UNIVERSITY OF NAIROBI SCHOOL OF THE ARTS AND DESIGN

Transformation of African rock art

Fundamentals and element of African rock art form in the development of culture and communication

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DECLARATION

This project is my original work and it has not been submitted to any other University for the award of a degree.

Sign (ZR).

Date 30, 11, 2011

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B51/71978/08

The project has been submitted for examination with my approval as the university supervisor

Sign

John Stephens Mayienga

Date 30.11.2011

DEDICATION

I wish to give thanks and sincere gratitude to my beloved family for their consideration and confidence in me in the course of my studies.

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CHAPER 1: BACKGROUND

1.1 Introduction:

The slowly disappearing cultural heritage which presents in cultural activities in Kenyan rock art is a worrying trend.

The examples that exist in the rock art raises challenges to scholars and historians who may want to stress the need to preserve the special practices which can act as a resource for preservation of cultural heritage.

It is said that most of the African culture as practised before the coming of the white man has disappeared and that whatever little that remains is slowly getting ignored and forgotten. African traditional practices, rituals, ceremonies have either been dismissed as primitive, barbaric and uncouth or have been relegated and replaced by new order from the West. Western religion, the precursor of colonialism dismissed African traditional practices as satanic and a new order was put in place. Education which had been passed on through oral tradition and socialization process was replaced by formal structures in exotic language. In time foreign cuisines had largely replaced African traditional dishes. Christianity assumed a leading role in civilizing the natives and keeping them away from any other form of worship. Dictatorship was practised in governance and in so doing cultural practices of indigenous peoples of Africa in general and Kenya in particular were thwarted and destroyed.

The earliest of Africa's remaining rock art (some may have disappeared long ago, destroyed by sun, wind, and rain) is very old, perhaps dating back 12,000 years, and may turn out to be much older. It is almost certainly the earliest African form of human communication left to us today and is possibly more graphic than any written text could be.

Archaeological excavations can tell us a certain amount about past lifestyles, such as when people lived, what they made, ate, and even traded, whether they owned livestock, moved seasonally, and how they buried their dead; but we also need to learn about the other side of the coin, about their social activities, cognitive systems, esoteric and abstract thoughts, perceptions of morality, and concepts of reality, the very things that give our lives meaning. Archaeology tells us little about how they perceived their worlds. Rock art is just about all that remains to give us insight into the earliest ways in which our ancestors thought and survived in a world in which they were merely a part of nature, not above it as we see ourselves today. The rock art informs us how imagery was used to portray abstract interpretations of reality and, thus, how it became the basis from which writing evolved. These artists were our ancestors, and from their skills and cognitive patterns our own were born. It may be only through a better understanding of the origins and early development of those cognitive systems that we will fully appreciate our modern perceptions of what we believe to be reality.

One area in which we have already felt the impact of this art, which was unrestrained by the modern age of technology, is in the new life and impetus it gave to European art in the early twentieth century (along with Oceanic and Native American arts), freeing it from bonds of conventionality and thereby influencing modernism. Much of this art, the powerful masks, statuettes, and ornamentations of the sub-Sahara, must derive from central Saharan rock art, which was carried south as the desert dried up and people moved to less arid environments. We have only to look at the rock art in southern Algeria to see the antecedents of sub-Saharan art reflected in the paintings of figures and masks painted on rock.

These incredible rock art paintings and engravings have, in general, not made a great impression on Africa's white population, which often has viewed them merely as the work of "primitive" peoples. Although settler governments in the early twentieth century passed laws protecting rock art from theft and vandalism, they were rarely

enforced. African archaeologists were initially reluctant to incorporate rock art into their mainstream studies. Until the 1960s,rock art had found little or no place in the art history courses of South Africa's universities, nor had much of it seen the inside of that country's art galleries. A controversial and remarkable South African artist was one of the first to recognize and embrace rock art for what it is, when he writes and says "Have I not been proud when some masterpiece of ancient art spoke to me of new discovered beauty? Here indeed is one of our richest heritages, for South Africa possesses a splendid panoramic history of art." Others, such as Cecil Skotnes, have followed his lead, but only in fairly recent years. It is only since the 1950s that African rock art has begun to find its place alongside the Paleolithic cave art of Europe, while its uniqueness and value are still not fully recognized by many African governments.

Rock art reminds us, in this modern world where technology tends to rule, that we are in danger of losing our once uninhibited perspective of the natural world around us, as well as our ability to express that world in terms unalloyed by modern arrogance. We should remember that rock art was created by peoples with no knowledge of metallurgy, peoples who made tools of bone and stone yet who employed graphic techniques for expressing what they considered to be the essence of things rather than obvious physical form.

For the art itself, time is running out. Mining, the spread of agriculture, and the construction of roads and dams all take their toll. Tourism expands every year and more people are visiting the Sahara and southern Africa's visitors to the rock art increase, so do threats to its future existence, people touch the paintings, run their hands down engraved lines, douse paintings with water to make them more visible, scrawl graffiti across them and add bawdy details, steal engravings on loose stones, chop paintings from the rock face, and scramble over engraved panels to see those above. The sheer volume of human visitors will eventually impact the very

¹ Walter Battista The Artists of the Rocks writing in 1948

environments where the art occurs. We would like to see governments put more money into maintaining their archaeological sites: they could become major tourist attractions tomorrow and next week is lost forever.

1.2 Overview:

We are already aware that prior to the advent of writing, the only way to show how people lived in the past is clearly presented in rock art. Incidentally this phenomenon manifested concertedly across the world as if by telepathy thus presenting an interesting par value scenario devoid of such relative clichés like primitivity or civilization.

Registered rock images whether at Lascaux in France or Altamira in Spain show common techniques, use more or less same tools and materials on similar drawing and painting surfaces, the rock. Preservations used by the prehistoric artist which have helped protect these works to date continue to confound modern technology.

The place value of rock art and the role of its creator the artist raise basic questions on reasons for its execution. Certainly it must have not been sheer art for art's sake. It wasn't for meer sport. A purpose must have inspired it. Given its meticulousness and precision, one wonders whether this was a primitive art or manifestation not only of a personal but also a unifying, universal standard for these artists.

Considering the influence prehistoric creative works have hard on reshaping modern art and thinking one wants to question the western classification of these unique records of communication as primitive.

The foregoing questions have raised the need to conduct a research project based on the general objective to provoke and challenge Kenya to present the environment for culture, development and posterity. In addition, the project intends to unravel the fundamentals that inspired the creation of Kenya's rock art, the use and application of the elements of art and design in the rock drawing and painting, draw a comparative between Kenyan rock style and that of other parts of Africa and elsewhere especially China and finally to postulate challenges for sustained environment preservation and inherent benefits for cultural development.

Archeological studies and findings have revealed Kenya as the cradle of humanity. So far, no record to challenge the claim that the oldest male human fossil was found in Kenya. Man must have lived a simple life full of challenges inherent of a hostile environment. Forests must have existed in their prime with many wild animals. There must have been abundant rainfall which, together with the hot tropical sun should have created wet, humid condition for a tricky hunt. Hunger must have inspired the hunter to kill the animal for ford. A habit formed into a wish to capture and to control the animal by capturing its spirit through drawing its physical image. Latent creativity gave rise to innovation. Soon, a range of colored earths were found and ground into powder. Black was developed from charcoal and grey was concocted from ashes. These were then mixed with animal fat to create paste for drawing and painting. Using fingers or bristles made from grasses or animal hair, suitably identified rock surfaces or wall of caves enabled the prehistoric artist to draw and paint the hunted animals meticulously from memory. The spirit of the hunted animal had not only been kept captive on the cave wall but had also been made visible to tell the story about hunting experience and exploits.

Creation of these works by gifted individuals had not only been the work of one artist on behalf of the entire settlement but was also an intellectual instrument which encouraged discussion or storytelling, accounts of exploits and the history of the community. It played a creative role not merely in general education but more specifically in the development of sophisticated language, being capable of community. It is likely too that cave art promoted the birth of a religious spirit. There is nothing in these art works as such to suggest religious purpose. But the conditions,

in which they were viewed, flickering torches bringing to life these fine representations with their deep colours out of the surrendering darkness, induced a sense of wonder and reverence. And as the people marveled at the way artistic skills could recreate nature, they became aware of the even greater miracle of nature itself in the vast world beyond the cave, and asked themselves: who could it be who created that? Thus cave art was thought-provoking and the thoughts it provoked provided the impetus for men and women to lay the foundations of theories of life, and of the universe. Precisely because of its non-material, its metaphysical qualities, art became the father of religion.

All these observations make for a strong case in the argument that nothing much has changed right from the beginnings of human endeavour at development. Man's endeavour at development has surely benefited from changes that have taken place on the historical perspective where the artist has continued to play an enviable creative role. Modern technology communicates much better beyond the word and in so doing helps perpetuate the roleplay of signs and symbols as handmaidens of communication. Although the place value and role of art has nearly been taken for granted, creative thinkers should be brought on board and consulted on the way forward for technological development agenda and strategies. After all is said and done, this project strongly recommends for recognition to be made of the artist's untapped talent as latent resources of creative thinking.

1.3 Problem statement:

In order to make useful study of Kenya rock art as a resource of information of creative presentation of the life style of early people of this country, the art forms should be kept clean and distinct. Unfortunately this situation is increasingly being hampered by destruction and obliteration of rock art subject matter either by the elements: sun, rain and harsh winds or through maltreatment of surfaces by human and animal activity. Thus migratory occupancy of natural habitat in most parts of

Africa have interfered with innocent image of specific character and style of rock art

In addition, the study of Kenyan rock art is restricted in scattered sites which therefore suggests drawing comparative research of the same in neighboring countries and beyond, in order to get greater insight into materials, techniques, subject matter and processes of rock art product.

The demands of this project does not make it easy to travel to every part of Africa to get first hand information, only to realize that some rock art has been destroyed.

Certain factors relating to execution of rock art are observable as follows:

The identity of the artist

The problems presented by the rock art in any region are the interrelated issues of age and similar identity of the artists. The cave art itself can seldom be directly dated. Its age in years determined by any physical means is now available. But if the particular material culture is found associated with the same kind of rock art which is often true in many cases, it becomes fairly certain that both are the product of the same people.

