

**TOWARDS AN UNDERSTANDING OF THE LATE PLEISTOCENE AND HOLOCENE
ASSEMBLAGES THROUGH THE SHIWA NG'ANDU ROCK ART IN ZAMBIA**

BY

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DECLARATION

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ABSTRACT

Rock art is much more than mere decorations or reflections of everyday concerns or daubing of figures for idle pastime but a reflection of past people's relation with their environment. This study examines Shiwa Ng'andu Rock Art of in the context of the Late Pleistocene and Holocene hunter-gatherer activities. It reveals that rock art and stone tool making were two aspects of the hunter-gatherer lifestyle that took place synchronously. The study has established that the paintings of rock art at Shiwa Ng'andu belong to the later stages of the Nachikufan period.

The study has also established that the Shiwa Ng'andu rock art had a direct link to the BaTwa rock art of central Africa belong to the schematic art zone whose sites were attributed to the Late Stone Age and the others to the Early Iron Age period. The Shiwa Ng'andu rock art like many others provides a rich historical, cultural and ritual significance. This is because of the application of colour and use of realistic and abstract forms (of the red tradition) and a truly artistic conception of the ideas which most deeply moved the minds of the people who made the paintings. The study highlights the connection between rock art in the region and various challenges in the interpretation of the rock art. The rock art did not only have an aesthetic appeal to the artist, but acts of cultural significance too.

The study concludes by demonstrating that the social theory in rock art interpretation of Shiwa Ng'andu was based on the premise that the major point in making rock art was to communicate societal concerns and principles. The production of art was embedded in the social, political, economic, and religious circumstances of the whole community. This was also the context for the consumption of the art. The rock art was intelligible to the viewers because it fell within the broader framework of symbolism and experience of the wider society in which it was done.

DEDICATION

This Dissertation is dedicated to my adored parents, Mr. Lenson Kayuni Sr. and Mrs. Beatrice M. Kayuni who sacrificed a lot for my education. To my beloved Sisters, Helen, Faith, Tina, Napanji, Diana, Memory, and Karen, Brother Lenson Jr., Nieces and Nephews, loving and understanding Husband Benny Sikazwe and most importantly my beautiful daughter, Loongo and my handsome son Emmanuel B. C.

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LIST OF ABBREVIATIONS

BUSO	Busongwa
CHV	Chimfwembe Village Site
EIA	Early Iron Age
KRS	Kapishya Rock Art
LM	Livingstone Museum
LSA	Late Stone Age
LDB	Lunsemfwa Drainage Basin
NAZ	National Archives of Zambia
NHCC	National Heritage Conservation Commission

CHAPTER ONE: INTRODUCTION

INTRODUCTION

Rock art is a term that refers to prehistoric or historic graphic marks on suitable rock surfaces and is very important in the study of prehistoric societies in Zambia. It is a global phenomenon, found in many culturally diverse regions of the world. Throughout human history art has been produced in many contexts. Although there are exceptions, the majority of it has been ethnographically recorded and produced as part of ritual. These artworks are linked to magico-religious significance.¹ Much of rock art is part of culture, a special spiritual package of the Late Stone Age (LSA) hunter-gatherers, long departed in the face of the arrival of more powerful farming communities and desertification. The art inspired some of the subsequent societies, and many sites have been adopted as places of religious significance.² Rock art research is currently an active research arena and has generated an academic debate in many parts of Africa and the globe at large. This study focuses on the Shiwa Ng'andu rock art in order to understand the Late Pleistocene and Holocene rock art assemblages in northern Zambia. This study is vital with regard to rock art not only to Zambia but also to the region as it shows the link of Zambia's rock art specifically the Shiwa Ng'andu rock art to the BaTwa art of Central Africa.

The term rock art first appears in published literature as early as the 1940s.³ The oldest known rock art dates from the Upper Paleolithic or Late Stone Age period, having been found in Africa, Europe, Australia and Asia as well as in the Americas. The archaeological sub-discipline of rock art studies first developed in the late 19th century among Francophone scholars studying the Upper Paleolithic rock art found in the cave systems of Western Europe. While French

¹David S. Whitley, Art of the Shaman: Rock Art of California. (Salt Lake City UT: university of Utah Press, 2000), p.12., see also B. W Smith, And The National Heritage Conservation Commission, Zambia's Ancient Rock Art: The Paintings Of Kasama. (Livingstone: National Heritage Conservation, 1997), pp.32-48.

²Nick Walker, "Review of Alex Campbell and David Coulson, African Rock Art: Paintings and Engravings on Stone". Botswana Notes and Records, 33, (2001), p. 161.

³E. Goodall, "Domestic Animals in rock art" Proceedings and Transactions of the Rhodesian Scientific Association 41, (1946), p.57.

archaeologists expressed interest in rock art research, Anglophone archaeologists largely neglected the subject for decades.⁴ Whitley states that:

the discipline of rock art studies witnessed a "revolution" during the 1980s and 1990s, as increasing numbers of archaeologists in the Anglophone world and Latin America turned their attention to the subject. In doing so, they recognised that rock art could be used to understand symbolic and religious systems, gender relations, cultural boundaries, cultural change and the origins of art and belief.⁵

David Lewis-Williams, a South African archaeologist, carried out significant work on the rock art of the San people of southern Africa in which he combined ethnographic data to establish the original purpose of the artworks. He is now celebrated for elevating rock art studies to a theoretically sophisticated research domain. However, rock art studies worldwide are marked by substantial differences of opinion regarding the suitability of various methods and the most relevant and defensible theoretical framework.⁶ Rock art research requires an integrated effort that brings together archaeological theory, method, fieldwork, analytical techniques and interpretation.

Therefore rock art or parietal art is an archaeological term that refers to human-made markings placed on natural stone. In this way, it is distinct from artworks placed on constructed walls or free-standing sculpture.⁷ Rock art is thus a form of landscape art, and includes designs that have been painted on bare vertical faces and ceilings in caves and rock shelters, on bluff faces and rocky outcrops or boulder surfaces.⁸

Rock art is found across a wide geographical spread of cultures. It served multiple purposes in the contemporary world and continues to be of importance to indigenous peoples in various parts

⁴David S. Whitley, Introduction to Rock Art Research. (Walnut Creek, California: Left Coast Press, 2005), pp.viii, 1.

⁵D.S. Whitley, 'Shamanism and rock art in western North America'. Cambridge Archaeological Journal, 2, (1992), p.91, see also Whitley, Introduction to Rock Art Research, pp.x-1.

⁶D.J. Lewis-Williams and T. Dowson, Discovering Southern African Rock Art, (Cape Town: D. Philip, 1990), p.9.

⁷Whitley, Introduction to Rock Art Research, p.3.

⁸Whitley, Introduction to Rock Art Research, p.4. See also K.I. Meiklejohn, 'Aspects of Weathering of the Clarens Formation in the Kwazulu-Natal: Drakensberg: Implication for the Preservation of Indigenous Rock Art', Unpublished PhD Thesis, University of Natal, Pietermaritzburg, (1995), pp.11-23.

of the world. In several regions, rock art remains spiritually important to indigenous peoples, who view it as both a sacred and a significant component of their cultural patrimony.⁹ It also serves as an important source of cultural tourism, and hence a key source of economic revenue in certain parts of the world. As such, images taken from cave art have appeared on memorabilia and other artefacts sold as a part of the tourist products and have been utilised in popular culture for their aesthetic qualities.¹⁰

Rock art found in many culturally diverse regions of the world has been produced in many contexts throughout human history, although the majority of it has been ethnographically recorded to have been produced as a part to help enact rituals. It can be noted that other purposes could have been to mark territory and to record historical events or stories. Some of this art seems to depict real events whilst many other examples are apparently entirely abstract. Prehistoric rock depictions were not purely descriptive. Each motif (individual markings) and design had a "deep significance" that is not always decipherable to modern scholars.¹¹

There are two classes of rock art typology. These include chattel or mobile art, (that is, art applied to small objects especially that found in archaeological deposits either in caves or in the open), and parietal art (which is restricted to walls, roofs, in some cases on floors of caves and rock shelters).¹² Parietal art takes three forms: markings scratched or pecked into rock surfaces, which are commonly known as engravings or petroglyphs, geoglyphs and markings painted onto rock surfaces sometimes referred to as pictographs.¹³ The term pictographs refers not only to motifs executed using pigment but also daubings or drawings. These are most common in areas where there are caves or rock shelters, outcrops of granite and in sedimentary rock formations of limestone, sandstone and quartzite, pictographs are sometimes interchanged in this work with rock paintings (although that only refers to paintings).

⁹Whitley, Introduction to Rock Art Research, p.1.

¹⁰ Whitley, Introduction to Rock Art Research, p.1-2.

¹¹ Andrea Arca, 'The topographical engravings of Alpine rock-art: fields, settlements and agricultural landscapes'. The Figured Landscapes of Rock-Art (Cambridge: Cambridge University Press, 2004), p. 319.

¹²Billiard B. Lishiko, 'The Politics of Production of Archaeological Knowledge: A Case Study of the Later Stone Age Rock art Paintings of Kasama, Northern Zambia', University of Cape Town, MA., Dissertation, (2004), p.167.

¹³Lishiko, 'The Politics of Production of Archaeological Knowledge', p.168.

Petroglyphs (rock engravings) are created by rock removal, including scratching, abrading, pecking, carving, drilling, incising and sculpting on rocks.¹⁴ Like pictographs, rock engravings are usually performed in softer sandstone but some can still be found on other types of rocks such as limestone, dolerites, dolomite, gneiss and granite. The third category of parietal art is geoglyphs which are earth figures such as earth forms or intaglios engraved into the ground.¹⁵ Some of the most famous geoglyphs are the Nazca Lines in Peru, hill figures, turf mazes and the stone-lined labyrinths of Scandinavia.¹⁶ For Zambia, rock art falls into two distinct categories, namely, engravings and paintings.¹⁷ This study is concerned with rock art paintings which are the basis of investigations in the Shiwa Ng'andu area in northern Zambia.

Rock art is one of the oldest art forms that has found expression at many later Stone Age sites in Zambia and elsewhere with suitable rock surfaces.¹⁸ Depictions of human figures, richly hued animals, and figures combining human and animal structures continue to inspire admiration for their sophistication, energy, and direct powerful forms. The apparent universality of these images is misleading, especially that the content and style range widely over the African continent. Nevertheless, African rock art can be divided into three broad geographical zones and these are southern, central, and northern. The art of each of these zones is distinctive and easily recognisable. For instance, the rock art in Zambia 'sits within a broad geometric rock art belt straddling East and Central Africa'.¹⁹ In this study, the term geometric is used to describe images that conform to a basic geometric shape not identifiable as obviously figurative.²⁰

¹⁴ The word comes from the Greek words petros meaning 'stone' and glyphein meaning 'to carve' (it was originally coined in French as pétroglyphe). See Petroglyphs - Pictographs - Cave Paintings - Geoglyphs <http://www.crystalinks.com/petroglyphs.html> Accessed 7/12/2014)

¹⁵ A geoglyph is a drawing on the ground, or a large motif, (generally greater than 4 metres) or design produced on the ground, either by arranging clasts (stones, stone fragments, gravel or earth) to create a positive geoglyph (stone arrangement/alignment, petroform, earth mound) or by removing patinated clasts to expose unpatinated ground (negative geoglyph). See Petroglyphs Pictographs Cave Paintings Geoglyphs <http://www.crystalinks.com/petroglyphs.html> (7/12/2014). See also Promeet, Dutta. 2012 Rock Art. In Encyclopaedia Britannica. <http://www.britannica.com/EBchecked/topic/506054/rockart>, Accessed April, 2015. See also Solveig-A. Turpin, 'Rock Art and Hunter-Gatherer Archaeology: A Case study from the South-West Texas and Northern Mexico' *Journal of Field Archaeology*, 17, 13, (1990), p.263.

¹⁶ See Petroglyphs - Pictographs - Cave Paintings - Geoglyphs <http://www.crystalinks.com/petroglyphs.html> Accessed 7/12/2015.

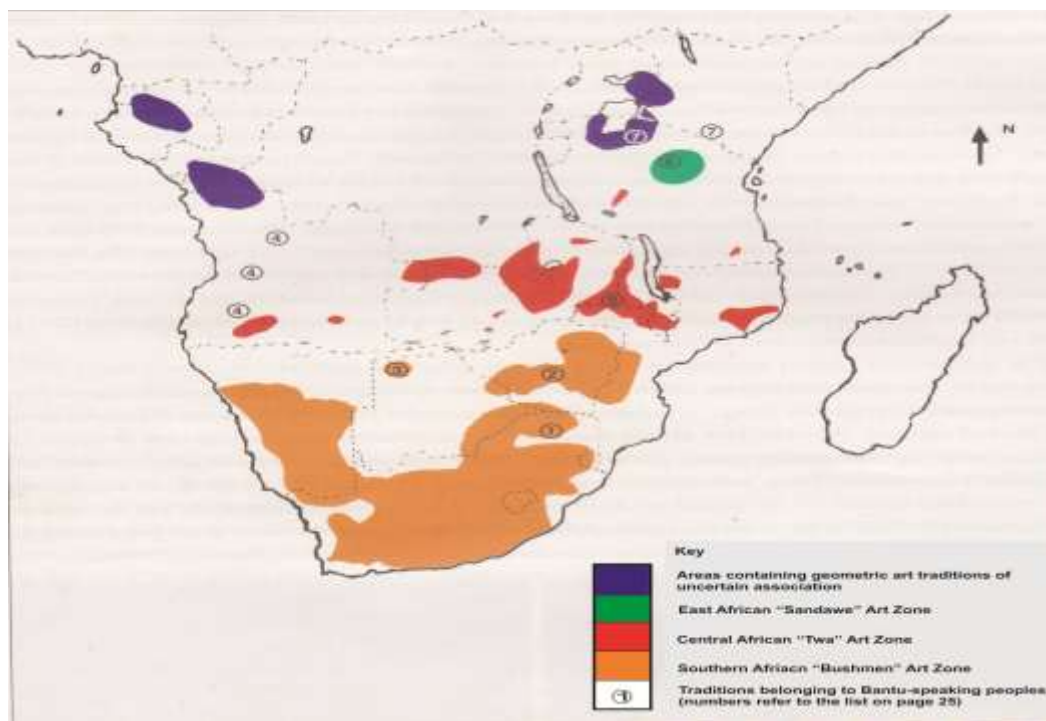
¹⁷ D.W. Phillipson, *Prehistoric Rock paintings and Engravings of Zambia: Exhibition Catalogue*, Livingstone National Museum. (Lusaka: Government Printers, 1972), p.7.

¹⁸ Phillipson, *Prehistoric Rock paintings and Engravings of Zambia*, p.7.

¹⁹ B. W. Smith, 'Rock Art-BaTwa/Pygmies,' in R.B. Taylor and J. Kaplan (eds.) *The Encyclopaedia of Religion and Nature* (London: Theommes Continuum, 2005), p.1392, see also J.D Clark, *The Prehistory of Southern Africa*.

The Central African art follows the Zambezi River and the Anglo-Namibian border to the south. The archaeological remains also show strong divergence along this same line.²¹ Where the Central African art uses a distinct contrast with extensive geometric designs. For instance, animal forms or depictions are extremely unpredictable and with grossly distorted body forms, while those of Southern Africa adhere to strict and regular conventions which are highly naturalistic'.²² The Central African rock art differs fundamentally from that found in some parts of southern and northern Africa and in the central regions of Tanzania. The map below depicts this vividly.

Map 1: Map of Sub-Saharan Africa showing the distribution of rock art traditions belonging to both hunter-gatherer and Bantu Speaking Peoples.



Source: B. Smith, *Zambia's Ancient Rock Art*, (Livingstone: National Heritage Conservation, 1997), p.23.

(Harmondsworth: Penguin Books, 1959) and W.H Whitley, 'Southern Province Rock-Paintings'. *Tanganyika Notes And Records* 31: (1951), p.59.

²⁰Namono, *Surrogate Surfaces*, p.90. see also AncilaNhamo, 'Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe', University of Zimbabwe, PhD. Thesis, (2014), p.221.

²¹Smith Schmidt, *Message from the Past: The Rock Art of Eastern and Southern Africa* (NT, Stone Watch, 2001), p.67.

²²Smith, *Zambia's Ancient Rock Art*, p.24.

