in executing this project is 4 feet by 6 feet in measurement. The canvas is pulled from all four sides , and with the use of a staple gun , held tightly to the stretcher .

STAGE 2: Priming of the Stretched Canvas

Step 1: Mixing the glue and emulsion in the ratio of 4:2 to ensure a well toned ground for painting .

Step 2: Sprinkling of water over the surface: There was a combination of top bond glue and little water on the surface . This will protect it from changes in the environment and also help regulate absorbency. Also, it will help to tighten the canvas and stretch areas that wobble.

Step 3: Drying of the prepared ground (canvas) .

STAGE 3: Making the composition sketch

The composition sketch for the project was made for effective placement of the figures on the canvas. From the sketch, modifications were made and it encouraged confidence through the painting process.

Step 1: Transferring the sketch from paper to the canvas .

Step 2: combining the composition with more sketches that enhances the original idea.

STAGE 4: Painting

This was done in great diligence and confidence from the sketch, as colours were applied in their tonal values and gradients in order to achieve a successful painting. This was the under painting which served as a base for the final detail.

Step 1: Breaking of colours in their values (from dark to light). This was done on the palette with acrylic colour medium.

Step 2: Application of colours on canvas. This step involves direct lifting of the paint to the canvas with the use of a brush to make the under painting .

Step 3: Layering: This involves making the painting in layers , building the structure of the idea already sketched now with the use of paint to progressively bring out the idea in its brilliance .

STAGE 5: Detailing

Here, the painting is given more definition. Detailing modifies parts of the painting to give it a realistic appearance before the perceiver. Expression of forms and facial features are captured here.

STAGE 6: Finishing

This stage involves the final detailing of the painting. It deals with general emphasis or choiced effects on the painting.



Plate 1: Stretching of the canvas
Photography by Chukwuma Victory Eberechukwu

Stage 1: Stretching of canvas: The stretcher used in executing this project is 4 by 6 feet in measurement. The canvas is pulled from all sides and with the use of a gun tackler, it is held together to the stretcher.



Plate 2: Priming the stretched canvas
Photography by Chukwuma Victory Eberchukwu



Plate 3: Making the composition sketch.
Photography by Chukwuma Victory Eberchukwu

Stage 2: Priming the stretched canvas: This involves mixing the top bond glue and water and white emulsion paint on the surface. This protects it from the environmental influences and helps the colors stand out.

Stage 3: Making the composition sketch: The composition sketch was made for effective ordering of the figures on the canvas. With that, the idea of the painting is set for further layers. This stage helps to avoid potential problems before painting.

Stage 4: This stage involves a preliminary definition of idea with the use of acrylic paint medium. Layers are placed upon layers to bring out a defining representation of Allies.



Plate 4: Painting

Photography by Chukwuma Victory Eberechukwu

Stage 5: Detailing: Here, the painting is given strong definition. Detailing makes important parts of the painting stand out . This stage gives the perceiver clear perception of what the artist had to portray. Facial expressions, folds and attitudes are defined.



Plate 6: Finishing
Photography by Chukwuma victory Eberchukwu

Stage 5: Finishing: This stage involves the final layout of the painting . All definitions of the painting are perfected at this point. The artist's idea is now in full recognition to the perceivers.

CRITIQUE

A critique was carried out as follows to evaluate the project:

- PROJECT TITLE
- MEDIUM
- CONCEPT
- DRAUGHTSMANSHIP
- TECHNIQUE
- COLOUR
- STYLE
- ANALYSIS

- (1) **PROJECT TITLE:** Interdependence And Biological Interaction Of Species
As Allies -A call for improved cohabitation.
- (2) **MEDIUM:** Medium adopted was Acrylics on canvas and the size of the
project is 4 by 6 feet.
- (3) **CONCEPT:** The idea behind this painting is to depict visually the action of
alignment between species, featuring man and Ape as primates of the
Animalia.
- (4) **DRAUGHTSMANSHIP:** Using a pen, preliminary sketches were made
which aided the composition of the subject matter.
- (5) **TECHNIQUE:** Realism and surrealism were techniques applied on the project.