Frequent superimposition of drawings

The problem is the internal evidence of the art for many which would fix absolute age. The relative ages of different style or technique, may also sometimes be established. In the case of paintings, artists, especially in South Africa, frequently superimposed their work in older paintings and study of such cases and observation of the obviously greater freshness have enabled some generalizations to be made regarding the order of appearance of the different styles and techniques.

Weathering

There are many factors which affect the rate of weathering of a petroglyph even on the same kind of rock: its angle to the horizontal, orientation to the sun, and original depth, among them. But where the conditions are the same, and especially where there are petroglyphs created at different periods on the same rock surfaces, comparative weathering is a useful guide.

CHAPTER 2: LITERATURE REVIEW

Four sources of literature on substance relevant to this project have been considered as providing useful backdrop to help draw a comparative analysis on similarities and or differences between African rock art style and subject matter as applied in Kenya and other parts of African and the world.

From research carried on "The Hunter's Vision- The Prehistoric Art of Zimbabwe," Peter Garlake submits that paintings are to be found wherever granites outcrop on the surface of the highveld plateau of the tropical African interior between the Zambezi and Limpopo river valleys. He says that the paintings and the granites are inextricably linked and adds that the granite hills provided shelter for the paintings, the artists and their communities. Granite soils and bedrock determine the vegetation and fauna of the region as well as affording vantage points from which hunters saw their game, the animals they painted. Granite is the setting for the paintings and the surface for which they were designed. The rocks form a unique landscape of immense antiquity which for many has an unmatched beauty and enchantment. Granite is a symbol of endurance and immutability; yet here, under a bleaching sun and exposure in season to violent storms, these ancient rocks have been cracked, stained and eroded by water and weather into strange patterns and shapes. Great cliff-girt masses seem elephantine in size, colour and texture, appearing unalterable yet worn, their heights revealing sponges of grass and soil enough for a few hardy trees and ancient pools of fresh water from which tiny trickles have cut channels deep into the rock surfaces. The flanks of many hills are hollowed into great open caves, always in deep, cool shadow2.

The granites of Zimbabwe are extremely hard and ancient rocks. Millions of years ago they rose in liquid form from the earth's centre and cooled and solidified far beneath

² "The Hunter's Vision- The Prehistoric Art of Zimbabwe" Peter Garlake British Museum Press 1995

the earth's surface. They have only been exposed through aeons of erosion of the softer soils and rocks that once covered them. As the bubbles of liquid granite cooled, they developed lines of stress and as the exposed granite weathered slowly on the earth's surface through the action of daily and seasonal temperature changes, expansion and contraction, it split and cracked along these lines of stress. Where the stress lines formed a grid of horizontal and vertical lines, the granite mass weathered to form the 'castle kopjes' and 'balancing rocks' that are such a feature of Zimbabwe's skylines. Boulders are sculpted to improbable shapes and piled one on another in absurd instability, deep tunnels leading between them. Elsewhere, the stress lines followed the surfaces of the original granite globules, and their exposed surfaces peeled away like an 'onion's skin' producing great bare 'domes' and 'whale backs'. Where there were fast-weathering inclusions in the granite, decay and flaking centred round these and gradually increased and enlarged to produce smooth, rounded, domed hollows, great caves within the granite mass.

A single bolt of lightning on water-soaked rock can bring tens of thousands of tons of stone crashing down the slopes of a granite dome. Fire can have a devastating and terrible effect on exposed granite, causing the entire surface to split, exfoliate and fall as thin, irregular slivers or spa IIs. Water running over a surface even as hard and impervious as granite will gradually dissolve salts in the rock, bring these to the surface, deposit them as it evaporates and stain the rock in every shade of pink, yellow and white. It can form transparent, translucent or opaque films over the surface and over paintings on it, sometimes helping to preserve them, sometimes partly or entirely obscuring them. The coarse sand soils of the granite do not encourage dense vegetation and though they are easily tilled, they are far from ideal for continuous farming. If they are left undisturbed, the abundant water from the hills nourishes woodland of tall trees. The granite cliffs are still home to nesting eagles and a host of lesser birds. Busy and inquisitive rock rabbits inhabit every crevice; baboons make the rocks echo with their barking challenges. Small antelope specially adapted to life in the hills can still sometimes be seen, as can pythons and other snakes that seek the

warmth of sun-drenched surfaces. Before the heat of full day brings rest, some hills are still alive with the noise of wild life. Below, the plains seem now to lie silent and lifeless, denuded, divided into small holdings and dotted with villages and people working their fields. But even within the last hundred years they were home to some of the richest herds of game, in variety and numbers, that the world has seen. Little more than a century ago, hunters could describe river banks black for many miles with herds of elephant and buffalo, or plains covered with herds of every variety of antelope, zebra, wildebeeste, giraffe and ostrich, all easily visible from a single vantage point.

This abundance of life is now only preserved in the paintings, which occur everywhere among the hills and on the boulders of the plain. They are small, fragile, often faint and fragmentary, but equally often seeming as' fresh as the day the artist drew his last brush stroke, the marks of its hairs still visible across the surface. They are concealed, undocumented, unprotected, indeed many are so unvisited and ignored that it seems as if no one has seen them since the last artist wandered away. Few local people today recognise any merit in these paintings; they are seen as the work of ghosts, marking places where spirits and ancestors wander. Many visitors consider them the scribblings of superstitious savages, unable and unfit to survive and rightly swept aside by the onward march of evolutionary progress. Their paintings are too simple, crude and impoverished to have anything to say or to be of any interest.

Certainly the paintings are the opposite of the great monuments of civilisations. They do not proclaim themselves with the bombast of majesty or military might, soar with the aspirations of temples, churches and cathedrals, or cloak death with the vanity of tombs. They have to be laboriously searched out; each discovery is unexpected and exciting. They are the work of people whose culture and way of life and whose perceptions of their world and the beliefs they developed to make sense of these, are entirely alien to us.

One of the most appealing qualities of the paintings is the fact that they still exist in the places where they were painted. However much of the country round them and its human and animal populations may have changed, the physical context is still essentially the same as it was when the artists were at work. They sat on the same stones, balanced on the same rocks as they painted, worked in the same light, and looked out over the same stunning views when they had finished. Unlike the art of almost every other culture, these paintings cannot be removed to galleries and museums, be given a price tag or become subject to the changing fashions of display. They cannot even be reproduced in the fullness of their colour or texture. Even the most meticulous copies in oil or watercolour on paper lose all veracity through using media and surfaces so different from those of the artists. Photographs give only very broad and general impressions of character at the expense of detail. Tracings and copies in black and white can bring out detail with clarity and serve many useful purposes but are more diagrams than facsimiles. Nothing can match the originals in their impact. This is art in the places for which it was created. And to experience it one must expend considerable time and effort, undergo the prolonged anticipation, the climbs and searches through shadowed woods and up slippery rock-strewn slopes, in fact share in the pilgrimage of the artists. This is an integral part of the experience of rock paintings.

D.W.Phillipson on "Prehistoric Rock Paintings and Engravings of Zambia." says that the rock art of Zambia has so far received little attention from archaeologists and art historians, yet the long sequence of artistic development which can be deciphered on the walls of Zambian caves and rockshelters is one of great interest and one which differs in several important respects from the better-known sequences of East Africa, South Africa, and Rhodesia. ³ To the student of traditional Zambian culture, as to the general public of this country, the prehistoric rock art is of particular interest as it is

³ "Prehistoric Rock Paintings and Engravings of Zambia." D.W.Phillipson. Livingstone Museum, Zambia National Monuments Commission. 1972

one of the oldest forms of artistic expression to have survived into modern times.

He classifies rock art into two distinct categories: engravings, either cut or pecked into the rock, as found in the Zambezi/Congo watershed country of the Solwezi and Mwinilunga Districts, and in the Zambezi Valley between Feira and Lake Kariba, with outlying sites around Lusaka and in the Luapula Valley:he says paintings on the other hand have a much wider distribution. They are totally absent from the Kalahari Sand country of western Zambia and there is only one site known in the Southern Province, where the rare rock surfaces are generally too friable and fragmented for painting. Over the rest of the country, however, paintings have been found in virtually all areas where suitable rock surfaces occur, and over 300 sites are now known. They are particularly common in the Kasama area and in the southern part of the Eastern Province.

Engravings are found both on the walls of rockshelters and on boulders or rock slabs in the open air. Paintings have only survived where they are protected from the elements in caves or rockshelters or under small rock overhangs. Unlike European palaeolithic paintings, the Zambian examples do not occur in deep, dark caves beyond the penetration of daylight. Fading and weathering have thus taken their toll, aided often by the soft and friable nature of the rock and by the impermanent nature of the paint itself. For this reason it is probable that no very great antiquity can be attributed to any surviving rock painting in Zambia, and the age of the majority of the art is probably to be measured in centuries rather than millennia. It seems likely, however, that rock painting has been practised in Central Africa for many thousands of years, but that only the more recent examples have survived.

In their "Handbook of Rock art research," Whitlsy and Davids explain that the twenty-four chapters in their Handbook are intended to serve as basic references and guides to rock art research. Their purpose, is to provide practical advice and information about their subject matter, for the student. The volume has been divided

into three parts. The first includes a series of papers outlining the techniques and methods used in rock art data collection, analysis, and site management. The second turns to the ways in which rock art may be interpreted. The final section is an overview of world rock art. ⁴

This last point is important to emphasize, for reasons that may not be immediately obvious. Rock art research has experienced a revolution in the last two decades and continues to advance rapidly. This means that our substantive knowledge of the world's rock art, the techniques that we use to study it, and the interpretive models we bring to its understanding are all changing rapidly. While it is quite clear that rock art research has matured worldwide to the point that a certain summing-up was warranted, it is both expected and hoped that the next decade will result in greatly improved knowledge of this subject.

Brentjes Burchard, the author of "African Rock Art," in 1965, published a book on the history of the domestication of farm animals in the orient, and written monographs on wild and domestication animals, on the Iranian world before Mohammed, and on African sculpture.⁵ He believes it is necessary to see art as a form of history, and consider that the mural art of dynastic Egypt is simply a brand of African petroglyphic art, only to be understood in relation to this association.

This book is a unique and fascinating record of the arts of Bushman, Bantu, Berber, Hamite, Hottentot built up over ten thousand years and here arranged in an orderly scheme that will appeal to specialist and layman alike.