The distribution of rock paintings and rock engravings in most parts of the world where they occur depends on the presence of geological formations within the landscape. Rock paintings absence from other areas apparently may be a factor of unsuitable or non-durable rock surfaces. Therefore, the location and distribution of rock art paintings were determined by the presence of suitable rock surfaces. The rock surfaces were often related to specific geographical features such as geologic formations or mountains, springs or rivers. As a result, this created a vital relationship between rock art and the landscape or environment. Hence areas devoid of suitable rock surfaces do not possess paintings. For example, large parts of Zambia lying in swampy areas are known to have no rock paintings. Even when Smith states that rock art is found in most districts of Zambia and in places where sites have not been reported, this does not include areas where there are no suitable rock surfaces²³ Perhaps this is because of lack of sufficient research in certain parts of Zambia.

In Central Africa, paintings and engravings are also sometimes called 'BaTwa art' because most of it was created by the Twa²⁴ people. According to Vansina, Twa (BaTwa) is a term designating 'bush people' (hunters and gatherers), small hunter-gatherer, autochthonous and dwarf, now used for 'pygmy'.²⁵ Hewlett shades more light on the word 'pygmy', by which these hunter-gatherers are described, by arguing that the term is not derived from a name of any African group of people.²⁶ The actual etymological origin of 'pygmy' is the Greek word, 'Pugmaioi' or 'pugna', meaning an ancient length measured from the elbow to the wrist, or to the knuckles of the second digit, about 13 inches'.²⁷ The Bantu people were left with a legacy of rock painting by their hunter-gatherer predecessors. This makes rock paintings and engravings Africa's oldest continuously practiced art form.

²³Smith, *Zambia's Ancient Rock Art*, p.11.

²⁴ J. Vansina, *Paths in the Rainforests: Towards a History of Political Tradition in Equatorial Africa* (London: James Currey, 1990), p.56.

²⁵ Vansina, *Paths in the Rainforests*, p.56, 279.

²⁶ B.S. Hewlett, 'Cultural Diversity among African Pygmies', in S. Kent (ed.). *Cultural Diversity among Twentieth-Century Foragers: An African Perspective*, (Cambridge: Cambridge University Press, 1996), p.215.

²⁷ C. Namono, 'Surrogate Surface: A Contextual Interpretative Approach to the Rock Art of Uganda', PhD Thesis, University of Witwatersrand, (2010), p.26.

According to Lee, rock art is part of the archaeological record which has potential to elucidate many parts of the artist/s culture as it can tell us about belief and ideology.²⁸ Rock art is a precious cultural heritage of humankind and one of the most evocative of all the pieces of heritage left for us by our ancestors. It is indeed a precious depository of information on how ancient peoples interpreted their physical and spiritual worlds.

Rock art in some cases also furnishes us with precious contemporary documents of animal species that are now extinct in the region where these paintings are located. These artistic forms are also the only sources of data that give a glimpse into the artist's religious traditions. In other words, whereas the painters' remains and bone implements may tell us when and where they existed, how they lived and died, and even what they ate, it is only through their art that we can know a little more about their thoughts²⁹. Thus, rock art can serve as the best means of showing the interaction between our ancestors and the world as they perceived it. By examining its symbolism and analysis of its significance, we can look into the minds of people who lived in the late Pleistocene era thousands of years ago.³⁰ During this period humans began to produce the earliest works of art and engage in religious and spiritual behaviour such as burial and ritual.³¹ Therefore, rock art sites provide a unique insight into the meaning of the archaeological record, and an opportunity to view elements of culture and daily life as they were perceived by ancient peoples. Equally, rock art offers an understanding of both the artists themselves, the societies in which they lived and the possible symbolic meaning of the paintings themselves.

From the above mentioned, we can say that rock art research is therefore fundamental to creating links with humanity's past. It is vital for posterity and provides new knowledge on the lifestyle of ancient people and their technology. It is in this perspective that the study of the Shiwa Ng'andu rock art is expected to contribute to our present understanding of the late Pleistocene and Holocene assemblages of northern Zambia.

²⁸ G. Lee, 'Problems in the Conservation and Preservation of rock art WAAC Newsletter', 8, 1, (1986), p.5-7.

²⁹ D. Braun, 'Africa's Imperilled Rock Art Documented Before it Disappears', National Geographic News, October 5, (2001), p.1

³⁰ David Christian, Big History: Between Nothing and Everything. (New York: McGraw Hill Education, 2014), p.93. Later Pleistocene refers or corresponds with later palaeolithic or Later Stone Age Archaeology. This is a prehistoric period in human history distinguished by the development of the most primitive stone tools discovered, and covers roughly 95% of human technological prehistory.

³¹ Sibel Kusimba, African Foragers: Environment, Technology, Interactions. (Walnut Creek: Altamira Press, 2003), p.285. see also James. E. McClellan, Science and Technology in World History: An Introduction. (Baltimore, Maryland: JHU Press, 2006), pp. 6-12.

THE STUDY AREA

The study area is located in Shiwa Ng'andu District in Muchinga Province in northern Zambia. Shiwa Ng'andu lies between 11.2 latitude and 31.6 longitude, with the Global positioning system (GPS) coordinates of -11.170613, 31.600381.

It is part of the Muchinga Escarpment, a ridge of mountainous landscape that stretches from East Africa southwards into the Chisamba area, about 50 Kilometres north of Lusaka. In the higher area, near Mpika, the escarpment reaches over 5,500 feet in elevation.³²

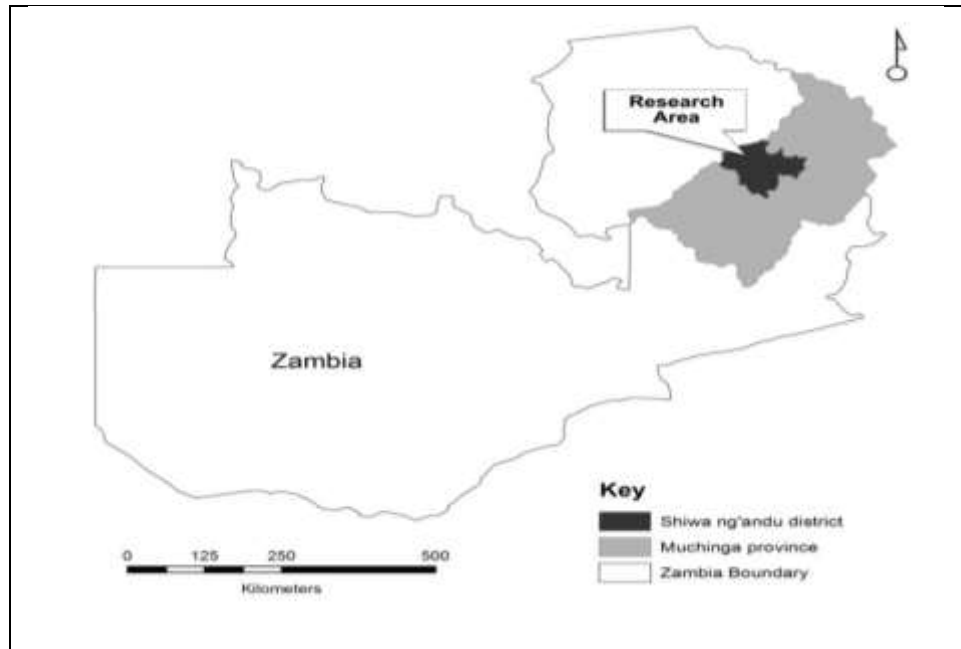
The Muchinga escarpment and the plateau to the west support one of the largest rock art sites in the region, representing a rich cultural history. These sites contain large quantities of paintings that contribute to the understanding of prehistoric rock art as they provide us with the forager life-ways or style of the people who once wondered that part of Zambia.³³

Shiwa Ng'andu rock art sites is a cultural landscape located within a radius ranging from 300m to 10km from Kapishya Hot Spring Lodge. The Kapishya Hot Spring Lodge is situated along the banks of the Mansha River, a tributary of the Chambeshi River. Mansha is 32km northwest of Shiwa Ng'andu Estates and half-way between Mpika and Chinsali districts (see Map 2, 3,4 and 5 from pages 9 to 11)

³²D. R. Archer, 'Relief; Drainage; Geology; Rainfall; Temperature, Humidity, Sunshine and Winds', in D. H. Davies, (ed.). Zambia in Maps: Graphic Perspectives of a Developing Country. (London: University of London Press, 1971), p.17., see also Sheryl E. F. Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', Ph.D. Thesis, Berkeley, University of California, (1969), p.32.

³³Billiard B. Lishiko, Report on Kapishya Research and Documentation of Rock art, National Heritage Conservation Commission, Northern Region, (July, 2011) , p.5, See also Lishiko The Politics of Production of Archaeological Knowledge, p.106

Map 2: Map of Zambia showing Northern and Muchinga provinces and the location of Shiwa Ng'andu area (District).



Source: Map by R. Kapumha

Map 3: Map showing the location of the Shiwa Ng'andu rock art sites.



Source: Map by Author

The study area comprises rocky hills and most of the paintings in the area are located in rock shelters and overhangs. It belongs to a Muva series which is one of the four rock systems found in Zambia. These are the Basement Complex, Muva Series, Katanga System and the Karroo System. Archer has also described the study area as being similar to Sherry Miller's study area, west of the Muchinga escarpment illustrating that:

The lowest of these is the Basement complex, which was subdivided ...into the earlier Basement Series and the later Muva Series. This upper Muva Series appears more frequently than the lower Basement Series, forming the great Muchinga Escarpment. The most prominent members of the Muva are the quartzites, and these form the majority of the more imposing hill ranges on the plateau...³⁴

Archer adds that

overlying the Basement Complex is the sedimentary Katanga System, composed of sandstones and shales. It is an extension into Zambia from Congo, and forms the high northern plateau west of the Muchinga Escarpment...Preserved in depressions and river valleys in these older rocks are the sedimentary beds, usually sandstones, of the Karroo system which are usually prominent in the Luangwa Valley and extend into the Eastern plateau.³⁵

The Shiwa Ng'andu Rock art site area mainly comprises metamorphic rocks or sandstones³⁶ and shows spotting with iron ore in some cases.³⁷

The study area just like the other plateau regions in Zambia is associated with four major soil types namely, Ferralsols, Lithosols, Gleysols and Acrisols. In most places on site, the soils can be excavated with a spade.³⁸ Soil colour ranges from the dull grey and greyish brown associated

³⁴Archer, 'Relief; Drainage; Geology; Rainfall', .pp.17-18, see also, Miller, 'The Nachikufan Industries of The Later Stone Age in Zambia', p.33.

³⁵Archer, 'Relief; Drainage; Geology; Rainfall', .pp.17-18 and see also Miller, 'The Nachikufan Industries of The Later Stone Age in Zambia', pp.33-34.

³⁶JICA-Zambia, 'The Project for Groundwater Development and Sanitation Improvement in the Northern Province', (2005), p.1.

³⁷Lishiko, 'Report on the Kapishya Rock Art', p.6 See also, JICA-Zambia, 'The Project for Groundwater Development', p.3

³⁸W.J. Veldkamp, 'Soils of Zambia' (2nd.ed.). Soils Bulletin, 13, Soil Survey Unit, Mt. Makulu, Zambia, (1987), p. 31.

with the Gleysols and Acrisols to the reddish brownish hue associated with the Ferralsols. The reddish tint in the Ferralsols is indicative of the presence of iron compounds in the soil while the grey colour in the aforementioned soils is indicative of low amounts of humus. The type of humus on site can be categorised as mull humus',³⁹ which is dark coloured and intimately mixed with mineral matter. The dark tones of the soil are also indicative of the wet conditions on site.

The Shiwa Ng'andu study area receives high to average annual rainfall during a single season. The seasons in Zambia result from a combination of changes in temperature and rainfall. After the rain season, streams and small rivers such as the Mansha River in the study area serve as minor water retention systems by means of dambos.

The major land uses in the study area are tourism and subsistence farming mainly through the Chitemene system where branches of trees are cut and burnt to make the soils more fertile. Other activities in the area include charcoal burning.

The distribution of various types of vegetation in Shiwa Ng'andu is largely dependent on three main factors, that is climate, altitude and soil. None of these factors is dominant over the others. Rather, it is their inter-relationship which determines the vegetation in any specific situation.

The physiognomy of the vegetation in terms of its general external appearance and structure (of life form within) falls into three major categories, namely, forests, woodlands and grasslands. The vegetation in the study area is famous for Riparian, Miombo, and Chipya Woodlands characteristically dominated by *Brachystegia*, *Julbernadia* and *Isobertlinia* species.⁴⁰ The study area has a great variety of grasses (poaceae), succulents, shrubs, creepers or climbers and fauna. The area also has dambos.

The vegetation supports abundant wild and marine life which include big and small game, fish, reptiles and amphibians. Common animal species in the area include duiker, greysbok, (Katili), bush buck, impala, kudu, porcupine, lion (intermittently reported), buffalo (rare), giant rats, cane rats, rock rats, bush pigs, snakes (various types), rabbits, velvets and mountain goats. Bird species include guinea fowls (Ikanga), horn bill (Mungo'mba), doves, black baobabs, African

³⁹Lishiko, 'Report on the Kapishya Rock Art', p.7.

⁴⁰A. E. G. Storrs, Know Your Trees; Some Common Trees Found in Zambia. (Ndola: Regional Soil Conservation Unit, Forest Dept, 1979), pp.25-26., see also Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', p.37.

wagtails and fire feathers. There are also snakes of various types, such as pythons, cobras, puff adders and others.

STATEMENT OF THE PROBLEM

Although Zambia is endowed with numerous rock art paintings in many parts of the country, not much research has been undertaken to demonstrate the role of rock art in the transformation of hunter-gatherer activities and lifeways during the late Pleistocene and Holocene periods. The appearance of rock art in the technological make up of hunter-gatherer societies has not attracted much scholarly research of the upper Pleistocene and Holocene periods for a better understanding of the Late Stone Age (LSA) assemblages. The rock art of the upper Pleistocene and Holocene periods and LSA assemblages have been treated as separate entities and yet they were synchronous. The appearance of rock art at sites such as Nachikufu caves which has yielded LSA industries creates a good opportunity to begin treating rock art and stone assemblages as having formed a hunter-gatherer system during the closing stages of the Pleistocene and into the Holocene period that needs a better understanding. This study focuses on the Shiwa Ng'andu rock art in order to understand LSA assemblages in northern Zambia.

OBJECTIVES OF THE STUDY

The purpose of the study is to establish the context of the Shiwa Ng'andu rock art paintings within the upper Pleistocene and Holocene chronological framework. The specific objectives of the study are therefore to:

1. establish the context of Shiwa Ng'andu rock art paintings within the temporal framework of the Later Stone Age of Zambia.
2. determine whether any relationship existed between the Shiwa Ng'andu rock art paintings and the BaTwa rock art.
3. analyze the symbolic meaning of Shiwa Ng'andu rock art paintings.

RATIONALE

Considering the inadequacy of research carried out on the significance of rock art in the context of LSA assemblages in Zambia, the study of the Shiwa Ng'andu paintings serves as an important beginning to contextualising the role of art in hunter-gatherer lifestyles. The work endeavours to situate rock art in archaeological studies that have tended to concentrate mostly on stone tool making and yet the two aspects of hunter-gatherer life took place synchronously. The work is

therefore expected to enhance the understanding of the lifestyle and behaviour patterns of the late Pleistocene and Holocene hunter-gatherers in the Shiwa Ng'andu area specifically and therefore others areas generally.

Besides making a great contribution to the existing rock art literature, it is also hoped that, this work will stimulate more research interest in the study of rock art. It is also hoped that the study will generate new knowledge on the importance of rock art in Zambia.

METHODOLOGY

The study was based on both primary and secondary sources. Oral sources, published and unpublished literature relating to rock art and LSA assemblages were explored. Two complementary methods were used in this research, namely, archival (review of primary and secondary sources) and fieldwork (interviews, actual locating, recording of rock art sites and analysis of paintings in the study areas).

Secondary literature such as books, PhD theses, M.A dissertations, reports, maps and various documents were consulted. The documents in the University of Zambia Main Library and the National Archives of Zambia (NAZ) which contained data on rock art and LSA assemblages were reviewed.

Fieldwork was conducted for 27 days in two phases. Some in September, but the rest in November, 2015. Generally, this study took a qualitative approach, but in some instances statistical data was collected for use in relevant parts of the study.

The second body of literature reviewed concerned rock art research conducted by the National Heritage Conservation Commission and the Livingstone National Museum in Zambia and by individual researchers. Reviewed also was literature on Central and Southern Africa on various interpretations of rock art and the LSA industry in relation to rock art.