- (6) **COLOURS:** The painting has a broad distribution of yellows and reds, with a good portion of greens and blacks. It takes the natural colours of sunset and that of the woods.
- (7) **STYLE:** The painting expresses and emphasises both realism and surrealism.
- (8) **ANALYSIS:** The painting depicts the alignment between species of nature in the civilised and natural world, and a pact that guides them.

THE ARTISTIC ELEMENTS

- **Man and chimpanzee:** since scientifically proven that man shares 99% of genomes with the afro chimpanzee, and they being the primates of the Animalia, the artist featured them at the opposite sides of the painting holding a branch sprouting from mother nature, to symbolise "alignment" with the civilised human and the natural animal world.
- **Old fierce smiling woman:** She symbolises mother nature, as nature is seen to be the oldest entity of life, compared to technology. She bears branches and leaves sprouting from her head of which her branch is shared by the primates.
- **Background colours:** This is a "red evening" (sunset) colour which rises from the south of the canvas and darkens on the east where more natural and unadulterated life circle breed.

- **Light house and boats:** The lighthouse expresses a beacon of hope for the natural world, and also stands as an emblem of equality (and pact) in combination with the native boats in disguise of the scale of equality.
- **The Animal-human relativity:** This is represented with the accounts of relationship between man and animals in the painting.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the summary, conclusion and recommendations.

Summary

This project 'Allies' depicts the alignment of species of nature from the civilised to the more natural world. It draws us back to the beauty and health of the natural and unadulterated world as compared with that of prevalent civilisation which threatens biological existence directly or indirectly. It encourages a sense of responsibility for the environment which we live in obedience to the conservative ethics and values which would lead to the overall posterity of species and sustenance of nature and biodiversity at large.

Conclusion

This project was carried out to create a vivid and expressive representation of the research in translating contents useful as a visual form of awareness to the general public to recognise the values of cohabitation and alignment of species featuring the primates man and Ape as central objects in exploring a realistic approach in painting. This will also influence prospective artists to use their creative abilities to create more art pieces which would speak volumes of the values of nature and interdependence of species within the environment. The subject portrayed in the 4 by 6 feet canvas

presents the primates (man and Ape) in relation with other elements which consists mother nature featured alongside.

The activities of man should be censored by a legal system which would serve to check the excesses against nature, in a bid to make the world habitable not just for humans but for all elements that makes up nature.

Recommendations

- (1) To inform the society of the importance of preserving nature at its natural state, against destroying it in the advent of technology through visual means; Technology should in fact be used to improve the life cycle of nature rather than be a parasite against it to it's detriment.
- (2) To enact conservation laws, and frequently alert the society on the need for 'preserving nature and it's resources', advertising the adverse effects of 'maltreating' nature and mismanagement of its resources which has led to environmental issues of global warming, oil spillage, wild- domestic attacks, volcanic eruption, livestock sickness and death ,etc .
- (3) **To bring nature and it's Goodwill to the fore, so that the society can enjoy the friendliness and benefits of nature alongside its wealth and gifts such as:** longer life span for man and animals, soil fertility, good crops, temperate climate, health, wealth and even friendlier relationship with the wild .

4. **To the Artist :** This study would help to alert the consciousness of other artists to use their creative abilities to create art pieces that would speak expressively of the norms of preserving nature, against the prevalent unconservational practices .
5. **To the Perceiver:** This study would help to project to the viewing public the prevailing dangers associated with mismanagement of the environment (and nature) with the expectation of taking conservative responsibility for nature.
6. **To Government and NGOs:** The study would serve as a vital advertising tool procuring the adverse effects of the mismanagement of nature and an uncontrolled infiltration of natural habitation by the advent of 'harmful' civilisation. So the government would be informed of these dangers and therefore enact conservation laws and restriction on illegal and inhumane practices against nature and its elements. While NGO bodies are to continually alert the society via campaigns, TV broadcast, radio shows, door to door information, etc, of the laws enacted and to try in convincing them of the benefits of obeying and practising the norms associated with the law of conservation against devaluation.

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