It is observed in the book that the large areas of exposed rock on the African continent

^{4 &}quot;Handbook of Rock art research" Whitlsy and Davids Altanira press 2001

⁵ "African Rock Art: The Future of Africa's past" Deacom and Janetle Trust of African Rock 2007

tempted man in primitive times, and indeed more recently, to imitate what he observed when hunting in those moments when he came close to realizing a force outside himself. The book describes the motives and social functions of painters, sculptors and engravers, practising their craft in the service of hunting magic, of fertility cults, of solar and lunar myths and in the interests of warrior kings, herdsmen and farmers from the Atlantic to the Indian Ocean and the Mediterranean.

CHAPTER 3: RESEARCH

3.1.0 Study Objective:

3.1.2General objective:

To make a strong case for Kenyan capacity and resolve to preserve the environment for culture, development and posterity.

3.1.2 Specific objectives

To unravel the fundamentals that inspired the creation of Kenya rock art.

To study the use and application of the elements of art and design in the rock art drawing and paintings.

To draw a comparative study between Kenyan rock art style and that of other parts of Africa and the world with specific interest in China.

To postulate challenges for sustained environmental preservation and inherent benefits for cultural development.

3.2.0 Rationale of study

It is against the backdrop of gradual and systematic disappearance of traditional cultures, Kenyan case included that this study is being carried out. Prior to the advent of the colonists, information was only passed orally, through word for storage of information. Writing was non-existent, however, man as created in God's image, possesses inbuilt creative and innovative spirit which practically manifests in his capacity to express itself outside mere verbalization. Man's day to day activities and practices are thus silently recorded. In the absence of writing and drawing surfaces

prior to the discovery of paper, pictorial records of information existed only on rock surface and the hidden part of caves. This has undoubtedly preserved human history with a difference from written resources. There is a lot of information and introspective insight that can be drawn from the rock drawings and paintings that preceded the discovery of writing.

It is in this context therefore that interest in the Kenyan study of rock art and painting has arisen.

Rock art is important because it offers tantalizing glimpses into early cultures and beliefs, as well as into early morality and the development of imaginative abilities. As such, it is irreplaceable. It has so far proven difficult to establish accurate dates for rock art. Scientists use radiometric techniques to date organic components such as charcoal and to date binders such as blood, egg-white and urine.

And now the questions of African rock art transformation arises.

In some parts of Africa, experts have been able to develop chronologies based upon the existence of ancient species such as the crocodile, now extinct in the Sahara, or the introduction of exotic new species like the horse, camel or dog. Because Africa's rock art was created in exposed places, much has now disappeared. What we see today was probably created during the last 12,000 years, while much of it is less than 6,000 years old. Researchers however believe that Africa's now-vanished art may have been contemporary with Europe's great Palaeolithic cave art - between 15,000 and 33,000 years old.

3.2.1 Inspirational fundamentals:

Archeological studies and findings have revealed Kenya as the cradle of humanity. So far, no record to challenge the claim that the oldest male human fossil was found in Kenya. He must have lived a simple life full of challenges inherent of a hostile

environment. Forests must have existed in their prime with many wild animals roaming about. There must have been abundant rainfall which, together with the hot tropical sun should have created a wet, humid condition for a tricky hunt. Hunger must have inspired the hunter to kill the animal for food. A habit formed into a wish to capture and to control the animal by capturing its physical image. Latent creativity gave rise to innovation. Soon a range of colored earths were found and ground into powder. Black was developed from charcoal and grey concocted from ashes. These were then mixed with animal fat to create paste for drawing and painting. Using fingers or bristles made from grasses or animal hair, suitable rock surfaces or wall of caves enabled the prehistoric artist to draw and paint the hunted animals meticulously from memory. The spirit of the hunted animal had not only been kept captive on the wall but had also been made available to tell a story about hunting experience and exploits.

3.2.2 The materials: use and applications

Rock art can be divided into two major categories: paintings, sometimes known as pictographs, and engravings, also known as petroglyphs. As we shall see, each of these categories is sub divisible. There is a third category that we will briefly touch on, carved or ground rock objects, but it has little importance to the theme of this study.

Painting:

Paintings are sometimes known as pictographs because most have been drawn rather than painted (as we understand the term today). However, for simplicity's sake we will call them all paintings.

Paintings were made with a brush, a spatula, or fingers, the wet pigment applied directly onto the rock. It seems that artists would normally first draw an outline and fill it in and add details later. Many paintings employed only one color, normally red, although some consisted of two, three, and even four colors. The paintings that

contain more than one color usually consist of an image with different parts painted in different flat colors, although sometimes shading is used.

Paint was made from coloring substances mixed with a liquid binder. The most common color is red or shades of red or shades of red ranging from pink to orange to purple. Other colors include yellow, black, white, and, very occasionally, green and blue. The coloring substance, or pigment, was made from ground, and probably burned, stone. Red was made from soft rocks containing oxidized iron (hematite or orchre); yellow was made from limonite; black was made from charcoal, manganese oxide, and occasionally secularity (a form of hematite); white was probably made from gypsum or lime; and green and blue pigments may have been made from malachite. Different ground pigments appear to have been mixed to create shades.

The liquids used to make the binder are still being investigated: they may have been made from water (least likely), blood, egg white, plants, urine, animal fat, or honey and, in the Sahara, possibly milk. In Lesotho in the 1930s a Sotho named Mapote, who had bushman half brothers, reported that eland blood was used; and a Botswana bushman who claimed his ancestors painted said that fat from around an ox's hearts was used to from the binder.

An interesting story regarding Mapote suggests that the paints used to create rock art may have a particular value-perhaps they contain magic ingredients that may be considered dangerous or valuable. He made a painting on a movable rock for a European woman named Mrs. How using material provided by her. She was due to leave Lesotho the next day by train and packed the paints and brushes in a trunk, which was put on the train. During the night the trunk was forced open and the paints and brusher-and nothing else-were stolen, suggesting these were all the thief wanted.

Paintbrushes may have been made from feathers, hairs, a stick, or even a bone spatula; unfortunately none has ever been found. The paint itself may have been held in small antelope horns: one strung on a belt has been found abandoned in a cave in the

Drakensberg of South Africa, and another set was discovered in the nineteenth century when a bushman, shot in a raid, was found to have paint horns strung on his belt.

Engravings:

Engravings, which are sometimes called petroglyphs or rock carving, are usually made by chipping small pieces out of a rock face to form the image. We call all these images engravings that have been cut, pecked, scraped, or ground into a rock face.

Engravers worked in several ways. In the method known as pecking, the engraver would hold a fairly heavy hard stone, pointed at one end, and use it as a pick, striking repeatedly against the rock face, chipping out tiny pieces of stone. A different pecking method involved the use of two stones: a hard point, perhaps quartz or chert, which was held against the rock and a heavier stone was used to hammer it into the rock, which removed small outer pieces. The engraver would probably first scratch the outline of the image into the rock surface and then laboriously chip it out by hammering the pointed tool into the rock. In northern Africa such engraving tools are sometimes still found lying near engravings, but in southern Africa these tools are absent—possible they have been deliberately removed.

The lines of some engravings have first been chipped and then carefully ground smooth by running an abrasive stone along the chipped groove. Another less common method was to scrape the black patina off a rock, leaving a pale image exposed against the dark surface. Some rock faces were prepared before engraving started by grinding a flat stone on the surface until they were fairly smooth. After the introduction of metal, perhaps as long as 3,200 years ago in the Sahara, some engraving were made with a metal spike, which may have been hammered with a stone or used as a pick.

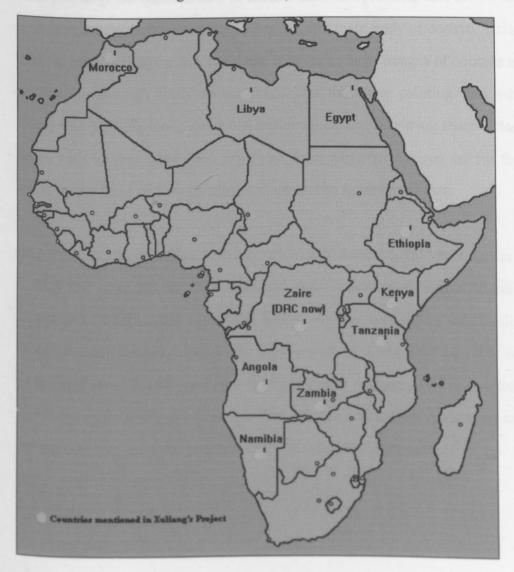
Most engravings employ only one technique, either pecking, grinding out lines that have already been pecked, or scraping; however, a few engravings use two or even all

of the techniques, such as ground outlines with internal areas shaded by pecking and smoothing. Only one engraving has been seen that also was painted, in Ennedi, Chad, but this may indicate that other engravings also were painted and that the paint has since disappeared. An engraving has been found in Niger that had been recently colored in black and white. One source believed that local people painted the engraving expecting to have their wishes for material objects fulfilled by this act, while another said that soldiers had painted it during the civil war of the early 1990s. In northeastern Niger an engraving has been found of a cow superimposed by a line of painted human figures.

CHAPTER 4: METHODOLOGY

4.1 Research focus

African region has been divided into three rock art categories: Northern Africa, which includes Sahara, Morocco, and Ethiopia, and stretches south to the southern end of Lake Turkana in Kenya; Eastern Africa, which lies between Lake Turkana and the Zambezi River and includes Zambia Angola, and Zaire; and Southern Africa, or the area south of the Zambezi River including Namibia. Apart from painting in the Irangi area of Tanzania, which bears some similarities to southern African paintings, the art's form in the three regions is relatively distinct.



Dots indicate areas in Africa mentioned in this project study

In the southern Africa paintings, especially fine-line painting, dominate all the earlier

(more than 2,000 years old) art. The artist's conceptual view, both in time and space, are the same for the whole region, leaving little doubt that greater part of the art was made by ancestral bushman: changes in the art are immediately obvious in north of the Zambezi River.