Specifically, the study employed several methods in the field to research and document rock art. These included taking notes, drawing, tracing and photography and use of Global Positioning

System (GPS).⁴¹ The exact spatial distribution of rock art sites was established by getting coordinates of every site by using the GPS. Mapping rock art with GPS is very important as observed by O'Connor, that:

“an exact location of every panel is needed in a rock art site recording as well as that of other archaeological features that may be present. In order to understand rock art it is necessary to place it in its landscape context which is why accurate mapping of panels is important.”⁴²

Specific rock art sites as well as their associated environmental elements were documented since rock art research has shown that areas with rock art paintings were very important from the artist's point of view.⁴³ The aim was to record as many sites as possible in the study area and collect data in relation to their exact position and contents. In the process eight sites were recorded that contained paintings.

The study used note books, photographs, field notes and sketching in addition to textual documentation.⁴⁴ This was critical so as to obtain all essential data such as the actual motifs, associated archaeological features, environmental setting of the area and the actual recording process.⁴⁵ This study faced one major limitation; it lacked ideal equipment such as laser scanners,⁴⁶ for precise recording of the art and solar reflectors⁴⁷ hence presenting challenges to accurately represent highly irregular surfaces on some rock art sites.

Tracing of few selected rock art sites (which were not very clear and faded) was necessary for accuracy and recording of rock art images or motifs and their scale in detail that were only

⁴¹P. Stanbury, and J. Clegg, A field guide to aboriginal rock engravings. (Sydney: University Press, Melbourne, 1990), p.163.

⁴²B. O'Connor, 'Rock Art Pilot Project: A Conservation and Management Study of Rock Motifs in England', Paper Presented at the 5th Annual Meeting of the European Archaeological Association, Bournemouth, England, September 14-19, (1999), p.5.

⁴³P. Blomquis, 'Contextualizing the Reindeer Lake Rock Art', M.A. Dissertation, University of Saskatchewan, (2011), p.6.

⁴⁴See attached Rock Art Form in the appendix used for data captured during documentation of each particular site

⁴⁵Angel Johnson, Carolyn Boyd, and Amanda Castaneda, 'Lower Pecos Rock Art Recording and Preservation Project', Archaeological Institute of America, 8, (March, 2011), p.11.

⁴⁶Sabry El-Hakim, et al., 'On the importance of Laser Scanners in recording rock art', in Sabry El-Hakim, John Fryer, Michel Picard and Emily Whiting, Digital recording of aboriginal rock art, Visual Information Technology, (Ottawa, Ontario: NRC, 2005), p.9.

⁴⁷El-Hakim, et al., 'On the importance of Laser Scanners in recording rock art', p.13.

possible from intensive close up interaction due to loss of color.⁴⁸ Therefore, images that may not have been very clear from photographs of the panels were supplemented with tracings and drawings. The paintings were traced using clear transparent polythene/plastics with different colored pens which did not fade and were water resistant.⁴⁹ In cases where the images of the paintings were too faint to be deciphered for the details, a strong magnifying glass was utilized in order to verify their details. Due to financial and time limitations, traced rock art sites in the study area were not revisited so that tracings could be inspected for accuracy in the event of possible immediate changes and notations made. In some caves and rock shelters with (see chapter three) floors that contained soil levels with undisturbed deposits by modern human or animal activities, excavation works were undertaken on one site to find out the habitation of the site.

METHODS OF INTERPRETATION

An ethno-archaeological approach⁵⁰ was employed in data interpretation which involved the recording of oral narratives and indigenous knowledge. This was used in an effort to get data on the possible identity of the artists (for Chapter Two) and symbolic meanings of the paintings (for Chapter Five) in the study area. The study used ethnographic information on the BaTwa and archaeological data from the art that is already known from around the globe and most importantly from the central African region relating it to the study area. Data was drawn from other parts of Zambia, central and southern Africa to interpret the symbols in the art. Pertinent ethnographic information was used from the present day BaTwa people in central Africa in trying to illuminate the lifestyle in relation to the art (symbols). Works of key experts on ethnography in the region such as Richard B. Lee, J.D. Lewis-Williams and Patricia J. Vinnicombe were consulted. Ethnography is vital because it provides a starting point in understanding the cosmology of the society of the artist. It was essential to observe the way

⁴⁸ See M. Greer., J. Greer, and J.D. Keyser, 'Pros and Cons of Tracing in Rock art Recording: The 2005 Season at Bear Gulch Pictographs, Montana', Paper presented at 71st Annual Meeting of the Society of American Archaeology, San Juan, Puerto Rico', (2006), p.2., see also For the importance of tracing in rock art in Blomquist, 'Contextualizing The Reindeer Lake Rock Art', p.8.

⁴⁹ M. Hachid, 'Sahara Rock Art Methodology', in S. A. Karzabi, M. Hachid, and M. Garcia, Rock art in the Sahara: Conservation Methodology and Management, Studies on Cultural Heritage, (UNESCO, 1986), p.16
Similar pens have been used for tracing of rock art by various researchers.

⁵⁰ Mary Lange, 'Rock Art Research in South Africa', Rosenberg Quarterly, 12, (October, 2011), p.1.

symbols operated, yet only found in observations of what the participants did with the symbols in real life.⁵¹

However, ethnographic analogy has some limitations, especially the problem of obtaining information about beliefs, values, and meanings from informants, Whitley highlights that the informants may not be able to articulate meaning or beliefs, may use metaphoric language understood only by the locals, they themselves may have a different understanding of the cultural symbols, may be disinclined to articulate them, or may intentionally mislead and make false statements.⁵² Nhamo adds that the various ethnographic and historic sources are also just segments of what was happening at the time they were recorded, but culture is dynamic, it changed before and after they were recorded. Yet the study of ethnography is unavoidable as it is a source of insights into attitudes of the BaTwa and other hunter-gatherer groups.⁵³

LITERATURE REVIEW

Zambia forms part of the geometric art zone that spreads across Central Africa, including Angola, Uganda, northern Mozambique, Malawi and the Democratic Republic of Congo. The work on rock art in Zambia has been devoted to description, classification and location by scholars such as J.D. Clark, D.W. Phillipson, B.B. Lishiko and B. Smith. Hence, the above situation provides a justification for undertaking this study.

A number of studies in Zambia provided useful data on the subject. Background information about the area of study comes from Billiard Lishiko's report on the 'Documentation of the Kapishya Rock Art'.⁵⁴ This comes after Mulenga Kapwepwe⁵⁵ informed National Heritage Conservation Commission about the paintings in the study area. Lishiko lays a starting point to this study as he provides a brief background and an outline of the Kapishya Rock art geological setting, description of the rock art motifs and styles. His study is hence also useful to the basic understanding of the study area. Thus this study owes its origin to Lishiko's preliminary report on

⁵¹Ancila Nhamo, 'Out of the Labyrinth: An enquiry into the Significance of Kudu in San rock art of Zimunya, Manyikaland, Eastern Zimbabwe,' M.A. Dissertation, University of Bergen, (2005), p.29.

⁵²D.S. Whitley, 'Shamanism and Rock Art in Far Western North America', Cambridge Archaeological Journal, 2, (1992), p76.

⁵³Nhamo, 'Out of the Labyrinth', p.20.

⁵⁴Billiard L. Lishiko, 'Report on the Kapishya Rock Art', NHCC., Unpublished, 2011.pp.1-31.

⁵⁵Mulenga Kapwepwe is the Chairperson of the Zambia National Arts Council and hails from Chinsali where rock paintings are found.

the rock art in the study area. The study has built upon Lishiko's work except that the methods adopted in this study are set out in more detail and the geographical area covered is wider.

In another background study, Benjamin W. Smith's monograph on the paintings of Kasama is a vital informative source to this research.⁵⁶ The publication presents an awareness of the existence of rock art in Kasama and its importance in providing insights into Zambia's prehistoric past. Smith's 1994 doctoral work presents rock art in four representations, namely, red animal tradition, Red geometric tradition (both clustered as red traditions), white spread eagled tradition and white zoomorphic tradition (white traditions), and the red traditions are critical to this study. Furthermore, Smith classifies the paintings into two styles, the earlier red and the later white traditions. He argues that they were painted by the BaTwa. Smith's work is also informative as he distinguishes between red animal tradition to be male associated and red geometric to be female associated. His work also adds to this study as he argues that the red geometric tradition pictographs could be interpreted under two broad themes- weather divination and fertility.⁵⁷ In addition to these two broad themes, his study also analyses the theory of hunting magic. This work is critical to rock art studies as it provides a foundation of BaTwa Rock art in Shiwa Ng'andu.

D. W. Phillipson's work on Zambian rock art is another interesting source of data for this research.⁵⁸ It presents a brief archaeological background and discusses the division and distribution of the rock art paintings. A vital aspect of his work in relation to this study is that, it shows the types of paintings in various regions of Zambia where research was conducted and further indicates that the Northern Province is where most of the rock art paintings in the country are predominantly situated. The study illustrates the relationship between rock art and the Later Stone Age (LSA) and Early Iron Age (EIA) populations. Unlike J. Desmond Clark who had earlier divided rock art into two general categories, Schematic (later) and Naturalistic (earliest),⁵⁹ Smith concluded that the red traditions made by the hunter-gatherers fall under Naturalistic

⁵⁶ B. W. Smith and The National Heritage Conservation Commission, Zambia's Ancient Rock Art: The Paintings of Kasama. (Livingstone: National Heritage Conservation, 1997), pp.7-60.

⁵⁷ B.W.Smith, 'Rock art in South Central Africa: A study based on the pictographs of Dedza, District, Malawi and Kasama District, Zambia', PhD. Thesis, (1994), p.286.

⁵⁸ D. W. Phillipson, Prehistoric Rock Paintings and Engravings of Zambia. (Livingstone: Livingstone Museum, 1972), pp.5-26.

⁵⁹J.D. Clark, The Prehistory of Southern Africa. (Harmondsworth: Penguin Books, 1959), p.195.

paintings. D. W. Phillipson, on the other hand, argued that some of the earlier red Traditions were painted by the Iron Age, Bantu-language speakers. This conclusion resulted in a massive debate on the authorship of the red paintings between J.D. Clark and D.W. Phillipson in the early 1970s. Recent studies such as Smith's research in Kasama and Malawi have led archaeologists to conclude that the red traditions were made by hunter-gatherers and white traditions by the Iron Age people.⁶⁰ Smith concurs with Phillipson as he indicates that the white traditions in the Eastern Province of Zambia were painted by the Early Iron Age (EIA) Bantu speaking people.⁶¹ This work is helpful because it points to the painters of the Shiwa Ng'andu red tradition as being the BaTwa hunter-gatherers. Although all these studies are vital to this research, they do not show any synchronous relationships between rock art and the LSA assemblages and mostly in line with interpretation of the art which this work has looked at.

Desmond J. Clark's work is another instructive source as it is the first to classify the typological system of the Zambian LSA artifacts as he initially described the Nachikufan cultural succession,⁶² which formed the basis for Miller's typology.⁶³ Clark identified the LSA artefacts based on common similarities with the Smithfield found in South Africa. Clark also contributes to this study as he notes that these sites with LSA artefacts also have schematic/geometric rock art. He argues that in terms of settlement type the majority of Nachikufan sites are located in rock shelters found within the woodlands of the Muchinga Escarpment suggesting dependence on hunting of small animals and gathering wild fruits, roots and nuts. They used bow and arrow technology with transverse heads of stone and points of bone, stone headed knobkerries and later introduced polished stone axes as weapons.⁶⁴

In another enlightening study, Clark recognised and acknowledged the important link between rock art and cultural practice.⁶⁵ This then led to the link between the geometric or schematic rock

⁶⁰Leslie. F. Zubieta, The Rock art of MwanaWaChentcherere II Rock shelter, Malawi: a site- specific study of girl's initiation Rock Art. (Leinden: African Studies Centre, 2006), pp.3-9.

⁶¹Smith, 'Zambia's Ancient Rock Art. The Paintings of Kasama', p.26.

⁶²J.D. Clark, 'The newly discovered Nachikufu Culture of Northern Rhodesia and possible origin of certain elements of the South African Smithfield Culture', Southern African Archaeological Bulletin 5, (1950), p. 80.

⁶³Sheryl E. Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', Unpublished Ph.D. Thesis, Berkeley, University of California, (1969), pp.2-10.

⁶⁴Clark, The Prehistory of Southern Africa, p.198, see also J.D. Clark, The Prehistory of Africa. (London: Thames & Hudson, 1970), pp. 175-178.

⁶⁵ Clark, The Prehistory of Southern Africa, p.196.

art in Central Africa and the works of the Later Stone Age hunter-gatherers, or the BaTwa people. This was later backed by archaeological excavations from areas in Malawi and Zambia. Based on these excavations, Clark argued that the presence of LSA and Iron Age material was evidence of two groups of people living alongside each other; the Bantu or early farmers and the BaTwa or hunter-gatherers. The BaTwa were the makers of the red animal and red geometrics, particularly since the LSA tool distribution matched the regional distribution of the geometric rock art.⁶⁶

The work of Sheryl Miller is vital to this study as it sheds light on the Nachikufu industry.⁶⁷ Her work began the first broad classification system for LSA stone tools in Zambia and Malawi. This study is critical as it formulated a thorough definition of the Nachikufu industry, in all its stages. It presented the description in terms of tool-type frequencies rather than vague, relative terms. The tool type frequencies led to a fuller understanding of the Nachikufu industry. Also of importance was the debitage (waste material from making prehistoric stone implements) which throws light on the techniques of tool-making. Consideration of raw materials available as both the texture and size of raw materials vitally influenced the technique of manufacture and the resulting tool forms. Thus Miller's work is informative and well documented in interpreting the way of life practiced by the tool-makers themselves and their interrelationships with the physical environment in which they lived. Equally, their rock art and the cultures contiguous with theirs in space and time are very useful to this study. This work resulted in an extensive examination of materials from seven LSA sites (Nachikufu Cave, Nachikufu Shelter, Nsalu Hill Cave, Bimbewa Mpalabwe Shelter, Chifubwa Stream Shelter, Mwela Rocks Shelter and Leopard's Hill Cave) not previously analysed by J. D. Clark who did the first study of the Nachikufu industry in 1942.

For some time there has been discussion on the broad understanding of the adaptive patterns of the LSA peoples in a complex geographical area. In the line of discussing the temporal framework of the LSA of Zambia, F. B. Musonda's work is another major source of information to this study as it provides more data on the exploitation and land use patterns of the prehistoric

⁶⁶Clark, *'The Prehistory of Southern Africa'*, p.211. See also Namono, 'Surrogate Surfaces', p.60.

⁶⁷Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', pp.8-9.

inhabitants of the Lunsemfwa Drainage Basin (LDB).⁶⁸ The study centred on the problem of relating the hunter-gatherer occupation sites and subsistence to major ecological zones and testing to see whether the recognised zones were reflected in the cultural materials. Musonda therefore hypothesised that the patterns of movements would be greatly influenced by these factors. The model proposed in the study is useful as it provides a means of demonstrating how prehistoric human interacted with their environment. It also serves as a useful basis for future research in the unexplored adjacent regions.

The current interpretation of Zambia's rock art is based on research conducted on the Kasama Later Stone Age rock art in 1992. Billiard B. Lishiko's analysis of this work is worth taking note of.⁶⁹ He analysed the problems with the methods, approaches and hypotheses that were used to produce the current meanings of Zambia's rock pictographs in which he agrees with what Clark discusses on the two divisions or distinctions of rock art, Schematic and Naturalistic. He examines and illustrates the politics in the production of rock art. He refers to political issues involved in the production of the above kind of archaeological knowledge at various levels. Starting with the theoretical and contextual introduction to the discipline of archaeology, it is not only apparent that the production of archaeological knowledge is fraught with politics at all levels- academic, heritage, national and international, but that in some cases it is used for various political purposes by various organs. Narrowing down to methods used in the production of rock art knowledge, such as qualitative, ethnography and neuro-psychology, this study shows that all have their own merits and demerits. For instance, Lishiko shows that some ethnographic theories, especially those that place the southern African rock art painters in the primitivist framework, resulted in the appropriation of knowledge in the rock art by early researchers in the region. He further points out that the use of ethnographic parallels or comparative methods cannot account for all the types of cultures. This study acknowledges this, but goes even further to discuss the challenges in following one theory and also addresses issues related to the social, economic and cultural aspects pertaining to the Shiwa Ng'andu rock art.⁷⁰

⁶⁸ F.B. Musonda, 'Aspects of the Prehistory of the Lunsemfwa Drainage Basin, Zambia, during the last 20,000 years', PhD. Thesis, Berkeley: University of California, (1983), pp.12-13.

⁶⁹Lishiko, 'The Politics of Production of Archaeological Knowledge', p.vi.

⁷⁰Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.41-60.

What is also cardinal to this study is Lishiko's argument that similar rock art motifs observed in different geographical locations in the world may not imply that the designs had the same historical origins, development, meaning, nor were they developed from the same psychic law. He instead argues that, if ethnographic parallels are used there is need to look at the process and history of the development of the customs and beliefs that are depicted by rock art motifs. This is equally applicable to the shamanistic approach that is based on neuropsychology. Using the Kasama (Later Stone Age) rock art as a case study, he clearly illustrates that this approach is full of flaws and quite unreliable in some instances. Because of the above, he cautions against the use of the earlier approach for interpreting the entire corpus of rock art paintings not only in southern Africa but in other geographical areas of the world.⁷¹ Lishiko also observes that knowledge produced from rock art, and indeed any other archaeological artefacts by researchers is a sound basis for ascribing values or significance to various heritage sites or artefacts.

Lishiko's statements in relation to the symbolic meaning of rock art are constructive. The people of Kasama used the landscape with pictographs for rain rituals or rain divination although they did not recognise the importance of the pictographs in any way in their rituals. Secondly, the Bemba speaking inhabitants of the area did not go to this landscape because of its numerous pictographs, but because they believed that the spirits of their ancestors dwelt in some sacred places within that landscape.⁷² His research in the rain ritual ceremonies of the Bemba speaking people showed that the Bemba speakers invoked ancestral help and guidance in order to perform rituals for good rains and harvest. The same was done when the Bemba were befallen with calamities such as famine. They asked for help through their ancestors. It also became apparent from this researcher's interviews that at no time did the Bemba worship rain spirits using weather divination symbols and geometric motifs. Rain rituals were actually sacrificial.

On a regional basis, Catherine Namono's work is critical to this study.⁷³ Namono formulates a contextual interpretative approach considering the meaning of the geometric rock art of Uganda. She sequences the art and ties identified patterns in the rock art data from ethnography, oral traditions and archaeological sources which this study has benefited from. Namono further

⁷¹Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.63-80.

⁷²Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.119-21.

⁷³ C. Namono, 'Surrogate Surface', p.xv.

considers the geometric rock art of Uganda to have been made within the context of ritual. Her work provides an empirical contribution to the current study by generating a comprehensive database of rock art in Uganda, and also partially in Central Africa, using a contextual approach to identify patterns and to interpret the rock art. Similar to Namono's study which relates the Ugandan rock art to that of the BaTwa, the current study explores the relationship between the Shiwa Ng'andu rock art and the BaTwa rock art.

DecioMuianga's study of the rock art and ancient material culture of the Cahora Bassa Dam, Tete Province, Mozambique, is another informative source to our research.⁷⁴ The study is an important and well documented examination of the nature of the Zambezi River as a boundary and frontier in the Cahora Bassa Dam area. The study analyses theoretical writings on borders and boundaries suggesting hypotheses to explore the distinction in the rock art and Late Stone Age tools and how the Zambezi River may have operated as a boundary between the Nachikufan and the Wilton industries. The results of the study show that two hunter-gatherer groups with different archaeological signatures occupied this area (San and BaTwa). However, the idea of the Zambezi River being a hunter-gatherer border does not apply to the rock art in this study. Yet this work is vital as it sets the ground that in most incidences the Zambezi River was and still is at this moment a hunter-gatherer border with distinct figures which seem to follow this separation of Southern and Central African rock art regions.

In discussing symbolism and significance of rock art, AncilaNhamo's study is very instructive.⁷⁵ It investigated the significance of the kudu in the art, that is, what it meant to the artists. This significance, according to Nhamo, is exhibited in the way the kudu is drawn in the art. What is relevant to our study is Nhamo's investigations on the painted context in which the kudu is found in the art as a way of finding what the artist associated the animal with. Nhamo also draws insights into the significance of the kudu from ethnographic data collected in various parts of southern Africa and also other rock art studies on animal symbolism.⁷⁶ Nhamo demonstrates that these might have symbolised the importance of social relationships. The study provides that the depictions such as the labyrinth (found at Muromo, Zimbabwe) and the therianthrope figures

⁷⁴DecioMuianga, 'Rock Art and Ancient Material Culture of the Cahora Bossa Dam, Tete Province, Mozambique', M. A. Dissertation, University of Witwatersrand, (2013), p. ii.

⁷⁵AncilaNhamo, 'Out of the Labyrinth: An enquiry into the Significance of Kudu in San rock art of Zimunya, Manyikaland, Eastern Zimbabwe', M.A. Dissertation, University of Bergen, (2005), p.1.

⁷⁶Nhamo, 'Out of the Labyrinth', pp.70-90.

serve to highlight the perceived strong connections between human beings and the kudu. The study further shows that ethnographic accounts have evidence of the kudu, just like many of the big antelope and elephant figures like those in Shiwa Ng'andu which were used in rites of passage and as animals of potency. As much as this current work does not specialise in Kudu or animal postures and significance, it is vital to the study of rock art as it has validated the significance or symbolic meaning of animal figures in Shiwa Ng'andu. It has also provided insight on the symbolic meaning of other figures such as concentric circles or weather symbols.

In another study, Nhamo has analysed the different attributes of hunter-gatherers and characterises the hunter-gatherer rock art and investigates spatial variations of motif representation in Zimbabwean rock art.⁷⁷ She examines the significance of the variations in the rock art in an attempt to understand the lifestyles of its painters. It is the premise of her research that rock art motif variation over space, just like other cultural variables, reflects on the differences in the social, environmental, economic, political, and religious organisation of a society. The study is fundamental to this work as it contributes towards a holistic understanding of the meaning of the art and the social context of its production. Another critical aspect of her study is the exploration of motif variation which influences the interpretation of the art and the conceptualisation of its makers, the Later Stone Age hunter-gatherers in Zimbabwe and other parts of southern Africa.⁷⁸ She argues that Rock art variation comes in various forms. This research concentrated mainly on subject matter, colour and technique of execution,⁷⁹ which is of great significance to our study.

OUTLINE OF CHAPTERS

This dissertation is divided into six chapters. Chapter One is the Introduction, the Second Chapter analyses rock art context within the Later Stone Age (LSA) of Central Africa specifically northern Zambia. It highlights rock art from excavated LSA sites in Zambia and neighbouring countries. The chapter also analyses the distribution and dating of rock art in Zambia. Chapter Three presents a study of the Shiwa Ng'andu rock art sites. The chapter discusses issues related to

⁷⁷Ancila Nhamo, 'Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe', PhD. Thesis, University of Zimbabwe, (2014), pp. ii-iii.

⁷⁸Nhamo, 'Characterizing hunter-gatherer Rock Art', pp.399-401.

⁷⁹Nhamo, 'Characterizing hunter-gatherer Rock Art', pp.295-354.

rock art in the study area. Chapter Four presents data on the research of rock art in the study area in relation to the BaTwa rock art. Chapter Five analyses possible symbolic meanings, of rock art and how the art was an important social and/or cultural activity in hunter gatherer life just like other activities. Chapter Six concludes the study and draws together the key issues raised in earlier chapters.

CHAPTER TWO: ROCK ART CONTEXT WITHIN THE LATER STONE AGE

INTRODUCTION

Zambia like other Southern African countries has been endowed with a rich rock art heritage consisting of both paintings and engravings. This is because of the presence of diverse cultural and natural environments and landscapes. The country has unique rocky surfaces that are ideal for rock art thus its presence in many areas. For one to understand the Zambian Rock art paintings, it is important to consider and appreciate not only the dates, correlation and sequence, but also the history and functional relationship to the parent cultural traditions such as the Late Stone Age (LSA) and Early Iron Age (EIA). It is also important to consider and appreciate the process of events that have led to the understanding of rock art in relation to the environment. This chapter analyses the context of rock art within the Late Stone Age in relation to the Shiwa Ng'andu rock art. It gives a brief history of the Stone Age period and the development of rock art research in the country. It is argued that the prehistoric rock art of Zambia is closely associated with the Late Stone Age and Iron Age assemblages. It further proposes that the painters of the art who had settled in the study area left behind a priceless record of rock paintings depicting their everyday activities.

ARCHAEOLOGICAL BACKGROUND TO ZAMBIAN ROCK ART STUDIES

A survey of rock art sites from excavated LSA contexts in Zambia and neighbouring countries reveals that there is still need for more research as there is an incomplete but developing understanding of the rock art data in the country. For instance, very little archaeological work has been undertaken in the study area, but work done by J Desmond Clark and other archaeologists such as David Phillipson and Benjamin Smith, have made Zambia's prehistoric rock art record to be better known.

The period (from) 1912 to 1947 was characterised by minimal archaeological investigations which however, resulted in a few discoveries of rock art sites enabling researchers either to examine or report on the paintings.¹ In 1912, two painted sites (Nsalu and Nachitalo) were discovered by Professor Clarence Van Riet Lowe. In the 1930s, additional painted sites were reported by members of the Northern Province Administration, missionaries and others, and paintings began to be subjects of investigations by prehistorians.² So far as is known, Lowe is

¹ Nicholas M. Katanekwa, 'Rock art that tells a Story-Zambia's Unique Prehistoric art Heritage,' in Zambia Heritage News 1(1992), p.3.

² J. D. Clark, 'Rock Paintings of Northern Rhodesia and Nyasaland', in Rodger Summers (ed.), Prehistoric Rock art of the Federation of Rhodesia and Nyasaland, (Glasgow: Maclehose & Company Ltd, 1959), p.163.

the first prehistorian to examine Zambian (then Northern Rhodesian) rock art. His work includes documentation at several sites, particularly Nsalu and Nachikufu Cave paintings³. This was in the later part of 1936.⁴ It was not until 1948 that his work was followed up by Desmond Clark.⁵ It is at this time that we see a few of these rock art sites being documented by amateurs who helped preserve the prehistoric record. Professionally, Desmond Clark, also examined and reported on the paintings at Bimbe, Mbangombe, Nachikufu, Nachitalo, Mwela rocks, and Sakwe, Siakaunda, Simbo and Zawi hill.⁶ Later, researchers such as David W. Phillipson⁷, Joseph D. Vogel, J. H. Chaplin, Robin Derricourt and Brian Fagan made significant contributions to the study of Zambia's past.⁸ Recently, research and documentation were conducted by B. Smith and B.B. Lishiko leading to the creation of a clear picture of Zambia's rock art.

Dart, Clark⁹ and Chaplin¹⁰ also examined and reported on the Chifubwa and Munwa engravings. In addition, Chaplin reported on the paintings at Kundabwika Falls, Kaboshe, Mwendachabe, Manda Hill, Rukuzye. Other sites are Chitungulu, Ndumbwa, Nyambwezi, Kalelanguni Hill, Chayingo, Chipangale, Masiya, Mboza, Mkoma and Senzamanja.¹¹ The first extensive report of rock art in the Kasama region was made by a teacher, Miss Elizabeth Hopkins and her pupils at Kasama Girls Secondary School, who detected the richness of this area in the early 1950s.¹² Subsequently, the identification and documentation of rock art in places such as Kasama- Mwela rocks,¹³ Muso Hill, Nachitalo, Kifubwa stream, Mukamwanji,

³ R. M. Derricourt, 'Archaeology in Zambia: An Historical Outline', in African Social Research, 21, June, (1976), p.33.

⁴ A. R. Willcox, The Rock Art of Africa (London and Canberra: Croom Helm Australia Pty Ltd, 1984), p.34.

⁵ Clark, 'Rock Paintings of Northern Rhodesia and Nyasaland', p. 163.

⁶ J. D. Clark, The Prehistory of Southern Africa, (Harmondsworth: Penguin, 1959), pp.163-220.

⁷ D.W. Phillipson, 'The Prehistory of Eastern Zambia', Memoirs of the British Institute in East Africa, 6, (1976), pp.1-2.

⁸ Friday Mufuzi, 'The Livingstone Museum and its Contribution to Zambian History 1934-2006', PhD Thesis, University of Zambia, (2010), p.12.

⁹ J. D. Clark, 'Nachikufu culture of Northern Rhodesia', South African Archaeological Bulletin, 5, (1950), pp.86-98; D. J. Clark 'The Chifubwa Stream Rock shelter, Solwezi Northern Rhodesia', South African Archaeological Bulletin, 13 (1958), pp.21-24. See also Clark Desmond, J, Schematic art. South African Archaeological Bulletin, 13, 1958, pp.72-74; Chaplin, J. H., op. cit., 1962, and Dart, R. A., & Del Grande, N., op. cit., 1931

¹⁰ J. H. Chaplin, 'The Munwa stream rock-engravings', South African Archaeological Bulletin, 14, (1959), pp.28-34.

¹¹ J. H. Chaplin, 'Some unpublished rock paintings of Northern Rhodesia', South Africa Archaeological Bulletin, (1960), pp.45-48 and J. H. Chaplin, 'Further published example of rock art from Northern Rhodesia', South Africa, Archaeological Bulletin, 17, (1962), pp.5-12.

¹² Phillipson, 'Prehistoric Rock Paintings and Engravings of Zambia', p.13

¹³ Phillipson, 'Prehistoric Rock Paintings and Engravings of Zambia', p.13

Munkombwe River and Munwa stream, Kansamba, Nsalu, Nachikufu Cave sites¹⁴ have contributed to Zambia's prehistoric legacy.

More recently, rock art has been identified at rock shelter sites at Lukoshi in Chinsali and Ntumbachushi falls hills in Kawambwa.¹⁵ At these sites, there is evidence of rock paintings in association with stone and Iron Age artefacts. Thus, these artefacts and rock art forms have been recognised as the main features of ancient hunter-gatherer research in Central and Southern Africa during the upper Pleistocene and Holocene periods.¹⁶

Research in the Northern Province reveals that during the pre-colonial era, rock art was understood in association with oral traditions. Musonda notes that it is true that long before this, local communities were already strongly aware of their past which was expressed through oral histories passed down from one generation to the next. They recognised that archaeological sites, such as caves and rock shelters, were part of their traditional history and that these had served as home bases for many past human groups.¹⁷ The rock paintings were understood in relation to traditional beliefs, customs and myths. The people gave importance to these rock art sites in the preservation of their heritage. The local people in different parts of the country were aware of prehistory through oral traditions that traced the existence of places and artefacts that linked them to past human existence¹⁸ which they in turn linked to their ancestors. For example, the Bemba speaking peoples of northern pre-colonial Zambia referred to Mwela, Sumina, Mwankole and Namulundu rock art as God's creation.¹⁹ The same can be said of the Chewa of eastern Zambia, who might have used the art for their traditional rituals and ceremonies at Thandwe and Mkoma rock shelters.²⁰ Nevertheless, rock

¹⁴Willcox, *The Rock Art of Africa*, p.34., see also R. M. Derricourt, 'Archaeology in Zambia: An Historical Outline' in *African Social Research*, 21, June, (1976), p.33.

¹⁵Billiard B. Lishiko, 'The Politics of Production of Archaeological Knowledge: A Case Study of the Later Stone Age Rock art Paintings of Kasama, Northern Zambia', M.A. Dissertation, University of Cape Town, (2004), p.97.

¹⁶Décio Muianga, 'Rock Art and Ancient Material Culture of Cahora Bassa Dam, Tete Province, Mozambique', M.A. Dissertation, University of Witwatersrand, (2013), p.24.

¹⁷F. B. Musonda, '100 Years of Archaeological Research in Zambia: Changing Historical Perspectives', *South African Archaeological Bulletin*, 67, 195, (2012), p.89.

¹⁸F. Mufuzi, 'A History of the Asian trading Community, 1905-1964', M.A. Dissertation, University of Zambia, (2002), p.205.

¹⁹L.F.J. Sinkamba, & B.B. Lishiko, 'Rock art survey in Kasama District: A Retrieval of Archaeological Heritage', Unpublished Report, National Heritage Conservation Commission, Livingstone, Zambia (1992), pp.8.