Eastern Africa's rock art can be divided into two types (excluding the art of pastoralists and bantu speakers): the painting of central Tanzania, which are ascribed to the ancestral Sandawe; and *Twa* art, made by ancestral Pygmies or people related to them. Twa engravings are found mainly in Zaire, Angola, and western Zambia, while Twa paintings are concentrated in eastern Zambia, spreading east across the continent to form a barrier between southern African and main body of eastern African art. The earliest art occurs in central Tanzania: it includes large images of animals and appears to develop through fairly recent times into fine- line painting. But while central Tanzanian painting looks similar to bushman art, and may even share distant common roots with it, they have been separated from southern African art for thousands of years by the band of Twa painting and cannot be termed bushman.

The art of northern Africa probably originated some 12,000 years ago in the central Sahara and over the next few thousand years spread west to the Atlantic, east into Egypt and Ethiopia, and south into Kenya. A clear chronology can be distinguished from the early forager art up to the most recent art of the camel period, which began in the east about 2,200 years ago. While northern African art of the pastoral period is separated as far south as Malawi, earlier Saharan and eastern African art are separated by thousands of miles and cannot easily be related to each other.

4.2 Case study: research sample.

Northern Africa:

This area of Africa has been appropriately identified as a benchmark of this research project study due to its longstanding archaeological significance and proximity to the cradle of civilization, Egypt.

We know from excavated stone tools and human refuse that after the change in climate about 12,000 years ago, people again occupied much of the Sahara. In the central Sahara big grindstones (fig.1) dating from about this time suggest humans were finding new uses for seeds, and microlithic stone tools found in many areas suggest new ways of utilizing resources and perhaps new ways of thinking.



Fig 1: A broad wadi extend to the sandstone cliffs, Tadrart, Algeria. A freestanding rock with a ground hollow like a huge mortar, stained red inside, is surrounded by chunks of red hematite and pottery fragment. Clearly, red pigment has recently been prepared here, but the hollowed stone, known as a kettle, could be 8,000 years old and was perhaps originally made for a different purpose.

It was at about this time that foragers in the central Sahara started to engrave the rocks with pictures of animals. These engravings, sometimes several feet high, appeared suddenly, already exhibiting a degree of skill that leaves us wondering where and how the art commenced.

Who were these forgers living in the central Sahara 10,000 years ago? Earlier depictions of human figures are so schematized that no identification of race is

possible; however, Fabrizio Mori has pointed out that some of the first naturalistic paintings, dated after about 8,000 years ago include only images of people with Negroid features (fig.2);no light-skinned people are depicted, suggesting that the artists were black.



Fig 2: A hunter with Negroid feature, about 5.5 feet (1.7 meters) in height, holds an arrow in his right hand and a heavy bow in the left in Tassili n'Ajjer, Algeria. He wears a skullcap on his head and is followed by a heavy, but unarmed, person wearing a loincloth. A painting of a small antelope appears in the background. This scene has been ascribed to the early pastoral.

About 10,000 years ago or less, pottery appeared, spreading from the middle Nile valley as far west as Mali, although its advent did not herald the arrival of new people. A thousand years later, the aurochs, a huge wild Saharan bovid with forward curving horns (fig.3), was domesticated in southeast Egypt. A short arid phase about 8,000 years ago may have started a westward movement of domesticated cattle, which had spread throughout much of the middle Sahara by 6,500 years ago.



Fig 3: An engraving of an aurochs, or wild ox, more than 3 feet (1meter) across, in Messak Sattafet, Libya, one back leg is roped to a heavy trapping stone while a front leg is attached to a much lighter stone or peg. Usually, images of trapping stone indicate hunting; however, here it is not certain whether the trapping stone and peg suggest the snaring of a wild aurochs or if the scene depicts domestication.

Small numbers of sheep and goats were introduced from the near east into Africa earlier than 7,500 years ago and they spread westward as well. We know that during this time some people lived in small groups on ricers and lakes, where they fished and collected riverine foods, trapped small animals, and occasionally hunted larger species.

The climate remained relatively humid until about 4,500 years ago when a final arid period closed the Sahara to widespread pastoralism. Hardier people remained in rockier areas, but most took their livestock and started drifting south, following the retreating tsetse fly, or moved east onto the plains along the Nile valley.

It appears possible, and even probable, that many of the peoples who moved south from the Sahara were ancestors of the once-nomadic Fulani, who today live across the Sahel, the semidesert southern fringe of the Sahara. Pastoral period rock painting in the Tassilin'ajjer and Akakus mountains depict, in addition to Negroids, tall, light-skinned people, some with long, straight, braided hair(fig,4) like that of modern Wodaabe(a pastoralist subgroup of the Fulani), and robes similar to those still worn by Fulani people. Even the paintings of reddish-brown cattle with long upsweeping horns resemble modern Fulani cattle (fig.5).



Fig 4: Hairdressing in the Akakus Mountain, Libya. This painted scene of a seated man working on the hair of a figure crouching before him reflects the lifestyle of modern Fulani peoples particularly the Wodaabe of Niger, who dress their hair in similar manner, and may link the painting with their ancestors. Fabrizio Mori has dated the painting to 6,000 years ago, but a spear with what appears to be a metal blade lying between hairdresser and client could indicate a more recent age.



Fig 5: Looking out from the back of a decorated cave in Tadrart, Algeria. A steep, 16-foot climb protect the cave from wild animals. Much of one wall and adjacent roof bear painting of cattle and people. Visible in the top center, is a seated man playing a flute. various artists may have painted here over a considerable period before the Sahara became desiccated.

Among Tassili n'Ajjer paintings are images of masks and dancing dress(fig.6) similar in style to those used by some western Africans today, although direct parallels have never been made.



Fig 6: A painting of a masked man, called by Henri Lhote "the Negro Mask," is superimposed over an earlier white Round Head figure. From Tassili n'Ajjer, Algeria, it is about 5 feet (1.5 meters) high. The mask has horns and ears similar to those of a cow, mushroom-shaped objects project from the shoulders and thighs, and a white loincloth hangs from the waist. The mask has been likened to modern Senufo masks of western Africa and the mushrooms are believed to be hallucinogenic, suggesting states of ecstasy and even shamanism. Its date is uncertain, but Lhote suggests that the masked figure belongs to the Round Head Period.

The next important event for the Sahara was an invasion of the Nile Delta in 1680 B.C by Hyksos warriors from southwest Asia. They conquered lower Egypt, introducing bronze working, meta; weapons, horses, and wooden, horse-drawn chariots. By 800B.C.,Lybico-Berber-speaking peoples living around the Fezaan of modern Libya acquired chariots and metal weapons. These wild peoples, called the Garamantes, were armed with spears and are said to have driven their chariots (fig.7,8) westward through the Sahara, fighting, robbing, and trading their way far into the desert. Herodotus describes how Garamantes slaughtered troglodytes, whose language sounded like the "screeching of bats," whom they found living in the desert. The identity of the troglodytes is uncertain, but they were probably remnant groups of forager populations.



Fig 7: A painting in southern Algeria of a two-horse chariot driven by a man wearing a skirt and holding two sets of reins. Although the horses are depicted in profile, the chariot is seen from an angle so that both wheels and the standing platform are visible.



Fig 8: A small painting from Algeria of a light, two-horse chariot. Painting of horse-drawn vehicles have been found as far west as Algeria and northern Mali, but there the painting cease, although engravings of chariots continue west to the Atlantic and also have been found in the Canary Islands. Alfred Muzzolini points out that there is more chariot art in the western than the eastern Sahara

However, chariots were not to last. Difficulties of dragging wheeled vehicles through sand and rocks soon saw them replaced by riding horses (fig.9,10) and eventually domesticated camels, which were led into the Sahara (fig11,12)) about 2,200 years ago or earlier. Strong and able to live for weeks without water, by 500 A.D. the camel had spread far to the west and had become the main means of desert transport and a highly valued possession of all pastoralists. Even today, caravans involving a thousand or more camels still cross Niger's Tenere Desert, transporting salt southward

to the Sahel, and grain in the opposite direction(fig.13)



Fig 9: The horses and rider are superimposed by white images of camels, suggesting the horseman was painted before the camels.



Fig 10: A small painting in red of four "flying" horse, two mounted and two riderless, followed by the figure of a "flying" person, from Ennedi, Chad. Painting human flying figures occur throughout Africa. It has been suggested that flying or floating figures in southern Africa may represent the trance experience and out-of—body travel.

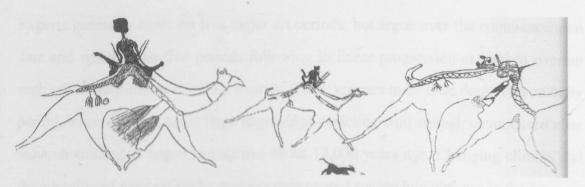


Fig 11: A painting almost 6.5 feet (2 meters) long, outlined in red and filled-in in white, of camels and a dog from Ennedi, Chad.



Fig 12: A red painting in eastern Chad of a camel with an armed rider superimposed by a white outline image of another camel. Below, a cow walks to the right. The painting is less than 2,000 years old.

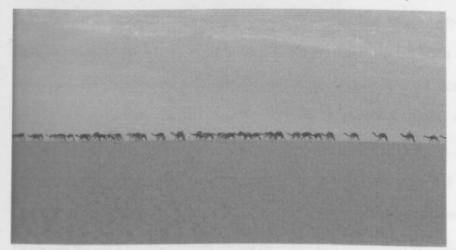


Fig 13: Camels in caravans are roped nose to tail in long strings. Lead camels set the pace and slower animals are forced to keep it, sometimes traveling from afternoon to just before dawn. Some carry loads of fodder for the journey, but the water is for the people only: camels manage the 370-mile (600-kilometer) journey without it. This caravan number about a thousand strong.

Experts generally agree on five major art periods, but argue over the commencement date and whether the five periods following in linear progression or tend to overlap each other; they almost certainly overlap. There appears to be little doubt that an early period, when foragers made large engravings depicting wild animal, commenced after Saharan conditions began to improve about 12,000 years ago. Changing climate and the adoption of pastoralism by some people caused succeeding changes in the art.