²⁰B.W. Smith, and the National Heritage Conservation Commission, *Zambia's Ancient Rock Art: The Paintings of Kasama*, (Livingstone: National Heritage Conservation Commission, 1997), pp.26-27.

art studies during this period in Zambia were less pronounced by early archaeological researchers.²¹ Musonda notes that:

what the early Europeans researchers of the first phase failed to appreciate let alone consider, was the fact that the Stone and Iron Age societies that were responsible for the stone and iron technologies that they were encountering all over the African continent were as a result of the activities of hunter-gatherers, agriculturalists and pastoralists.²²

In as much as there is a long sequence of artistic development, Zambian rock art has so far received modest consideration from archaeologists and art historians, concerning the rock art deciphered on the walls of caves and rock shelters. This rock art is of great interest and differs in numerous imperative respects from the better-known sequences such as that of East Africa, South Africa, and Zimbabwe. In traditional Zambian culture, the pre-historic rock art is of particular interest as it is one of the oldest forms of artistic expression to have survived into modern times.²³

It is for this reason that Phillipson argues that the "understanding and evaluation of the Zambian rock paintings can only be attempted against the background of the archaeological sequence."²⁴ Rock Art has been attributed to the Last Stone Age period which existed in central and northern Zambia between 10,000 and 15,000 years ago.²⁵ It is at this time that indications of frequent human settlement of the plateaux were found in caves and rock shelters showing signs of prolonged occupation, although river valley and lakeside open sites were also favoured.²⁶

DISTRIBUTION OF ZAMBIA'S ROCK ART

Investigations by Phillipson, Clark and others suggest that rock art is distributed in most parts of Zambia wherever there is suitable rock surface. As stated above, rock art distribution depends on several factors such as the occurrence of suitable rock, such as granite. Suitable

²¹NAZ, BOX 111 (shelf 17), 'Archaeology in Zambia, Livingstone Museum', and Nicholas M. Katanekwa, 'Rock art that tells a Story-Zambia's Unique Prehistoric art Heritage' in Zambia Heritage News, 1, (1992), p.3. see also Musonda, '100 Years of Archaeological Research in Zambia', p.88.

²²F. B. Musonda, 'Looking Back and Looking Forward: Iron Age Studies in Southern Zambia and their contribution to the understanding of Tonga', in Tonga Timeline. Appraising Sixty Years of Multidisciplinary Research in Zambia and Zimbabwe. (Lusaka: Lembani Trust, 2013), p.3.

²³ D. W. Phillipson, Prehistoric Rock Paintings and Engravings of Zambia. (Livingstone: Livingstone Museum, 1972), p.7.

²⁴J.D. Clark, The Prehistory of Africa (London: Longman, 1970), p.174.

²⁵ Phillipson, 'Prehistoric Rock Paintings and Engravings of Zambia', p.8

²⁶Lishiko, 'The Politics of Production of Archaeological Knowledge', p.167.

surfaces which are flat and do not flake easily allowed the artists to paint.²⁷ Other factors include rocks that offer protection to the pictographs or paintings from environmental factors or hazards like sun and rain so that they can survive for appreciable periods of time.²⁸

Generally, Zambian rock art has been divided into two major categories, Naturalistic and semi-naturalistic paintings (these are the earliest), and Schematic or geometric art group (the latest).²⁹ Schematic paintings were motifs executed by either brush or fingers (dots) such as parallel lines, circles, concentric circles, ladders, grids, ellipses filled with parallel lines, tectiforms and stretched-out hides. Naturalistic paintings were those that had zoomorphic (animal) and anthropomorphic (human) figures.

The North-western, Lusaka and Luapula provinces mainly have Petroglyphs (engravings) whilst virtually all the provinces apart from the Kalahari sands of the Western Province have pictographs (paintings),³⁰ (for distribution, see Map 6; for percentage of rock art per province see charts on page 33). Recent research has revealed that petroglyphs may occur in any part of Zambia, with sheltered surfaces such as flat rocks and boulders,³¹ although early research work showed that petroglyphs were mainly found in the western and north-western parts of the country.³² This throws out Phillipson's claim that petroglyphs are exclusively schematic because a petroglyphic site such as Mankombwe located west of Lusaka depicts over eighty percent naturalistic (zoomorphic) figures than schematic. The presence of petroglyphic sites with naturalistic (zoomorphic) have also been equally reported in Gwembe, in southern Zambia and await verification by the National Heritage Conservation Commission.³³

Investigations by Willcox, Smith and Phillipson attest to the fact that there are two regions in Zambia which are very rich in rock paintings. These are to the north, the area around Kasama and Chipata to the east.³⁴ Shiwa Ng'andu is located in the area around Kasama, just between Kasama, Mpika and Chinsali (close to where the Nachikufu caves are located). With more research done by archaeologists, this area has potential to even produce more rock art

²⁷C. K. Cooke, *Rock art of Southern Africa* (Cape Town: Books of Africa, 1969), p.14., see also Sinkamba, & Lishiko, 'Rock art survey in Kasama District', p.15.

²⁸Lishiko, 'The Politics of Production of Archaeological Knowledge', p.96.

²⁹LM, 721/71a, Press Communiqué No. 406, Important New Discoveries in Northern Rhodesia, p.2. See also LM, ARCH/67/61 Chaplin's Tour report 2/60, 27/7/60, and Clark, *The Prehistory of Southern Africa*, p.195.

³⁰Lishiko, 'The Politics of Production of Archaeological Knowledge', p.96.

³¹Sinkamba, and Lishiko, 'Rock art survey in Kasama District', p.7, Two petroglyphic sites were discovered in 1992 in Lusaka. Mankombwe, currently the biggest known petroglyphic site in Zambia.

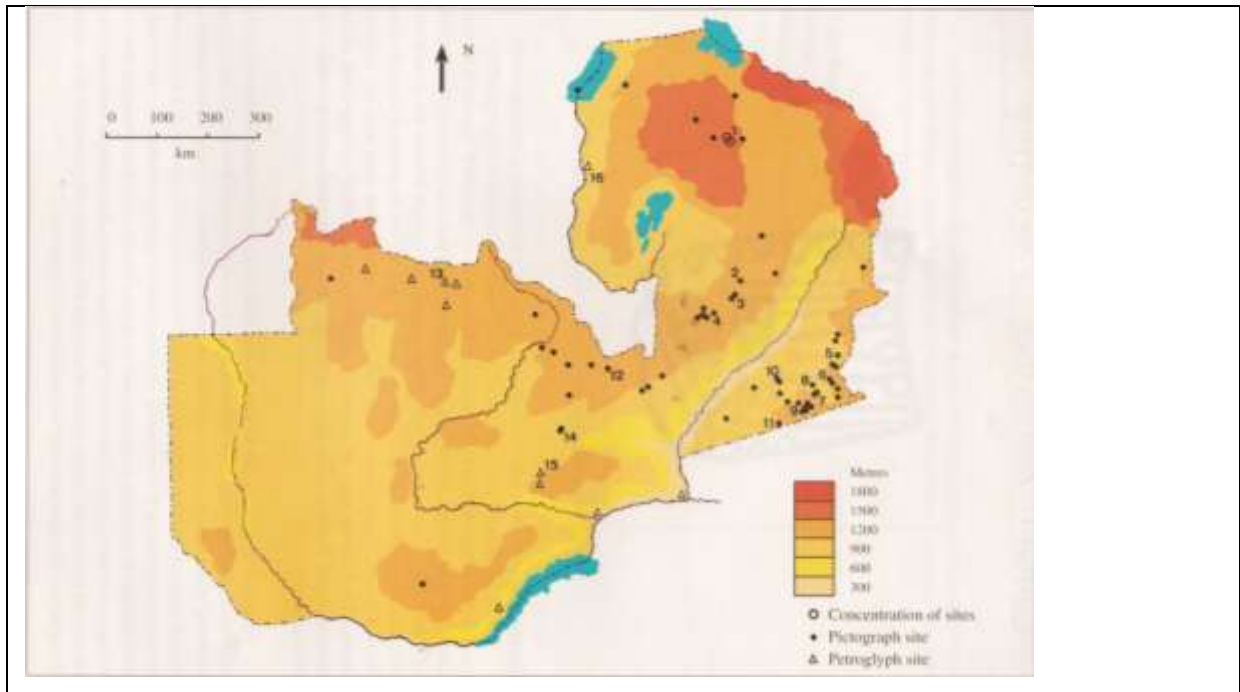
³²Phillipson, *The Later Prehistory of Eastern and Southern Africa*, p.227.

³³National Heritage Conservation Commission, p.13.

³⁴Phillipson, *Prehistoric Rock paintings and Engravings of Zambia*, p. 7.

discoveries. The breakdown of petroglyphs (engravings) and Pictographs (paintings) per province is shown in the form of charts on the next page (page 31).

Map 4: Map of Zambia showing rock art sites distribution.



Source: B. W. Smith, 1997, p.10.

Figure 1: Graphic Representations of Rock Art Petroglyphs (Engravings) per province

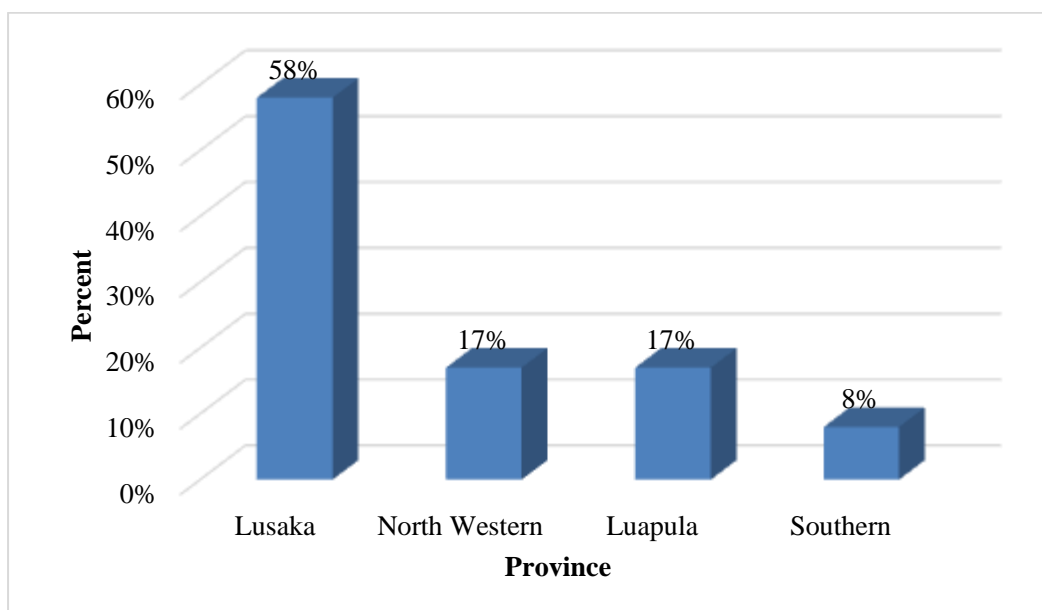
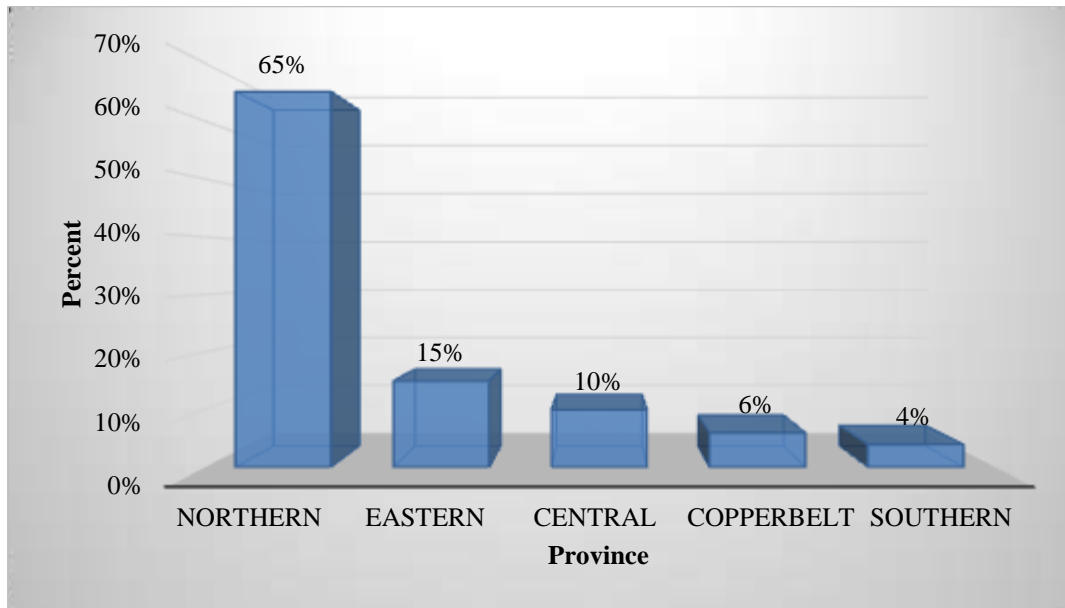


Figure 2: Graphic Representations of Rock Art Pictographs (Paintings) Per Province



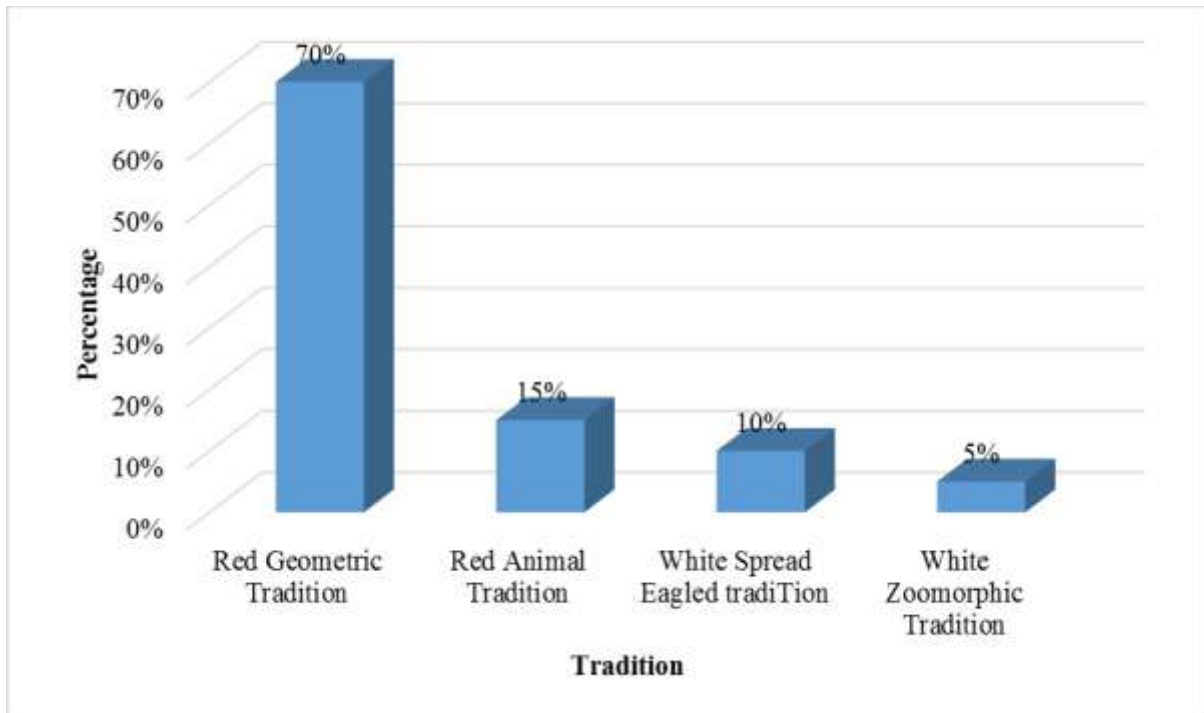
Smith believes that the representation of Zambia’s rock paintings are in four categories (see Chart Three). They include ‘the Red Animal Tradition’, ‘the Red Geometric tradition’, ‘the White Spread Eagled Tradition’, and the White Zoomorphic Tradition’.³⁵ Smith further distinguishes Red Animal (male associated) from Red Geometric (female associated) traditions. The White Spread-eagled Tradition, although not found in the study area, has been associated with Bantu speakers.³⁶ Evidence of most sites in a quartzite ridge like in the study area in the Muchinga Mountains region has art executed with semi-naturalistic and geometric paintings. The Nsalu Caves contain more of the geometric paintings³⁷ just like those in Shiwa Ng’andu (see Chapter Three).

³⁵ Smith ‘Zambia’s Ancient Rock Art: The Paintings of Kasama’, pp.12-7.

³⁶ Muianga, ‘Rock Art and Ancient Material Culture of the Cahora Bossa Dam’, p.49, Smith, ‘Zambia’s Ancient Rock Art’, p.24.

³⁷ LM, 721/109, Letter by Clark to the Chitambo Missionary- in-charge., 18th march, 1952.

Figure 3: Graphic representation of the Rock Art Tradition in Zambia



Late Stone Age aggregates in Zambia are mostly microlithic, and designate a hunting-gathering economy in which the techniques of food production were unknown. Variations in stone tool typology enable at least three regional groupings to be recognised.³⁸ The Zambian Wilton tradition found respectively in the Southern Province and the Nachikufan on the Central-Northern Province plateau, have been acknowledged for some years while in the east, a third variant, named after the Makwe rock shelter, has been documented.³⁹

Progressive typologically based succession of local developmental stages can be demonstrated in each zone. Currently, it is unclear to suggest the boundaries of the named regional types and their sequential stages are definable within close geographical or temporal limits, or if they are simply the best modes known in a moderately continuous range of variation. It is debatable whether this variation was dependent on the territorial boundaries of socio-political population units or on economic or behavioural factors subject to the local

³⁸Phillipson, 'Zambian Rock Paintings', p.3.

³⁹Sheryl E. F. Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', Ph.D. Thesis, Berkeley, University of California, (1969), p.32, also, Phillipson, 'The Prehistory of Eastern Zambia', p.1.

environment. Human skeletal remains discovered from Late Stone Age sites are mostly of the hunter-gatherer physical type of people.⁴⁰

Phillipson observed that the Late Stone Age inhabitants should be viewed by the appearance of the Zambian Early Iron Age people. Their way of life provides a complete difference with the Late Stone Age in matters such as their methods of food production, both agriculture and animal domestication, as well as the techniques of metallurgy, pottery and the construction of pole and daga (clay plastered) houses. During this period, life settlement in form the of villages made first appearance on the Zambian scene. Although, it is unclear whether the introduction of these new techniques were precisely concurrent, it is obvious that their arrival was closely connected with major population movements and coincided with the arrival of Bantu speakers.⁴¹ Phillipson mentions that within the Zambian Early Iron Age, at least seven regional groups may now be recognised. They appear to have entered the country through the Democratic Republic of Congo, and established themselves in Zambia. These events took place around the second or third centuries A.D.⁴²

The Early Iron Age people of the Kalambo(northern Zambia) and the Kamnama groups (in the east) appear to have been sparse, and the majority of the groups in these areas perhaps preserved their Late Stone Age way of life well into the present millennium.⁴³ Meanwhile, the Copperbelt Province was mostly populated by the farming peoples of the Chondwe group who exploited the copper deposits, dating from the middle of the first millennium A.D.⁴⁴ The Lusaka region had the Kapwirimbwegroupsettlers who were firmly established at an early date, but only the Kalundu and Dambwa Early Iron Age groups in the Southern Province displaced the surviving Late Stone Age hunters. People of BaTwa physical type survived in the extreme southwest of Zambia and partly they adopted an Iron Age way of life.⁴⁵

At about the beginning of the second millennium A.D., the first settlement of the later Iron Age people appeared. They appear to have been directly ancestral to many sections of the present Zambian population. The later Iron Age was established by the twelfth century on the

⁴⁰ C. Gabel, 'Further human remains from the Central African Later Stone Age', *Man*, 63,44,1963, p13.

⁴¹ D.W. Phillipson, 'Zambian rock paintings', *World Archaeology*, 3, 1972, p.314.

⁴² D.W. Phillipson, 'The Early Iron Age in Zambia: Regional Variants and Some Tentative Conclusions', *Journal of African History*, 9, (1968), pp.191-211.

⁴³ Phillipson, 'Zambian Rock Paintings', p.3.

⁴⁴ Phillipson, 'Zambian Rock Paintings', p.3.

⁴⁵ J. D. Clark, 'Bushman hunters of the Barotse Forests', *Northern Rhodesia Journal*. 1:2, 1951, pp.56-65.

Copperbelt, Lusaka and Eastern provinces.⁴⁶ The Early Iron Age in the Southern Province was displaced somewhat earlier than was the case further north, and the 'Kalomo Culture', whose relationship with other archaeological communities is so far poorly understood, was established by the eighth century A.D.⁴⁷

In western Zambia, the later Iron Age archaeology shows greater cultural continuity from the EIA into more recent times than is the case elsewhere.⁴⁸ Zambian prehistory has demonstrated three major cultural episodes which have shown considerable chronological overlap. Even with contact between EIA and LSA communities, the traditional way of life was still preserved, until after the replacement of the latter by later Iron Age societies.⁴⁹ It is against the background of this heterogeneous population that we must view the rock paintings at Shiwa Ng'andu.

In Zambia, the most common naturalistic motifs are simple monochrome paintings of antelope; other animals and human figures being comparatively rare. Linear motifs, including grids and ladder designs, and patterns of finger-dots are frequent in the schematic group.⁵⁰ Zambia has similar schematic paintings widely distributed,⁵¹ but the occurrence of naturalistic paintings has drawn the attention of archaeologists away from the schematic designs which consequently remain little known.⁵² Clark noted the tendency in Zambia where a sequence is recognised, for the naturalistic paintings to predate the schematic. The majority of sites contain sufficient paintings occurring under overhangs or in shelters with a number of motifs without any superimpositions. Therefore, conclusions as to the sequence and authorship of the paintings are necessarily tentative.⁵³

⁴⁶ D.W. Phillipson, 'Excavations at Twickenham Road, Lusaka' *Azania*, 5, (1970), pp.77-118.

⁴⁷ Katanekwa, 'Rock art that tells a Story-Zambia's Unique Prehistoric art Heritage', p.17.

⁴⁸ Phillipson, 'Excavations at Twickenham Road, Lusaka', *Azania*, 5, 1970, pp.77-118, see also, J. D Clark, *The Prehistory of Southern Africa*. Harmondsworth, (1959), and , N.M. Katanekwa, Some Early Iron Age Sites from Machili Valley of south-west Zambia. *Azania* 13, (1978), pp135-166.

⁴⁹ Lishiko, 'The Politics of Production of Archaeological Knowledge' p.165. Phillipson, *Zambian rock paintings*, p.3.

⁵⁰ NAZ, BOX 116, shelf 17, National and Historic Monument and Relics.

⁵¹ C.K. Cooke, Rock art in Matabeleland. In *Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland*, R. Summers. (ed.). (London: University of London, 1959), pp. 112-62.

⁵² D. N Lee, and H. C. Woodhouse, *Art on the Rocks of Southern Africa*. (Cape Town: University of Cape Town, 1970), p.16.

⁵³ Clark, 'The Prehistory of Southern Africa', p.19.

Zambia has four regions where rock art has so far been known. These are Northern, Copperbelt, Southern and Eastern regions. Northern Zambia has the utmost concentration of paintings so far, and has provided the first stylistic sequence for the country. According to Phillipson, the earliest paintings are naturalistic representations of animals or, less frequently, human figures.⁵⁴ They occur at Nachikufu Cave, in Serenje District.⁵⁵ This is where black monochrome naturalistic paintings comprising two elephants, a tiny and relatively well executed figure of an antelope, and a series of stylised human figures, some of which are armed with bows and one with a spear, have been found. Although no direct superimpositions exist at the site, the low position of the naturalistic paintings, together with their weathered condition, despite their sheltered situation, renders it likely that they are the earliest paintings at the site.⁵⁶

The second Nachikufan style is the red schematic series, represented by an elaborate grid-like motif and a series of small rectangular grids with vertical subdivisions, where one is overlain by a large oval mark in orange paint. The red schematic motifs are painted over at Nachikufu cave, grid designs are overlain by bold dots and oval splotches. Another group of designs is a thick greasy white paint.⁵⁷ The clearest figures are two crudely drawn elongated quadrupeds, which may be either mammalian or reptilian, and two representations of metal tools. Sites further to the south in Serenje District are what give confirmation and elaboration of the Nachikufan sequence.⁵⁸

Naturalistic art at Nakapapula rock shelter is symbolized by a reddish-purple animal figure in the 'Nachitalo style', where the body is represented by a crescentic block of paint, the limbs, tail and head being only briefly shown. Nakapapula, just like Nachikufu, also provides evidence for the absolute age of the schematic paintings. Part of the rock face is covered by a stack of fallen rocks, around which schematic paintings extend almost to floor level. It is obvious that the schematic paintings were implemented after the rock-fall which took place

⁵⁴ Phillipson, 'Zambian Rock Paintings', p.315.

⁵⁵ J.D. Clark, 'Stone Age Cultures of Northern Rhodesia', South African Archaeological Society, 1950, p.25.

⁵⁶ Lishiko, 'The Politics of Production of Archaeological Knowledge', p.113

⁵⁷ NAZ, BOX 116, shelf 17, Archaeology in Zambia, Livingstone Museum.

⁵⁸ D.W. Phillipson, 'The Prehistoric sequence at Nakapapula Rock Shelter, Zambia. Proc. Prehistoric Society. 35, (1969), pp.172-202.

during the second half of the first millennium A.D.⁵⁹ when both LSA (Nachikufan) and EIA (Kalambo group) peoples were present in the area.⁶⁰

North of Nakapapula is Nsalu cave, with a high concentration of schematic paintings.⁶¹ A series of fine scribbling done by using a piece of dry yellow-brown pigment as a crayon, are the earliest designs. There are a lot of yellow schematic paintings which occur above and below a broad yellow band which runs horizontally around the wall at a height of about four meters. These include grids, parallel lines, ladders, concentric circles and elongated loops. Another old series, overlying the yellow, is in red and characterised by finger drawings of parallel lines, several grids, and two large, parallel loops forming a 'bridge' motif. Overlying the red paintings are bichrome designs in red and white, including white concentric circles with internal radiating lines, their interstices filled in with red. Thick grey/white pigment, represent the latest paintings in the cave, which include sun motifs and anthropomorphic designs. Thus, Nsalu provides a detailed local subdivision of the schematic art series, and confirms that the greasy white designs symbolise the final stage in the rock painting sequence.⁶²

Northern Province has rock paintings widely scattered with much concentration in Mwela of Kasama. Although the region has few large rock shelters suitable for prolonged human occupation, it is characterised by huge boulders and fragmented rocky outcrops that have countless small overhangs protecting surfaces ideal for painting.⁶³ The scarcity of large painting surfaces means that many sites have only single motifs. Superimpositions are, therefore, few and the establishment of a stylistic sequence is correspondingly difficult.⁶⁴

The Mwela Rocks area has many outstanding naturalistic paintings as well as schematic paintings. With few exceptions, its naturalistic paintings occur in monochrome of various shades from red to purple while others are more delicate and well proportioned. It is logical to suggest that the small figures in the art are representations of antelope and of a jackal.

⁵⁹ Phillipson, 'Proc. Prehistoric Society', p.182.

⁶⁰NAZ, BOX 116, shelf 17, National and Historic Monument and Relics.

⁶¹ J.D. Clark, 'The rock paintings of Northern Rhodesia and Nyasaland' Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland, (1959), pp.163-220

⁶²LM, 721/18, Letter by Clark to M.J. Morris, 6th October, 1948.

⁶³ Phillipson, 'Zambian Rock Paintings', p.3

⁶⁴Lishiko, 'The Politics of Production of Archaeological Knowledge', p.128.

However, there is a small, lively figure that depicts a warthog, with a clearly shown erected tufted tail. Another significant feature is a panel showing five animals that have long and large horns, erect ears, heads, tails and legs represented at an appropriate scale. On this panel, the animal paintings are overlain by schematic designs of finger dots. In addition, rows of dots have been painted around animal figures, although the relative fading of the two motifs generally indicates that the dots were painted later⁶⁵ and their association with animals appears intentional. The Mwela rock paintings also have stylised human figures.⁶⁶

The schematic paintings at Mwela consist of a wide variety of styles and motifs. Although some of the designs are clearly figurative, it is uncertain whether there are enough grounds for separating them from the main schematic group. Important among the designs is a small grid design which extends upwards from the stylised figure of a bird and it seems to symbolise a bird caught in a trap. Other motifs found in the Mwela Rocks area are rare anthropomorphic figures and rectangular blocks with projections at the corners resembling hides stretched out to dry. A majority of schematic motifs are in red paint while others are coloured in a yellow-orange shade. The latter are predominant with linear and concentric circles. The site has no finger dot designs in yellow and its commonest type of motifs appear in red. It is tempting to suggest, in the absence of superimpositions, that the yellow schematics may antedate the red ones, as is the case at Nsalu, although the yellow paintings are usually faint which may be due to a more fugitive nature of the pigment.⁶⁷

The Zambian rock art series has two common groups of naturalistic paintings showing a clear interaction of several naturalistic figures. The first of these represents a hunting scene centred on a faded red motif such as a quadruped, very similar to the 'Nachitalo' type, whose head and limbs are grossly under emphasised. Surrounding the animal is a line of fifty-six small, stylised, reddish-purple human figures, three of which depicted upside-down below the hind legs of the animal, may perhaps be interpreted as fatalities of the hunt. A very faint pale-yellow saurian figure, also enclosed by the line of hunters, probably predates the main composition. Also at Mwela, a second group of composition, from the Somena Rocks, is executed in a powerful manner, somewhat simple and stylised. It depicts a lioness standing over a supine bovid, while a human figure stands nearby levelling a long object, perhaps a

⁶⁵B. W Smith, And the National Heritage Conservation Commission, Zambia's Ancient Rock Art: the Paintings of Kasama, (Livingstone: National Heritage Conservation, 1997), pp.32-34.

⁶⁶Smith, Zambia's Ancient Rock Art, pp.35-38.

⁶⁷Smith, 'Zambia's Ancient Rock Art.' p.119.

spear, at the head of the lioness. The bovid is incompletely represented, only one limb being shown. Its stance and the fact that it is depicted upside-down probably indicate that it is dead.⁶⁸ The shape of its horns, portrayed in twisted perspective, suggests that it may be a domestic ox. It is interesting to note that the human figure is much more highly stylised than are the animals.⁶⁹

At Mwela, the schematic paintings have a variety of paintings, thus difficult to present an adequate description without resorting to a catalogue. Other aspects of the designs consist of finger dots. The number of superimposed examples in differing degrees of fading suggests that these continued to be executed over a long period of time. Finger dots frequently occur evenly spaced in lines, often composed of two or three parallel rows of dots. In several instances, the dots were clearly applied with three fingers held in a fixed position, the resultant designs bearing a strong resemblance to cat spoor. Also found are designs of fine dots, seemingly made with a stick or brush. Occurring in great variety are ladder designs, ranging from small neat examples to roughly executed motifs crossing a whole rock face. Grids of other types are relatively unusual but include some large complex examples with both horizontal and vertical subdivisions.⁷⁰

Also present at Mwela Rocks are concentric circles that appear to belong to an early position in the sequence, largely because they are faded. There are also strange looking motifs of large panels of swirling and looped lines and many-branched leaf-like design executed by artists who made remarkable use of the natural configuration of the rock, the painted surface being divided into two parts by a deep horizontal crack. The design on the lower half is an exact mirror image of that on the upper. At Mwela Rocks, white designs which are prevalent at Kalembe in Chadiza are virtually absent.⁷¹

As for the Copperbelt, the rock paintings share many features with those of the northern area. They are sparsely scattered in the area stretching south from the eastern end of the DRC pedicle to as far south as Kapiri Mposhi and Fiwale, west of the Muchinga escarpment. The paintings at numerous sites around Nachitalo Hill, in the extreme west of Mkushi District

⁶⁸ Clark, 'The Rock paintings of Northern Rhodesia and Nyasaland,' p.211.

⁶⁹ Phillipson, 'Zambian Rock Painting,' p.3.

⁷⁰ NAZ, BOX 116, shelf 17, Archaeology in Zambia, Livingstone Museum.