Art periods	Approximate timespans	
Bubalus Period	12,000 to 8,000 years ago	
Round Head Period	10,000 to 8,000 years ago	
Pastoral Period	7,500 to 4,000 years ago	
Horse Period	3,000 to 2,000 years ago	
Camel Period	2,000 years ago to the present	

Table 1

The earliest period, known sometimes as the large wild fauna, or Early Hunter Period, or Bubalus period (Bubalus was a giant buffalo that became extinct about 5,000 years ago;fig.14), probably commenced about 12,000 years ago or somewhat earlier and was the work of foragers. In the central Sahara, huge engravings of large animals depicted in a naturalistic manner exhibit a wonderful knowledge of animal stance, movement, and anatomy, suggesting a close relationship between artists and subjects. Elephant, rhinoceros, buffalo, giraffe, antelope, hippopotamus, lion, and crocodile are all featured, while small human figures, apparently male and often holding boomerangs, club, axes, and sometimes bows, may appear in front of or behind animals, suggesting inferior importance (fig.15). Bubalus Period art lasted for 4,000 years or considerably more and spread across the Sahara, although the magnificent large engravings of the central highland were not replicated elsewhere.

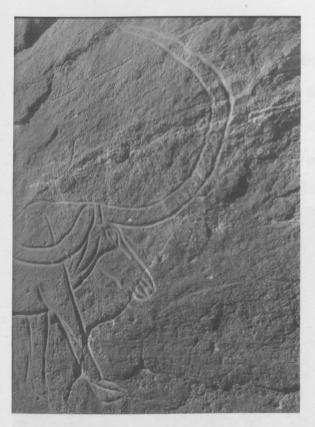


Fig 14: A huge engraving of a Bubalus (bubalus antiquus or syncerus caffer antiquus) from the Messak, Libya. The Bubalus, which became extinct about 5,000 years ago, is thought to have been a relative of the African buffalo. Rudiger and Gabriele Lutz suggest that style of Bubali engravings have developed over time and have proposed a chronology, into which this engraving fits at between 7,000 and 6,000 years ago. Even so, many early engravings of Bubali were later touched up and their features altered, making positive identification of style difficult.



Fig 15: An elephant from the Messak, Libya, about 6 feet (1.80 meters) long. It dates from the Bubalus Period and may be 10,000 or more years old. Two tiny hunters stand before the elephant, the upper one wielding a boomerang.

The Round Head Period (fig.16,17) commenced slightly less than 10,000 years ago and lasted for 2,000 years or more. For the most part confined to the Tassili n' Ajjer and the Akakus Mountains, the art consists of painting, often of gigantic size __ one figure stands more than eighteen feet high (fig.18). A large proportion of Round Head painting portrays strange people with around featureless heads



Fig 16: On the left, a figure facing forward appears to float in space. In the middle, a man with plumes bent over his head and wearing necklaces holds in his right hand a geometric shape half hidden by an outlined object. On the right, a woman raises her arms as though in supplication. The central man is 23 inches (60 cm.) high. Such scenes evoke feeling of reverence and peace and belong to a time when man created the gods of nature in his own image. The painting is from Tassili n'Ajjer, Algeria, and is ascribed to the Round Head Period.



Fig 17: Ā typical Round Head Period painting in orchre of a human figure outlined in red dating to about 9,000

years ago from Tassili n'Ajjer, Algeria. Henri Lhote was the first to call this style of figure "martian" and the term stuck.



Fig 18: Henri Lhote's "great Martian God." Pier Paolo Rossi sits gazing up in wonder at this 18-feet-high (5.4meters) huge Round Head figure looming over him in the Tassili n'Ajjer, Algeria. Huge painted figures, categorized by Lhotes as belonging to the "evolved phase of the Round Head Period," probably date from the ninth millennium before the present. Eric von Daniken saw this painting as a real-life depiction of an "alien"



Fig 19: This scene from Algeria is more than 4 feet (1.3 meters) long. A horizontal, elongated female figure appears to float through air or water, towing an unconscious male figure in a fetal position. The caps of two men bent toward each other just superimpose her stomach and lower leg. Below, a circular geometric supports a symbolic human torso wearing a similar cap. At bottom right, a sexless figure, naked except for a waistband, appears to sway, gazing upward. The two small figures on the right are later additions. Henri Lhote saw this scene UNIVERSITY OF MAIROBI as reminiscent of an Egyptian religious theme and dates it to less than 4,500 years ago.

and formless bodies, sometimes appearing to float or swim through space as though experiencing out -of -body travel(fig.19). Women are depicted with raised hand, as thought seeking blessings from the huge male figures that tower above them (fig.20). These seem to portray a gentle and ethereal world where man bows to the lords of nature. The Round Head artists were almost certainly foragers as no images suggestive of pastoralism are found in the paintings, nor have excavated domestic stock bone been dated to this period.



Fig 20: A reddish- brown sable antelope superimposes a supine woman with a distended stomach and raised arms.

The Round Head Period seems to end shortly before the appearance of domestic stock in the central Sahara, perhaps 7,500, or more, years ago. Final phases include painting of people wearing elaborate headdresses and decorative clothing (fig.21), after which images of cattle begin to dominate both painting and engraving (fig.22).

The Pastoral Period (also called Cattle Period) probably commenced about 7,500 years ago and lasted until the Sahara dried up, about 4,000 years ago or a little later.



Fig 21: Three separate but linked panels of figures from Algeria. A thin line, now barely visible, joins the left panel to the central panel with the tall male and smaller females with breasts. The right panel shows a female in the background and two men bent forward. The scene may represent stages of a dance culminating (with the bent-forward figure on the right) in a state of trance. The date is uncertain, but Herri Lhote places the scene in the Round Head Period, describing it as, "evolved and with Egyptian Influence." If it does belong to the Round Head Period, earlier than 8,000 years ago, then the painting predates Egyptian art and the influence, if any, would have been from the central Sahara to Egypt.



Fig 22: A late Pastoral Period scene with cattle and fine-featured people from Tassili n'Ajjer, Algeria. Three figures with elaborate hairstyles and loincloth stand, one drawing another toward a fourth, who is dancing, while a fifth reclines, watching the dancer. The figures are about 10 inches (25cm) high. An orange cow is circumscribed by an outlined larger animal. Henri Lhote notethe hairstyles and the actions associated with cattle and was told by Fulani prince that the scene reflects a ceremony still practiced by his people living some 900 miles to the south. The painting may date to about 5,000 years ago or more.

Dramatic changes took place in the art that suggest changes of attitude toward nature and property. Man becomes much more important, and human figures play a central role in the art (fig.22). Perhaps man is no longer a part of nature, closely allied to other animals, but is now above it and able to derive much of his sustenance from his stock. Both engravings and painting continue to depict wild animal, but domestic stock, mainly cattle but also sheep and goats, predominate, expressing man's affinity with his beasts. Men are now armed with spears and bows, and domestic scenes, such as herding cattle and dancing, are more common. Unfortunately, artistic standards fall, and gone is the immense drama experienced in the pre-Pastoral art of the Bubalus and Round Head periods. Animals are drawn smaller and in more rigid styles, often lacking the details seen in earlier art. We cannot with any certainty identify the artists of Pastoral Period. Some may have been descendant of foragers who acquired livestock while others could have been immigrants from the east and north spreading westward with their livestock.

The Horse Period commenced about 3,000 years ago in the eastern Sahara, spread west, and lasted about 1,000 years. It tends to depict horses and horse-drawn chariots (fig.7,9), warriors with metal weapons (fig.23), and armed men mounted on flying horses. Wild animals are still shown, particularly giraffe, Barbary sheep, and ostrich, although on much smaller scale and cattle still form a considerable part of the art. Human figures are drawn in highly conventionalized style: the bodies are often formed by two triangles joined at their apex, with round heads surmounted by three plumes (fig.24), while spears have become the common weapon. Occasionally, the art is accompanied by statements in Tifinagh script, which suggests the art was done by Berber artists, although modern Tuareg are unable to read it. It is unknown how much of the art was merely communication or whether it served some unrecognized purpose.



Fig 23: These engraved figures in northern Niger with double triangle bodies, sometimes holding metal spears, were named Libyan warriors by Henri Lhote and have been associated with Garamantes' raids perhaps 2,500 years ago. Francis Rodd believed some of these figures represent Tuareg (fig 24)



Fig 24: An engraving of an armed man leading a horse in northern Niger from the Horse Period. The man wears a decorated shirt hanging to below his knees, has three plumes on his head, and holds spears with metal blades in either hand. Francis Rodd has compared this dress in similar engraving to the leather shirts formerly worn by the Tuareg and to painting of Temehu Libyans found in an Egyptian tomb.

It is still not absolutely certain that actual chariots were driven along routes where their depictions occur, from the Fezzan in Libya through the Air of Niger into northern Mali and then westward to the Atlantic coast: remains of chariots have never been found west of the Fezzan. There are more images of chariots west of the Air Mountains than to the east, and it could be that chariots were first transported westward by boat and then driven inland before being manufactured in northwestern African. Or, it may have been merely the chariot symbols that were carried westward; the artists may never have actually seen the vehicles themselves. Should this be the case chariot symbols must have had some special meaning for the artists' communities.

The last rock art phase, the Camel Period, commenced in the eastern Sahara some 2,000 or more years ago and, spreading westward, has lasted until the present day. Although images of horses and cattle still occur in decreasing number, the major theme in both engravings and painting is the camel. Earlier paintings are often beautifully executed, depicting white camels almost flying above the sand bedecked with red trappings and ridden by spear-brandishing warriors(fig.25),but the artistic standard deteriorates steadily, and later engravings are often crude, portraying little other than camels, sometimes mounted. The drawings of human figures deteriorate even further and many are merely faceless caricature. Sword appears quite early in the period, followed by firearms. Camel Period engravings seem to be little more than statements of fact, such as "a caravan halted here", and many of the more recent works could well have been inscribed by children. However, the earlier paintings, which evince an atmosphere of both movement and serenity and display considerable artistic skill, may be more than just drawing for the sake of communication.

From the Tifinagh script and subject matter, we can assume that the artists were ancestral Tuareg-who, since the general exodus began more than 4,000 years ago.



Fig 25: A huge shelter wall in eastern Chad is covered with layers of paintings. Cattle with horns curved up and forward are painted in two colors. At the top left, a cow has lost one color, leaving blank patches. Ghostly white camels with red riders seem to float across the wall while a horse lands from an enormous. The dates of the paintings cover a long period, but the camels are 2,000 years old or less.

have most likely been the major inhabitants of the Sahara together with a few remnant hunter-gatherer groups. We believe they were responsible for some of the rock art as most of the Tifinagh inscription occur with, rather than as graffiti, on the engraving.

A stratified, pastoral, nomadic people who raised camels, small stock, and sometimes cattle, Tuareg kept large numbers of slaves, which freed them from most domestic and pastoral chores. The extracted tribute from subservient peoples, provided armed escorts to caravans, or else plundered them, raided their neighbors, and lived on milk, meat, wild food, and grain either harvested or traded from the south in exchange for salt, which was gleaned from the few remaining lakes.

Tuareg were converted to Islam in the eleven or twelfth century; it remains unclear whether they practiced Christianity before their conversion to Islam. Traditional Tuareg religious beliefs are uncertain but probably involved the forces of nature and a goddess of fertility named Tanit, although they may once have had a polytheistic

system(fig.26). They believe in good and bad spirits who inhabit particular areas and cause trouble, and sometimes practice the sacrifice of sheep. Francis Rodd, who visited Air in the early 1920s, wrote that the most powerful spirits are identified with certain Air Mountains.

Tuareg are believed to be descendants of pastoral Berber with some admixture of Nilo-saharan and Phoenician blood (fig.27). Ancestral Berber —speakers probably entered Africa from southwest Asia 7,000 or more years ago, settled first in Libya , and then spread along the north African coast. From there some moved southward onto the plains and highlands of the Sahara, where they practiced a pastoral economy and came into contact with black Nilo-Saharan, who also were stock raisers.



Fig 26: Two human figures, one with a dog's head, copulate with two women. Above, a figure with a cat's head and a huge hanging penis faces to the front. The figure with the dog's head has been likened to a jackal and thereby related to the Saharan fable of the jackal's wedding, which involves fertility and rain. The catlike figure facing forward has been described as the Egyptian god Bes. This scene from Akakus Mountain, Libya, belongs to the Pastoral Period and could be associated with ancestral Berber peoples. Note the Arabic and Tifinagh graffiti.

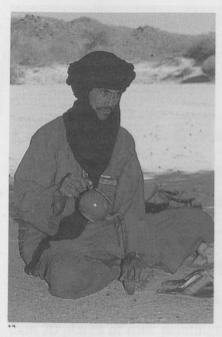


Fig 27: Drinking tea is an important ritual that emphasizes harmony. Whenever an opportunity arises, Tuareg prepare strong, thirst quenching green tea. The leaves are brewed with sugar in small teapots on hot coals and then poured from one pot into another, raising a froth on the surface. After tasting it, the brewer pours it again, from a height, into tiny glasses.

When the Sahara began to dry up about 4,500 years ago, some Berber moved further south, where they intermarried with Nilo-Saharans, while others slowly withdrew into wetter areas, particularly the rocky highlands of the central Sahara and southern Morocco. When the Phoenicians began to settle the northern African coast, about 3,200 years ago, some Berber practiced a farming economy along the more humid Mediterranean coast, while Saharan Berber were mainly pastoralist. The Phoenicians came to control the coast and coastal Berber, and to organize tribute and trade with the pastoral Berber of the Sahara. Today the name Berber is applied to certain peoples of Caucasoid stock who speak related afro-Asiatic languages. Tuareg language, Temasheq, has a written form called Tifinagh, meaning "characters," that may have originated in southwest Asia, influenced by Phoenician script.

4.3 Methods of analysis

4.3.1 Chinese tangent

A comparative analysis of African rock art and Chinese rock art is hereby made to open up greater understanding and insight into diverse cultures and experiences straddling unique and distinct geographical situations.

China is one of the earliest countries that found and recorded rock arts in the world. Early in the 5th century A.D. a famous writer called Daoyuan Li had recorded more than 20 places of rock paintings, its scope affected almost half of China, including all aspects of social life. So far rock paintings have been found in more than 21 provinces and more than 166 cities in China.



Dots indicate areas in China mentioned in this project study

Chinese rock paintings can be roughly divided into two major north-south systems.

Northern grassland nomads paintings is China's most densely populated rock-art distribution to include Chifeng rock paintings, Yinshan rock paintings, ALaShan wulanchabu flag rock paintings, xinjiang tianshan north-south rock paintings, and the northern xinjiang altay paintings. Most of the rock paintings in China are centralized in this area. These paintings were mostly discovered at the national cultural relics in the 1980s. Paintings quite comprehensively reflect all aspects of life in the ancient society, like hunting, nomadic, war, dance activities; as well as the stars, fingerprints, footprints and various original symbols.

4.3.2 Northern rock paintings

Northern rock paintings in accordance with the theme division are mainly divided into moai statues paintings, hunting paintings, reproductive paintings.

Moai statue rock painting:

Moai statues, with its number of paintings, style diversity, rich in the world has a prominent position in the world rock painting history. These rock paintings are sub classified into two types, i.e. no outline of moai statues type, half contour model, the contour model, tire type. The tire type refers to the eyes, except chiseled cheeks tattooed with tire outside also includes the moai statues.

The moai statues found in rock paintings are basically similar with those found in Taosu and bone carved faces. We can identify their outline type and ages from the general characteristics, as well as research on the derivation and developing process of human ancient culture, and the motivation of creating these rock paintings. Take Moai statues as a example, from the research that has been done we can conclude that: They were the sign of the winter solstice in the protohistory age, which later became business ancestors' symbol of worship. In addition, the Moai statues in Yin hill in

Inner Mongolia not only have the meaning of ancestral worship, but also tell us that our ancient ancestors had the face thrust custom, following from the many straight lines on the face of these Moai statues. In the knowledge of folklore, primitive religion, we are able to unlock many mysteries hidden in these ancient rock paintings.

Hunting rock paintings:

Hunting rock paintings, are about the animals which had been hunted, but also about the objects that must have been represented. A good example is the rock painting that is found in Wulateqi in northern of China which fully shows the artist's psychological reflection of this. The whole picture highlights a deer, which in spite of multiple shots, still stands motionless, thus manifesting the Chinese ancient ancestors' belief that every thing is blessed by God. Hunting paintings is the art of hunters; they do so in the hope of hunting success and in the belief of animal breeding.

Reproductive paintings:

Reproductive paintings are relevant to the reproductive expectations of human being itself, reproduction being the most mysterious theme in the primitive man's mind. Breeding is the oldest human aspiration and will last forever.

Rock paintings in the northern part of China often hitches such scenes: a bouffant stomach painted with small animals, which are often horse or deer, like they "impregnate" the same; Some pairs of animals have been interpreted in a mating state as in direct pictures showing human or animal straightforward scene; Xinjiang hiutubu paintings are the direct expression of the human extreme hyperbole phallus erections. It is interesting to think of these strange paintings as having been our ancestors depicting the root of ancient culture.

Chinese scholars have summarized ten methods of dating paintings, among these ten methods, through the weathering intensity and the analysis of the art style to infer are the most effective way. However, this definition is still an unverified hypothesis.

The north's earliest paintings belong to the Neolithic period, these paintings of rock faces are generally badly eroded, and nicks are broad and deep. The earliest one of these was about six thousand years old. The most developed era of rock paintings in northern China was between the 5th century BC and the 1st century or so.

Chinese northern grassland is the nomads' active stage since the ancient times. According to historical records, from the immemorial time, there appeared Rong HunZhou, ghost square, sardis, qiang, spring and autumn and warring states later, successively appeared in hsiungnu DongHu uzziel and huan, xianbei, Turkey, the kitan, nuzhen, Mongolia nationality. These people are the makers of the rock paintings, because in these rock paintings we can find many languages of these nomads, such as HuiGe language, XiXia language, Mongolian, turks language etc.

4.3.3 Southern rock paintings:

Southern rock paintings mainly distributed in Yunnan, Guizhou, Sichuan and Guangxi provinces. In Yunnan province we found 31 rock paintings in 14 counties, among them the Cangyuan county is the one we found the most and earliest rock paintings, about the 750-800 graphics, content can be divided into character, animal, hunting, herding, war, housing, symbols, print, web, utensils, dance, acrobatics, etc. Minghua Hill, the most densely populated area in China, has about 90 places. The rock paintings are made in the same age, have the similar style, display large dance, war and god, so they are now referred to as "Minghua hill" rock painting.

In southern China, the rock paintings mainly display the human routine activities. Among these rock paintings, the type of "squat shape" character which raising arms, squat legs is the most obvious. Not only in the south do hundreds of graphics appear, and in the northern paintings, the primitive painted pottery, even the Pacific Rim's

image of original artwork had appeared. The analysis of southern rock paintings age is credible, different from the northern rock paintings which are mainly made by chiseling methods, majority of the southern rock paintings are made by animal and plant pigments and this make it possible to use the method of carbon 14 measuring. It is consistent with the result that scholars got from the local unearthed relics pattern. For example, the results we got are the same as the findings of carbon 14 determination when comparing the Cangyuan rock paintings and Cangyuan unearthed bronze, as well as comparing the Zuojiang region timbals figures, the ring-pommel dao, character decorative pattern with local relics unearthed image of rock paintings. The former method got the result that these relics are 2,500-3,500 years from now, while the result of the latter said it is about 2370—2115 years old so far.

Chinese rock paintings in addition to the South-North system, the southeast coastal area of jiangsu, anhui, fujian, guangzhou, Hong Kong, Macao, Taiwan rock art can also form a system. Rock painting in this area are mainly formed by abstract symbols and made by the method of grinding.

4.3.4 Comparative analysis of northern Chinese rock art and northern African rock art.

	Regions	Timeline	Style
Northern	Inner Mongolia	No clear timeline	Mix style
China	xinjiang	boiltion, Mfangane divi	1. Moai statue rock paintings:
	sa .oral Tristory, C	e nanc Mawaosa was	2. Hunting rock paintings:
	which means s st	opp place. The site is	3.Reproductive paintings
	lege which the ed	mmunity's onal tradition	dentities as the habitet for it
tainmaking	spicie. It is also	close to Right told	o the south one which je we
Northern	Sahara	Clear timeline	Different periods have
African	Morocco,	r breught Ggether by	different style
	Ethiopia Libya,	12,000 to 8,000 years	Bubalus Period
	Niger Chad	ago	
	Kenya		
	of 13 minutes by	10,000 to 8,000 years	Round Head Period
	vanica landing ex-	ago	in site through a rich flora as
	usting of plants and	d shows some of which	have medicinal veloce. The e
	in hask, reincis	7,500 to 4,000 years	Pastoral Period
	idi S 00'25 797' i	ago	and is those 76 mores that
			C C
		3,000 to 2,000 years	Horse Period
	to location:	ago	
	lacked on the sea	or ear of the Web I	Burning and the second
celenal ner	the parthern use	2,000 years ago to the	Camel Period
	aloni Walana a	present	The state of the s
			Massica, rehargane theise

Table 2

4.4 Rock art site visits in Kenya:

Mawanga site location:

Mawanga rock art site is situated in Mfangano island, Wagosia village, Wasamu sub-location, Mfangano west location, Mfangano division, Suba district. According to the Abasuba oral history, the name Mawanga was derived from the Suba dialect Luwanga, which means a sloppy place. The site is adjacent to the sacred island of Zenze or Atego which the community's oral tradition identifies as the habitat for the rainmaking spirits. It is also close to Ringiti island to the south east, which is very close to Ugandan waters of Lake Victoria. Ringiti Island is inhabited by people from diverse cultural backgrounds brought together by fishing and trading activities. Mawanga site is identified with the larger Wasamo clan but is under the custodianship of the Wagosia sub clan.