⁷¹ Phillipson, 'Zambian Rock Paintings', pp.2-3

include the only naturalistic paintings known from this area, and are the most diverse.⁷² There are traces of at least twelve purple quadrupeds with crescentic bodies and with the limbs, head and tail under-emphasised. Part of the schematic art group, are at least four of the animals with overlain by-lines and dots in red paint, which here, as elsewhere, post-date the naturalistic figures. At Nachitalo, the earliest schematic paintings are in faded yellow-orange, comprising groups of parallel lined motifs, often associated with dots, as well as simple large grids, and are overlain by schematic designs in red. The motifs in the latter series are similar but include smaller, neater and more complex grids. The latest paintings are in deep reddish-purple, and include bold designs of lines and dots as well as a large comet-like motif with a long horizontal tail. It is to the red schematic group that the other rock paintings in the Copperbelt area all belong.⁷³

Nearly all Copperbelt sites consist of isolated motifs, mostly large open grids, boldly but apparently carelessly executed.⁷⁴ Superimpositions are lacking, and in the absence of further evidence it must be assumed that the sequence demonstrated for Nachitalo has characteristics of the hunter-gatherers.⁷⁵

In the southern Province, paintable rock surfaces are almost unknown and the only painted site so far discovered is at Sikaunda Hill, near Kalomo. Motifs comprising a ladder, traces of circles and linear patterns of alternating dots and short dashes are poorly preserved red schematic designs.⁷⁶

The eastern Zambian discussion of rock paintings sequence has been left until last, not only because of its significant differences from the rest of the country, but also because the rock painting tradition has continued into more recent times than elsewhere in the country. Sites are intense in the plateau country of Chipata, Chadiza and Katete districts, and are separated from the regions described above the Luangwa valley and its adjoining escarpments. Zambia's eastern borders are surrounded by part of this art zone, which extends into Malawi and Mozambique.

⁷² Clark, 'The Rock paintings of Northern Rhodesia and Nyasaland', pp.163-220.

⁷³ Phillipson, 'Zambian Rock Paintings', p.3.

⁷⁴ Smith, 'Zambia's Ancient Rock Art', p.138.

⁷⁵ NAZ, BOX 116, shelf 17, Archaeology in Zambia, Livingstone Museum.

⁷⁶ LM, 721/18, Letter by Clark to M.J. Morris, 6th October, 1948

In eastern Zambia, Zawi Hill and Katolola, both in Chipata District, are the only two sites known with naturalistic paintings. These sites have faded red naturalistic paintings, including a small neat antelope, perhaps an eland, delicately and accurately outlined and filled in with a mass of dense lines, to give the initial impression of a solid block of colour. The head, horns and tail are neatly indicated but the legs are under emphasised. This painting exhibits a greater degree of naturalism than any so far discovered west of the Luangwa. Nearby is a series of well-preserved red schematic paintings which appear more recent. These comprise numerous small neat grids with vertical subdivisions, as well as loops and isolated lines. Overlying the red paintings are delicate designs in white, including rows of fine parallel lines, neat board grids and patterns of fine dots.⁷⁷

Two separate painted sites are at Katolola. One bears a large figure of an eland sketched in thin purple lines. The style is clearly related to that at Zawi, although it is rougher and coarser. The dewlap and mane are obviously indicated, but the legs are disproportionately small. Interestingly, the eland has been painted over a large schematic grid.⁷⁸ Katolola is thus the first site to be exposed in Zambia where there is clear superimposition of a naturalistic painting over a schematic one. The second site is the associations of a nearby rock face with detailed red schematic motifs, including large and carefully executed groups of concentric circles and grids. From one grid appear two horizontal ladder motifs below which are dots of red paint forming a design resembling rain falling from a cloud.

The whole rock face is pitted with scars, caused by stones being thrown at the paintings. Cooke has described a site near Gwanda, in Zimbabwe, where the throwing of stones at rock paintings forms a part of traditional rain-making ceremonies, and, in view of the design at Katolola, this seems to be the explanation for the stone-throwing at that site.⁷⁹ The red schematic grids overlain by the Katolola eland have a wide distribution in the Eastern Province, but are a less predominant part of the total range of local rock art styles than are their counterparts in other parts of the country. Such grids continue to be painted for some time at Makwe, near Katete, where several superimposed grids occur in differing states of protection. Also, there exists a group of red vaguely anthropomorphic paintings at Makwe, which are closely similar to those from Mwela Rocks. Sakwe near Chadiza has the widest

⁷⁷ Clark, 'The Rock paintings of Northern Rhodesia and Nyasaland', pp.118-220

⁷⁸ Clark, 'The Rock paintings of Northern Rhodesia and Nyasaland', p, 173.

⁷⁹ C.K. Cooke, 'An unusual burial in the Gwanda District of Southern Rhodesia'. South. African Archaeological Bulletin, 19, (1964), pp.41-2.

range of schematic paintings, where the oldest grids are overlain by zoomorphic motifs in red outline, covered by grids, some of which are unusually complex and angular. The contemporaneity of grids and outline zoomorphic figures is confirmed at Chafisi Hill and at sites near Rukuzye Dam, Chipata.⁸⁰

Numerous sites in this region display a large series of white paintings known to occupy the most recent position in the sequence. North-east of Katete at Chaingo, an elaborate and extensively faded red grid is overlain by a large zoomorphic figure of which the white outline has been filled with finger dots in the same white paint, producing a design resembling a leopard skin. This figure is evidently derived from the red outline zoomorphs of Sakwe, Chafisi and Rukuzye. Done in the same paint and apparently contemporary with the main zoomorphic figure are representations of hoes and axes, demonstrating the later Iron Age date of the white paintings at Chaingo.⁸¹ Just as the red and white bichrome series of paintings at Nsalu indicates a transitional stage and some degree of continuity between the red schematics and the late white style, so too can a similar link be established in the east. Here, there is continuity in subject matter as well as in colour, pigment type and technique.⁸²

Other than Zawi, Simbo Hill in Petauke, shows the presence of schematic grids in thick white paint, also paintings of metal tools which local inhabitants say were painted by their own ancestors at the time of the Ngoni wars in the nineteenth century.⁸³ Suggestions of connections between the red outline zoomorphs of Sakwe, and the white 'leopard' at Chaingo, and confirmation is available in the form of paintings typologically intermediate. Thandwe and Manje, in Chipata, and at Kavumoin Chadiza, do have bichrome zoomorphic designs, each of which includes a red outline almost matching the examples at Sakwe which is located only two kilometres from Kavumo. The outlines are filled with thick, greasy buff-white paint, and over-painting of red on buff. Buff of red on different parts of the same figure at Thandwe shows that the painting was originally made as a bichrome and was not produced by the buff infilling of an earlier red outline.

⁸⁰ D.W. Phillipson, 'The Late Stone Age and Zambia's first artists', in B. M. Fagan (ed.). *Short History of Zambia*. (Oxford: Oxford University Press, 1966), pp. 56-79.

⁸¹ J.H. Chaplin, 'Further unpublished examples of rock art from Northern Rhodesia', pp.5-13.

⁸² Phillipson, 'Zambian rock paintings', p.3

⁸³ Phillipson, 'The Late Stone Age and Zambia's First Artists', p.64.

A rectangle filled with finger dots, done in red paint but using the same techniques that employed for the 'leopard' at Chaingo, is found at Rukuzye.⁸⁴ At Mkoma, east of Katete are bichrome grids and other schematic designs done in dark purple and white paint.⁸⁵ Mkoma also includes a broad series of white paintings, including anthropomorphic and zoomorphic designs and representations of metal tools. The shift from the red schematics to the late white paintings is seen as a gradual process which took place over a wide area of the Eastern Province.⁸⁶

The later white paintings are in great diversity and most striking and inspiring paintings belong to this style. A frieze of white paintings over twelve metres in length, beneath which are faint traces of red schematics are present at Kalemba, in Chadiza District. The white motifs are mainly anthropomorphic, but stylised figures of quadrupeds, some probably representing long-horned cattle, and schematic motifs also occur.⁸⁷

At Thandwe, the bichrome zoomorphic paintings have already been described. They are overlain by a series of white paintings, including representations of hoes and what appear to be pictures of grain bins. A second rock face in the same rock shelter has a huge series of white paintings. The earliest is a large, slightly faded 'leopard' motif which is very similar to that from Chaingo but without the outline. This is overlain by a chain of designs in a brighter white paint, with a much cruder version of the same 'leopard' motif, and three elaborate circular designs.⁸⁸ They were painted in association with the puberty ceremonies of Nsenga girls. Thus, local people state that these designs have a sexual significance. Related designs are still made on the ground, usually with mealie meal, at such ceremonies.⁸⁹ At Thandwe the presence overlying the earlier 'leopard', of a depiction of a motor car, associated with a crude anthropomorphic figure is established by a very recent date of these white paintings. Thus, at this site, it is very clear that rock art tradition has continued into the present century.⁹⁰

⁸⁴NAZ, BOX 116, National Museums of Northern Rhodesia, The Rhodes Livingstone Museum, 1934-1951.

⁸⁵ Chaplin, 'Further unpublished examples of rock art from Northern Rhodesia', pp.9-13.

⁸⁶ Phillipson, 'The Late Stone Age and Zambia's First Artists', p.67.

⁸⁷ Phillipson, 'Zambian rock paintings', p.3.

⁸⁸NAZ, BOX 116, National Museums of Northern Rhodesia, The Rhodes Livingstone Museum, 1934-1951.

⁸⁹R. Apthorpe, 'A note on Nsenga girls' Puberty Designs', *South African Archaeological Bulletin*, 17,1(1962), pp.12-13

⁹⁰ Phillipson, 'Zambian Rock Paintings', pp.2-3

The presence of rock art in most parts of northern Zambia is closely associated with sites that have produced Nachikufan industries of the upper Pleistocene and Holocene. These industries have been found at sites such as Nsalu Hill Cave, BimbewaMpalabwe Shelter, Mwela Rock Shelter, Chifubwa Stream Shelter in Northwestern province and Leopard Hill Cave in Lusaka province.⁹¹

Neighbouring Countries

This section discusses the paintings from the neighbouring countries in order to bring the Shiwa Ng'andu rock art into the regional context. As Zambia sits within the central African schematic (geometric) rock art tradition she shares rock art similarities with neighbouring countries from northern Mozambique to Uganda in the north, and certain parts of Tanzania.⁹² From Angola in the west it stretches to Congo in the north-west and then Malawi to the east sharing similar rock art motifs. The map below shows Zambia's location in south-central Africa.

Uganda forms part of the geometric rock art zone that spreads across central Africa, including Angola, northern Mozambique, Malawi and the Democratic Republic of Congo. The geometric rock art of Uganda is a product of pygmy ritual made in prehistoric times. Presently, rock art sites in Uganda are still used as ritual sites by present day inhabitants. These rock art sites are defined by the values and meanings that BaTwa (pygmy) groups, pastoralists and farmers give to them and their surroundings.

Furthermore, sites in Malawi have been known since the 1920s to contain rock art paintings in rock shelters and caves, the earliest discoveries were sketched by Mrs Margaret Matcalfe. Here animal (naturalistic) and geometric paintings exist together. There are a lot of similarities between the rock art of Zambia and Malawi as all their rock art falls under the two main divisions; the red (earlier tradition) paintings by the BaTwa and the white (later tradition) paintings made by the Bantu speakers.⁹³

⁹¹Clark, 'The Prehistory of Southern Africa', p.19, see also Muianga, 'Rock Art and Ancient Material Culture of Cahora Bassa Dam', p.25, and Miller, 'The Nachikufan Industries of The Later stone Age in Zambia', pp.102-8. Mgomezulu, 'Food production: the beginnings in the Linthipe/Changoni area of Dedza District, Malawi', PhD Dissertation, Berkeley: University of California, (1978).

⁹²H. A. Fosbrooke, et al. 'Tanganyika Rock Paintings: A guide and Record', Tanganyika Notes and Records, 29, (1950), pp.1-61.

⁹³Clark, 'The rock paintings of Northern Rhodesia and Nyasaland', pp 219-220.

The earliest Angolan rock art has been placed within the broad Schematic Zone with motifs such as concentric circles, rayed circles, dots and lines congruent to those in the geometric rock art zone.⁹⁴ Other than rock art, Angola has similar cultural material similar to that of the geometric rock art zone. Angola has also depicted evidence of the later Bantu-speaker rock art like that found in the eastern part of Zambia.

Congo is a country that is in the tropical rain forest, where rock paintings are unlikely to survive for long periods in the humid environments, yet engravings can. South-west of an industrial city in Lubumbashi, and at the end of one of the tributaries of the Lualaba River, are outer walls of the Kiantapo and Kiamakonde caves with engravings made in limestone. The engravings are depicted by circular motifs, concentric circles with strokes, dots, and lines similar to images that are common in Zambia and the rest of the central African rock art type.⁹⁵

Mozambique has quite a unique pattern of rock art forms because it constitutes a link between southern and eastern Africa. This is due to its evidence of two different ethnic groups of hunter-gatherers, that is, the San and the BaTwa who occupied and exploited the environs of Mozambique.⁹⁶ In the northern part the area has traces of BaTwa rock art dominated by geometric motifs and occasionally by animal motifs, while the other parts of the country have San rock art. There are more than 200 excavated sites associated with Stone Age, although detailed studies are lacking.⁹⁷

AGE DETERMINATION OF THE SHIWA NG'ANDU ROCK ART

Dating is fundamental for any meaningful interpretation of rock art. Without distinguishing which art depictions were contemporary from others, it is impossible to determine which themes were portrayed at a given time. At the same time, it is impossible to tie in the rock art

⁹⁴ Clark, 'Schematic Art', pp.72-3.

⁹⁵ C. Namono, 'Surrogate Surface: A Contextual Interpretative Approach to the Rock Art of Uganda', PhD Thesis, University of Witwatersrand, (2010), p.130

⁹⁶ Muianga, Rock Art and Ancient Material Culture of Cahora Bassa Dam, p.11-36.

⁹⁷ J. R. dos Santos, 'Les Peintures rupestres de Moçambique', in Actes du IIe Congrès Panafricain de Préhistoire, ed. L. Balout. Paris. (1955), pp.747-58.

with archaeological and historical data; meaning that it is unusable as supplemental data.⁹⁸ Reliable dates are only those obtained from actual pigment taken from the painting on the rock art. An alternative to dating rock art lies in comparing the remains found in the stratigraphy.⁹⁹ Despite this, Smith believes that, even though Zambian rock art has not been dated, the rock art can be placed within a calendrical framework.... This can be done by analysing the extensive overlays of the country's rock art sites and by using archaeological research work findings, linguistic studies and oral traditions.¹⁰⁰ Smith further states that:

5000-7000 years would seem a reasonable estimate for the age of some of the more faint designs in large protected shelters,..and that these could have been executed by the BaTwa. The later paintings (pictographs only) especially those attributed to the ancestors of the present Chewa or Nsenga of eastern Zambia, could be about 1500 years. As for engravings (petroglyphs) the heavily weathered (petroglyphs), engravings such as those at Munwa stream could be over 10 000 years old and were probably executed by the BaTwa.¹⁰¹

Secure dates are not yet available for the rock art in Zambia let alone Shiwa Ng'andu. What is conclusive is that in Zambia, LSA assemblages date to between 18 000 BP and 10,000 BP and possibly further back in yet unexcavated levels with most sites indicating a hunter-gatherer economy.¹⁰² This is the earliest occurrence of the LSA which continued well into the Early Iron Age (EIA).

Nonetheless, monitoring similarities and differences in the method of depiction that may suggest a common authorship or patterns of occurrence in rock art that equate with excavated archaeological contexts may propose relative dates. Degrees of chemical and physical weathering of rock engravings and paintings are also indicative of relative age.¹⁰³ Red pigment is more durable than most pigments. However, dating patina may reveal dates of post-deposition rather than the making of the image. While it is not possible to precisely date

⁹⁸ Rock Art Analysis http://archaeology-easterndesert.com/html/rock_art_analysis.html[12/27/2011 3:33:11AM]

⁹⁹Phenyo C. Thebe, 'Rock Art of Southern Africa', presentation- P.17

¹⁰⁰ Smith, *Zambia's Ancient Rock Art*, pp.19-21.

¹⁰¹ Smith, *Zambia's Ancient Rock Art*, pp.19-21, see also Lishiko, *The Politics of Production of Archaeological Knowledge*, p.100, and D.W. Phillipson, *The National Monuments of Zambia*.(Ndola: Mission Press 1972), p.4. One such site where extensive overlays have been used to approximate the age of the pictographs of Zambia is Nsalu Cave in Serenje, Central Zambia.

¹⁰²F.B. Musonda, 'Aspects of the Prehistory of the Lunsemfwa Drainage Basin, Zambia, during the last 20,000 years', Berkeley: PhD Thesis, University of California, (1983), p.320.

¹⁰³AncilaNhamo, *Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe*, PhD. Thesis, University of Zimbabwe, (2014), p.84.

the rock art, it is highly likely to date back centuries if not millennia, to a time prior to the large-scale settlement of the areas where sites are found.