It takes about 15 minutes by speed boat from the Abasuba community peace museum site to Mawanga landing area, and a short walk to the site through a rich flora and fauna, consisting of plants and shrubs some of which have medicinal values. The site is very rich in birds, animals and insects as well as rock formation and structures. It lies at latitude S 00°26.797' and Longitude E 057°726', and is about 26 metres above sea level.

Kwitone site location:

Kwitone is locked on the upper part of the Wakula Beach next to Gulwe primary school on the northern upper ground. Kwitone rock art heritage site is found in Mfangano island, Wakula sub location, Mfangano west location, Mfangano Divison, Suba district. The site lies at Latitude 00°27.446' and Longitude E 33° 95.912'. It takes about 15 minutes speed boat ride from the Abasuba community peace museum to Wakula beach, then 1 hour and 45 minutes climb through a longer but more scenic path, or an alternative path that takes about 45 minutes of steep climb, but less

endowment with scenic beauty.

The longer route to the heritage site commands a very beautiful view of the surrounding landscape, which comprises of hills and valleys settlements, a stream flowing through rocks into the Lake Victoria, as well as full view of the lake to the south. The longer route is dotted with colonial historical features such as the colonial chiefs homestead, while the homesteads and sacred forests signifying the African traditional leadership dot the lower and shorter route.

4.4.1 Site description:

Mawanga

Mawanga's a rock art site is found in Mfangano island, adjacent to the sacred island of Atego in Lake Victoria. The Wasamo clan who are associated with the art of rainmaking occupies the area around the site, and the art drawings are inclined towards Atego sacred island. The site is on an imposing rock structure about 26 metres above sea level. It takes about ten minutes climb through a rich mix of flora and fauna from the landing bay to the heritage resource. The rock surface with the drawing is well sheltered from direct harmful weathering agents such as rainfall, wind and direct sunlight.

According to the Suba oral tradition, the imposing rock structure was used for shelter from attacking clans as well as clan cultural ritual practices associated with rain making Like the case of Kwitone west, women of high spiritual, social and cultural integrity are credited with the drawings and spiritual intercession while men provided the sacrificial animals. The sacrifices could generate or stop the rains depending on the clan's needs.

The rock shelter was divided into two sections by a distinct line according to oral

traditions; one partition was for men and the other for women. It has remnants of print marks, storage chambers, cooking area which is marked by dark smoke remains and signs of dry molten lava possibly as a result of its formation.

On the landing area of the beach before embarking on the climb is a large tree that has served as a shade for traditional boat repair yard cum clan meeting place that has been in existence for several hundred years. The climb to the rock passes through an area with different plants and shrub species some of which are of medicinal values, while others are used for carving traditional tools as well as construction of houses. The path goes through an interesting rock formation and a wide range of birds and animal species.

Kwitone:

Kwitone is located on the upper part of the Wakula Beach, with Gulwe primary school on the northern part. The heritage site is found on a higher ground of a well sheltered rock surface overlooking the Wakula Beach. It has rock art expressions of natural things such as the sun, moon and fish. According to the Suba community oral tradition, the Wagimbe clan used the site for defensive purposes when attacked by other clans. Clan women are credited with the artwork and active participation in the armed inter clan wars that resulted in their victory over their enemies. The site therefore, symbolizes victory over the Wagimbe enemies or aggressors.

According to the Suba oral traditions, the symbols drawn on the rock expressed the times and natural factors; such as the sun, which symbolized drought or the moon which symbolized gentility, therefore a sign of good harvest. The Suba oral tradition therefore claims that, in case of hard times caused by drought, the clan members through women of high integrity, who merited the set purity standards offered sacrifices on site through the drawings for them to get rains and good harvests. The site is fronted by a natural forest with a cooling effect and a large number of birdlife, which makes it very ideal for bird watching activities and picnicking.

4.4.2 Historical background:

Mawanga and Kwitone

Both Mawanga and Kwitone have a lot of similarities not only in rock formations, size, but in uses as well. According to the Suba oral traditions, both were used as hiding places by the women against the attackers while the men fought in active wars. However, the Kwitone women participated more actively in the war by dressing up like men to deceive the attackers while the men positioned themselves strategically and attacked from the flanks from where they were able to defeat their enemies. Therefore, the Kwitone site symbolizes victory through an indirect method of denying the aggressors' rain through sacrifices aimed at weakening them militarily.

The heritage sites of Mawanga and Kwitone were both used for the cultural practice of rain making, although Mawanga played a more prominent role due to the Wasamo clan's art of rainmaking. It is said that the Wasamo clan still use the site minimally to make rain when faced with drought and threats of crop failure. Mawanga heritage site is also in active use by the modern day Christians, who frequent it for prayers and fasting sessions that can last for days, therefore making it a living spiritual heritage site.

The sites of Mawanga and Kwitone both have cultural, spiritual, historical, research and educational values.

4.4.3 Cultural and historical values:

Mawanga and Kwitone are endowed with rock art impressions that signify the people's ways of life through expressions of art painting, therefore giving an insight on their perception of life experiences and happenings around them. This in turn gives us a chance through the relevant research methods to connect the past, present and be able to project the future. Both Mawanga and Kwitone heritage sites were effectively used as sage havens by women during clan conflicts, and symbolizes victory over the

adversaries either through active war engagement or spiritual methods of weakening the opponents through drought by sacrifices made on these spaces.

4.4.4 Rock art in Lake Victoria



Rock art in Mfangano island



Taking to the guide and the fisherman on the island



The guide and the fisherman



Project researcher standing behind rock art



Close-up study of Mfangano rock art



A wide view of the rock art site

CHAPTER 5: CONCLUSIONS AND RECOMMENDATION

5.1 Protection Limitations:

While observing and noting that little interpretation of meaning, has been applied to whatever exists of rock art in Africa in general (outside South Africa) and in Kenya in particular, it is not enough to blame sites protection shortcomings on limited resource, lack of deep-seated research and dismiss these prehistory records as primitive. We already know of constant danger of overexposure of this rare heritage to the ravages of the elements: sun, rain and raging winds that scorch, wash away and create untold damage to the delicate rock surfaces whenever areas are opened up for human settlement and cultivation. We are also aware of the little that has been done to restrain vandals from defacing the drawing and painting on the rock surfaces; the chipping away of choice parts of drawings by collectors who carry away pieces as souvenirs, inscribing overlays of graffiti on the works, overgrazing the unprotected sites and turning the immediate rocky environment into quarries. Not much of this heritage sufficiently exists in the school curricula to create awareness in the youth of latent national wealth that risks getting lost through neglect and destruction.

5.2 Findings:

Found near Lake Turkana in Kenya, a nearly three-million year old stone that had been sharpened into an implement proves the thoughtful and deliberate attempt at the development of a technology, a tool. By speculating about the use of early tools, we know that they mark a major step in human immense journey from primitive origins toward a civilized state. A number of leaps provided the capacity to organize a community and gain some measure of control over human destiny.

Speech, the ability to make sounds in order to communicate with one another, was an early skill developed by the species in the long evolutionary trail from its primitive beginnings.

Writing is the visual counterpart of speech. Marks, symbols, pictures or letters drawn or written upon a surface became a graphic counterpart of the spoken word or unspoken thought.

Until the present electronic age, spoken words vanished without a trace while written words remained. The invention of writing brought people the miracle of civilization and made it possible to preserve hard-won knowledge, experiences and thoughts.

The development of writing and visible language had its earliest origins in simple picture, for a close connection exists between the drawing of pictures and the marking of writing. Both are natural ways of communicating ideas, and primitive man used pictures as an elementary way to record and transmit information.

The earliest human markings found in Africa which depict the essence of prehistoric visual communication have a lot to learn from. First, they show the artist's knowledge and awareness of the potential of his environment in terms of materials available for his creative use as well as the presence of the animals which he captures and draws for posterity through memory and imagination and, second, the universal sharing of such community service not only in providing communication facility but also creating a library of the same for posterity and history. A black was procured from charcoal, and a range of warm tones from light yellows through red-browns were made from red and yellow iron oxides. This palette of pigments was mixed with animal fat as a medium. Images of animals were drawn and painted upon the walls of the underlying water channels occupied as a refuge by prehistoric men and women. Perhaps the pigment was smeared onto the walls with a finger, or a brush was fabricated from bristles or reeds. This was the dawning of visual communication,

because these early pictures were made for survival and were created for utilitarian purposes. The presence of what appears to be spear marks in the sides of some of these animal images indicates that they might have been used in magical rites designed to gain power over animals and success in the hunt. A high level of observation and memory is evidenced in marry prehistoric drawings. The objects and events of the world were recorded with increasing fidelity and exactitude as the centuries went by. The developed tendency by the Paleolithic artist towards simplification and stylization in later years is not only admirable and exceptional but also raises challenges to modern day creativity and innovation.

The similarities and differences in both choice of subject matter and style of presentation and execution as manifest between northern African scene and Chinese rock art must have arisen either from common human ethos of need and celebration or sheer uniqueness of the environment and its natural potential.

The study of prehistoric rock art, although it serves other disciplines, is primarily a branch of archaeology-and the purpose of archaeology is to find out how people lived in the past and as far as possible infer their attitudes and beliefs. The study of art reveals aspects of man's nature not deducible from their material culture.

It has been said that the primary purpose of the study of rock art is as a branch of archaeology. What is depicted confirms or supplements the information gained by digging in an associated deposit, for example, knowledge of the implements the people used, and the animals they hunted or herded. In addition the art reveals much not to be deduced from artifacts found in the deposit either because perishable objects are shown such as wooden weapons, clothing and hair; or because cultural practices are depicted - dancing, ritual, methods of hunting. In South Africa, for example, it would never have been known that Bushmen once used small canoes or floats from which to harpoon fish, if this practice had not been illustrated in rock paintings. Nor,

but for the North African petroglyphs, would it have been known how far carts and chariots penetrated the Sahara.

A 'spin-off' from the study in South Africa has been to establish what animals have lived in certain regions in the recent past and thus indicate which ones might be reintroduced to game reserves with a reasonable prospect of success.

Africa has the greatest variety and some of the oldest rock art on earth. About 30 countries in Africa have rock art with a total of between 10 and 20 million images. Major concentrations occur in the Sahara and Southern Africa.

Rock art is fragile and irreplaceable. All rock art, tumuli and archaeological remains are protected by law; they are unique, valuable and fragile. Respect Africa's rock art heritage by looking and enjoying; do not walk on, deface or touch rock art, nor damage or remove anything.

Protection of this heritage is a global priority. We must learn to study the art, to try and find out how old it is, what the images might mean and why they were made.

Understanding the art and its age confirms its value.

5.3 Conclusions:

Vast records of northern African rock art have been compiled, style defined, and chronologies prepared, but what conclusions can we draw about the artists and the meaning of their work? These are questions that have vexed researchers for more than half a century and led most of the less adventurous to stick to recording art rather than attempting to interpret it. Yet some conclusions and interpretations have been made. For instance, although researchers continue to argue among themselves over certain points, there now appears to be little doubt of the following points.

The earliest known rock art, made by foragers in the highlands of central Sahara, involves large engraving of wild animals, dating back 12,000 years or even more, and was a spontaneous initiative. The art often had magnificent simplicity of line and expression, portraying the essence of its subjects rather than their formal shape, a simplicity recognized and adopted by modern master.

Over time, artistic practice spread from the central Sahara westward to the Atlantic coast and eastward to the Nile valley, and was probably a base from which some Egyptian art arose to the Sahara.

Early forager art was symbolic, not necessarily portraying the obvious. In particular, Round Head Period painting make us sharply aware that those early artists had highly developed *concepts of reality and moral values, even though it used to be believed that they were merely primitive hunter-gatherers.*

The art reflects succeeding changes in human attitudes toward the natural environment, from self-recognition as man forming part of, to recognizing man's position above and outside nature. Exactly what influenced these changes remains uncertain, but altering climates, introduction of pottery, and shifts from purely forager to pastoral and agricultural economies must all have played their part. Over time, the powerful drama of the earlier art deteriorates as it becomes more naturalistic and mundane.

Underlying conceptions of Saharan rock art forms spread south to influence the plastic arts of Negroid western Africa, while styles of cattle painting spread to the Nile and were then taken south along the Great Rift into Kenya; however, Saharan art forms in general never spread south of Lake Turkana.

It is unfortunate to note scarcity of rock art phenomenon on the Kenyan scene. Apart from the Olorgaselie prehistoric site with findings of traditional artifacts strewn on the

ground in a natural habitat, the rock art in Lake Victoria at Mfangano island have a fascinating record of artistic and creative experience. The animal drawings commonly manifest in many examples of rock art across Africa are obviously absent in the Kenyan case which, in as far as the Mfangano spectacle shows, only depicts forms of concentric cycles on the rock surface. These seem to signify the sun, which, accordingly to folklore symbolizes sun god which the local Luo people used to look up to as representing diety. There are also aspects of fish which represent the natural form of food in an aquatic environment. The rock art of god in the Inner Mongolia and the rock art of sun and moon in the Jiangsu appear to share common religious belief in Kenya and China

Such conclusions tell something about the development of northern African art, but little about its interpretation, an area in which northern and eastern African research lags behind work being done in southern Africa. While recognition must be given to the fact that interpretation of earlier art forms will always reflect guesswork there is strong belief that too little use has been made of local ethnographies and that greater study of these applied to rock art might prove fruitful.

5.4 Recommendations:

Going by what has been noted of the role the prehistoric artist played in recording the events, escapades and hunting exploits of his day and the impact these images may have had on viewers at both the spiritual and educational levels, there is a lot to draw from this early human experience in terms of the service art and design has given and continues to give in the development of technology and communication. If man was created in the image of God as noted spiritual writings say, then the artist in this regard should be the reference point in his creative endowment. The artist must have been the first man to put down information in pictorial form long before language medium complemented the effort. It is interesting to note that elements of

communication like signs, logos, symbols, pictures et *cetera* have not been replaced in their communication roles but only complemented by language and the print.

Throughout history the ideas men have been artists and so, their participation at all levels of development should hardly be taken for granted. Everything around us is either naturally created or man- made. Man's capacity to think and create must be appreciated and promoted by the government and well wishers alike. Art education and all that manifests in creative thinking and innovation must be taken seriously and given priority in the school curriculum. It is sad to imagine the threat curriculum developers have raised against the teaching of art. The reason given has been that only the gifted child may benefit from the teaching of the subject and since these are usually only a few in a school, the subject is therefore a waste of time if it is not amongst examinable subjects in national examinations. It is natural enough for history to have identified only a few gifted people in its wake and yet these few have brought momentous feats in development of technology. It is not enough to promote and protect our heritage as only tourist sites for foreign exchange earnings. Rather, research should be critically directed on what innovators can make of what can be done to add value to what exists as our history. Is there anything from prehistory that can jumpstart new thinking in the resurgence of African lost glory since the infiltration of colonialism? What happened to the cradles civilization in Africa: Egyptian civilization as bequeathed to the world, the Ashanti empire in West Africa with its bronze sculptures and statuettes? What happened to African independence from the yoke of the oppressors?

In trying to answer the questions posed, we need to rethink. If all prehistoric artists acted so telepathetically without ever coming across themselves as they worked in different parts of the world, then there must only have been communality in thinking at every stage of their creative performance. Should that be the case, then we have the challenge to do further research and find out the cause for the disparities that have arisen in the development agenda for humanities across the world. It may as well turn

out that this is because of lack of recognition and acknowledgment of the role of creative thinkers in development of societies.

The challenge for the Kenya government and by extension, the Kenyan people is to develop consciousness for preservation of the environment especially in those areas which involve history and heritage. Due to threats to deface manifestation of prehistoric creative activity on the rock or elsewhere by both man and animals, measures should be taken to protect sites either through fencing or appropriate digital documentation. National Museums and archives should develop records in this regard. Sites and places of Tourist interest so created should then become points of attraction not only to students who want to expand knowledge of their country but also to scholars and researchers who want to pursue studies of specific cultural interest. The school curricula, as has already been cited under protection limitations, should also be reviewed and restructured to inculcate in the student the potential of preservation and protection of heritage in the development of national image and identity.

Appendix:

Additional figures:

Africa Rock art of the central zone



Kasama Hills, Northern Province, Zambia.

Courtesy of the Rock Art Research Institute, University of the Witwatersrand, South Africa.



Dedza Hills, Central Region, Malawi.

Courtesy of the Rock Art Research Institute, University of the Witwatersrand, South Africa.

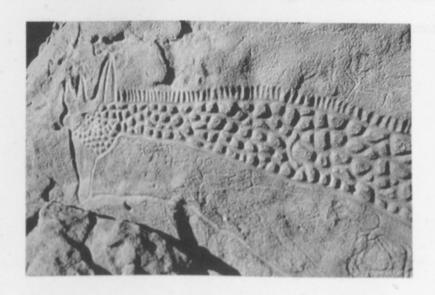


Kolo, Dodoma Region, Tanzania.

Courtesy of the Rock Art Research Institute, University of the Witwatersrand, South Africa

A representational image from the Kondoa Region. The art of this area is an anomaly because in subject matter and style, it is more similar to southern African rock art than to other rock art traditions of the central zone.

Africa Rock art of the northern zone



Head of the male giraffe. The techniques used to make this spectacular work of art include deep carving, low relief for the spots, smoothing of the lines, and polishing of the head.

Africa Rock art of the southern zone



The Linton Panel.

Image courtesy of the South African Museum, Cape Town.

This rock painting was extricated from a shelter in the Drakensberg Mountains and currently resides in the South African Museum, Cape Town. Its images of antelopes and humans have been interpreted as evocations of Khoisan trance experiences. Beautifully rendered in subtle tones of red and white, this is among the most famous South African rock paintings. Although its date of execution is not known, it is estimated to have been painted sometime during the eighteenth or nineteenth centuries A.D.

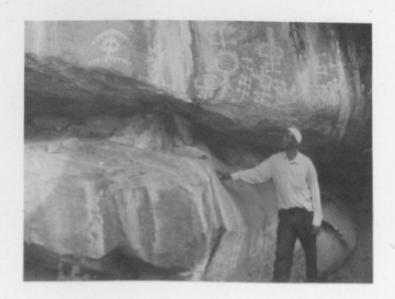


Lonyana Rock, Kwazulu-Natal, South Africa.

Image courtesy of Rock Art Research Institute, University of the Witwatersrand, South Africa

The southern zone is characterized by very detailed, fine-lined San paintings. This image is one of two known circular depictions of the curing or trance dance. Figures dance around a seated figure apparently healing another reclining person enveloped in a kaross.

Africa Rock art of the Eastern zone



Late white painting attributed to bantu-spe	eaking farmers in Tanzania, probably mad	e
during the last 700 years.		

Chinese rock art



Megaloceros giganteus rock art in Yinshan mountain



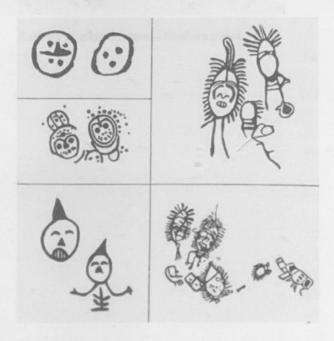
The rock art of god in the Inner Mongolia



The rock art of sun, star and moon in the Jiangsu



Rock art of reproductive



The face figure of the rock art



Rock art of animals figure in Northern prairie

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