Some rock art can be identified with particular “archaeological” cultures, that is, cultures whose typical signatures can be recognised by archaeologists. The Archaeologists, for instance can analyse motifs and style, even if they do not know whether the people who carried that culture have any reasonably direct descendants today. For example, by analysing the style and motif one can tell if that type of art is geometric or not. Sometimes this is because of where the rock art occurs, as at habitation sites of a particular culture,¹⁰⁴ in a specific region like the Shiwa Ng’andu area. Solomon adds that:

The petroglyphs, which tend to be less figurative, have until recently attracted less attention than the paintings. The style and, to a lesser extent, the subject matter of the paintings vary between regions. Often a single site includes works in several styles, so that it is impossible to tell whether it is the work of different artists or art from different historical periods. Early researchers suggested that simpler or less delicate images, in one colour only, are the oldest, with colour range and stylistic intricacy evolving through time. Today we know there is no such straight forward correlation. Some of the less accomplished work is probably the most recent.¹⁰⁵

Hence, in the case of the Shiwa Ng’andu rock art, an associative date has been proposed that the paintings are about 10,000 years old.¹⁰⁶ This was arrived at by identifying typical geometric signatures, and also relative dating. It was done by monitoring similarities and differences in the method of depiction that may suggest a common authorship or patterns of occurrence in rock art. These equate with excavated archaeological contexts from the study area and other known rock art sites such as the Mwela rocks in Kasama and Nachikufu caves. The findings from these sites, which are not only close in proximity but also in rock art motifs, location of settlement and type of pottery found, brought out more of the similarities than differences. It is vital to state that it is difficult to estimate exactly when the rock art tradition died out in the Shiwa Ng’andu area.

¹⁰⁴ Understanding Rock Art – Who Made it and When? What did it mean to Its Creators and Audiences?

¹⁰⁵ Anne Solomon, “Rock Art in Southern Africa”, *Scientific America*, (2005), p.44.

¹⁰⁶ Lishiko, 'Report on Kapishya Rock art', p.20.

PAINTERS OF SHIWA NG'ANDU ROCK ART

The current inhabitants of Shiwa Ng'andu, are the Bisa (whose dialect is close to Bemba language and follow Bemba customs although at times are influenced by adjoining tribes such as the Lala).¹⁰⁷ They have no memories of the LSA hunter-gatherers who once lived in the area. An ethnographic study to support the recovery of archaeological material was conducted among some individuals in Chimfwembe Village which is the nearest local community in the area. Other than the minority individuals in Chimfwembe Village, few people, among them workers at Kapishya Hot Springs and the Shiwa Ng'andu Estates, are however aware of the existence of the art in the hills, which some of them believe belong to ancient people (BaTwa).¹⁰⁸

Like many ethnic identities, the BaTwa or Twa is a construct.¹⁰⁹ The term BaTwa or Twa can be said to be an equivalent of the term Bushmen, and like "Bushman" it is derogatory. The term is an insult, which actually means a person of no reason.¹¹⁰ The name Twa seems to have been applied throughout southern Africa by the modern tribes to the more primitive Stone Age.¹¹¹ Prominent rock art researchers describe hunter-gatherers in racial terms.¹¹² For instance, Clark considers the 'BaTwa' as the Bushmen of Zambia who are believed to be the authors of most of the country's rock art and he described them as a small statured dark skinned, hairy and proficient hunters,¹¹³ with wrinkled skin on their stomach.¹¹⁴ Inhabitants of Nachikufan sites are believed to have been hunter-gatherers who continued to live with or alongside intruding farming and iron-using communities.¹¹⁵ If there is indeed a connection,

¹⁰⁷ W. V. Brelsford, The Tribes of Zambia. (Lusaka: Government Printers, 1965), p.43.

¹⁰⁸ Interview, Joseph Mwaba (41 years old), Kapishya Hot Springs, Shiwa Ng'andu District, 18 November, 2015.

¹⁰⁹ Lishiko, 'The Politics of Production of Archaeological Knowledge', p.113 In order to understand how this identity was created, there is need to address questions such as: What does the term BaTwa or Twa mean? Who are the BaTwa or Twa? Where are they found? What criterion is used to identify them? What language do the Twa speak? Do they have a distinct culture?

¹¹⁰ B. Mugarura, & A. Ndemeye, 'The Experience of The Twa Pygmies of The Great Lakes Region The International Council on Human Rights Policy, Geneva', 24-25 January, (2001). <http://www.ichrp.org/ac/excerpts/53.pdf> (Accessed 1st July 2013). Note that the Bushmen of South Africa were also viewed as devoid of intelligence.

¹¹¹ R. Hall, Zambia, (London: Pall Mall Press, 1965), p.7.

¹¹² J. D. Lewis-Williams, & T.A. Dowson, Images of Power: Understanding Bushmen Rock art, (Johannesburg, Southern Book Publishers, 1989), pp.9-11. see also J. D. Lewis-Williams., 'San'. in J. Turner, The Dictionary of Art, 36, (London, Macmillan Publishers Ltd, 1996), p.695.

¹¹³ Chaplin, 'Further Unpublished Examples of rock art from Northern Rhodesia', pp.5-12.

¹¹⁴ D.W. Phillipson, 'The Prehistoric Sequence at Nakapapula Rock Shelter, Zambia' Proceedings of Prehistoric Society, 35, (1969), pp.172-202....According to Phillipson, ethnography from Central Zambia showed that, the locals referred to the authors of rock art as *.ututuntamafumo*, which literally means *.with wrinkled skin on their stomach*. The above feature, Phillipson claims is a characteristic of the Bushmen.

¹¹⁵ Clark, 'The Stone-Age Cultures of Northern Rhodesia', p.93; and Clark, 'Rock paintings of Northern Rhodesia and Nyasaland', p.211.

then the authors of the geometric rock art tradition in Zambia generally and indeed Shiwa Ng'andu in particular were most likely Pygmy BaTwa groups, who were hunter-gatherers.

Rock art in Zambia has been attributed to BaTwa, although the use of the term BaTwa by scholars such as Smith is made to imply that any group of people that decide to live in swampy or marshy areas and mostly practices fishing automatically become a BaTwa. Yet this is not the case as the attributes of hunter-gatherer and fishing do not make one a rock artist or people of San physical type,¹¹⁶ or little short people.¹¹⁷ The people branded as BaTwa today are not different from other ethnic groups in the various countries they live in. For example, in Zambia the people labelled as BaTwa speak languages that other ethnic groups also speak in these areas.

The identity of the people regarded as BaTwa is problematic in Zambia's rock art. Yet even with numerous problems about the identity of the BaTwa, rock art has been attributed to these people and seemingly falls into two distinctive artistic periods, viz, the earlier and later periods.

Smith believes that the people of Khoi-San physical characteristics were actually a people labelled as BaTwa and he attributes the paintings of this period to this group.¹¹⁸ He also indicates that most of the paintings in the Eastern Province of Zambia are the works of early farmers. Smith observes that similar paintings also exist in central Malawi and adjoining areas of Mozambique.¹¹⁹ His recent research in Kasama suggests that the painters of Zambia, the BaTwa, practiced two traditions of art, namely, schematic and naturalistic.¹²⁰ He based his main assertion on the oral traditions collected by Clark and Colson.¹²¹ His other argument

¹¹⁶Phillipson, 'The National Monuments of Zambia', p.9. Note also that, the racial descriptions of these (Zambian) groups are similar to those on the counterparts in South Africa, Namibia and Botswana. The Twa were described as short of stature, black skinned and were remembered as fine hunters with the bow and arrow, a people with wrinkled skin on their stomachs...

¹¹⁷ I.G. Cunisson, 'History on the Luapula'. Rhodes Livingstone Papers, 21, (1951), p.31.

¹¹⁸ Smith, 'Zambia's Ancient Rock Art', p.17.

¹¹⁹ Smith, 'Zambia's Ancient Rock Art', p.17.

¹²⁰Chaplin, 'Further unpublished examples of rock art from Northern Rhodesia', pp.45-49 and Clark, 'The Prehistory of Southern Africa', pp.163-220... Schematic are mainly linear motifs, grids, ladders, finger dots, circles or concentric circle. Naturalistic are human or animal representations.

¹²¹E. Colson. 'The Little People of Rhodesia'. Northern Rhodesia Journal, 6, 5, (1965), pp.567-68. Collected oral traditions from the plateau Tonga in Southern Province in Zambia who actually differentiated the BaTwa from the Bushmen Makwengo.

is that the pictographs are works of BaTwa because modern day informants are emphatic that both animal and geometric arts belonged to the hunter-gatherers they call BaTwa.¹²²

In addition, Smith argues that the fact that this pair of art is found in abundance in remote parts of central Africa that were poorly suited to agriculture and which were thus not settled until the latter half of the Late Iron Age (such as Serenje, and Kasama Districts in Zambia) implies that the pictographs were the works of the BaTwa.¹²³ He further argues that the BaTwa are definitely the painters of rock art in Zambia because the geometric designs in Kasama are similar to those painted on barks by the modern Pygmy of the Democratic Republic of the Congo.¹²⁴ The last piece of evidence indicated by Smith that the Later Stone Age pictographs are the work of the BaTwa is that both Bushmen and Pygmies share the BaTwa feature of short stature.¹²⁵

CONCLUSION

This chapter has demonstrated a brief history of the Stone Age period with regard to the development of rock art research in Zambia in general and Shiwa Ng'andu in particular. It has demonstrated that the Shiwa Ng'andu rock art follows the Nachikufan art and culture. In contextualisation of the region, rock art shows that there is a close and strong consistent pattern linking the rest of the northern region to the geometric rock art tradition of central Africa. Rock art in this region known as central Africa schematic art zone, cannot be separated from studies of Stone Age and Iron Age societies, hence rock art should be understood from that angle.

It has been demonstrated that in Zambia, all the different microlithic industries of the Later Stone Age, are of the Nachikufan industry identified in Central and Northern Zambia plateau, the Wilton found in Southern Zambia, Makwe in Eastern Zambia and the Kaposwa industry at Kalambo Falls are now part of Nachikufan I.¹²⁶ It has also revealed that at present the rock art paintings in Zambia are mainly concentrated in the northern and eastern regions. The Northern Province has a higher concentration of these paintings than any other region in Zambia. This industry has been identified as being integral to a broad belt of the eastern and

¹²² Smith, 'Zambia's Ancient Rock Art', p.59.

¹²³ Smith, 'Rock art in South Central Africa', p.256

¹²⁴ Smith, 'Zambia's Ancient Rock Art', p.47.

¹²⁵ Smith, 'Rock art in South Central Africa', p.258.

¹²⁶ Phillipson, 'Prehistoric Rock Paintings and Engravings of Zambia', p.13.

south-central highlands stretching from Lake Victoria and southern Kenya, through Tanzania and northern Zambia to the Zambezi River.

The chapter has also demonstrated that earlier studies of rock art in the northern part of Zambia have divided paintings into naturalistic and schematic rock art forms. Investigations in the Shiwa Ng'andu area show that the same pattern prevails.¹²⁷ These have been attributed to the BaTwa, in the period in which hunter-gatherers and farmers interacted most closely. The BaTwa are one of the regions last connections with a hunter-gatherer existence, a way of life that was a human universal from 10,000 to 18,000 years old.¹²⁸ The BaTwa hunter-gatherers represent the Later Stone Age peoples who are ancestors of modern human. Thus, the rock art of Shiwa Ng'andu can be attributed to the BaTwa hunter-gatherers known for depicting red geometric paintings. Although it would be vital to indicate that there is no justification or linkage between the Bisa and the BaTwa (rock art). This is different from what is prevalent in the eastern province of Zambia where the painters of the art are linked to the ancestors of local tribes, Chewa-Nyanja.

¹²⁷Clark, 'The Prehistory of Southern Africa', p.195.

¹²⁸Musonda, 'Aspects of the Prehistory of the Lunsefwa Drainage Basin', p.320. see also Smith, 'Zambia's Ancient Rock Art', pp.19-21, and Lishiko, 'The Politics of Production of Archaeological Knowledge', p.100, and Phillipson, 'Prehistoric rock paintings and engravings of Zambia', p.4. One such site where the extensive overlays have been used to approximate the age of the pictographs of Zambia is Nsalu Cave in Serenje, Central Zambia.

CHAPTER THREE: SHIWA NG'ANDU ROCK ART SITES

ROCK ART SITE DESCRIPTION

For purposes of this study, an archaeological field investigation was undertaken for a period of 27 days in the Shiwa Ng'andu area. This revealed a rich concentration of rock art in three localities, Kapishya, Chimfwembe and Busongwa. Kapishya had four distinct rock art sites, KRS- 1A, KRS-1B, KRS-2, and KRS-3. Chimfwembe, named after a nearby village, revealed five rock art sites, CHV-1A, CHV-1B, CHV-2A, CHV-2B and CHV-3, while Busongwa consisted of only one rock art site. These brought the total number of rock art sites investigated to ten groups of sites, thus making Shiwa Ng'andu a cultural landscape. Sites such as KRS 1, CHV-1 and 2 have site A and B which are located close to each other indicating one GPS location.

It was discovered that paintings at KRS-1, KRS-2 and CHV- 1A were fading off quite rapidly due to rock efflorescence, exposure to natural factors like direct sun, rain, and also graffiti by humans, spider webs, mud, wasp insects nests, lichens growth, termite tunnels growth and fire. However, the remaining seven sites were not adversely affected and remained suitable for detailed study.

SITE KRS-1A: This site is located on the slope of a small hill in a shallow cave about 200m north of Kapishya Hot Springs area, hence the name. The site faces east and is close to the Mansha River, and located about 100m from the river. It is easily accessible from that point. The site is surrounded by sparse vegetation of Miombo, Chipya and Riparian woodlands and grasslands. It is the biggest site among the 10 investigated sites. It has a shallow cave opening 5m wide and a height of 4.2m. From the floor of the cave, the highest painting stood at 165cm and the lowest painting at 96cm. Most paintings lie between the floor and the roof of the cave. Due to the absence of any indications of human habitation at the site, no excavations were conducted. However, the surface floor was compacted though there were signs of running water on the cave walls (some researchers call it, panel) washing down the paintings. There were also other natural factors such as direct sunlight that contributed to the fading of the paintings. The paintings were concentrated on the top of the cave wall and also on the left wall of the cave. The cave wall constitutes a set of three concentric circles attached by lines to a figure which has an egg like shape with a line in the middle looking like a leaf on a branch of a tree. There is also a sun-like figure on the top and bottom left and a lot of

finger strips on the top right above the entrance to the cave. The paintings are in red and orange colour. Even though the paintings were found in good condition except for the finger strips and few concentric circles, this site suffers from direct sunlight and runoff water.

Figure 4: Photographs/pictures of site KRS-1A



SITE KRS-1B: This site is directly behind site KRS-1A. It is a shallow cave, measuring 3.3m wide, 3.1m deep and 1.2m high. The lowest and highest paintings from the cave floor are located at heights of 61cm and 108cm, respectively. The site faces east, and has a lot of creepers and/ or climbers around it with no appreciable deposit to allow an excavation. This site has a lot of red finger strips located on the top right hand side of the shallow cave. These

are the most visible paintings which are long curved finger strips running from north to south and where these end are finger strips running east to west. They are slightly faded red finger strips drawn from east to west. The walls of the cave have been affected by running water and mineralised salts in some areas, but did not appear to be destructive to the paintings.

Figure 5: Photographs of site KRS-1B



Site KRS-2: This site is located about 300metres north of Kapishya Hot Springs Lodge, 120 metres from Mansha River, on a slope of a hill almost in a direct line with KRS-1B. It has one panel of paintings on a small and smooth surface. The site measurements are about 5m wide and 4m high, while the drip is 5cm deep and 70cm long. The panel consists of four red concentric circles, three in one and some light orange scattered finger dots image. Below the paintings is a detached panel with one red sun-like figure and a faded concentric circle. Paintings were traced using clear plastic and a water proof marker. Three of the four concentric paintings were found to be in a fair condition despite some sections having been washed away due to run off water and mineral efflorescence. The fourth concentric circle was almost completely faded due to run off water and salts. Finger dots have also faded due to salt efflorescence and direct sunlight. This site lacks an overhang that can offer protection to the paintings from direct rainwater and sunlight. The base of the rock boulder shows rock detachment in addition to the fibrous roots on the rock boulder and the presence of spider webs on the panel.

Figure 6: Photographs of site KRS-2



SITE KRS-3: The site is situated about 410m from KRS-2 west of Mansha River. This is a big rock boulder facing east with about three ladders of grids with the fourth being slightly on top of the other three to the right. This site also has finger dots and finger strips. One concentric circle has two rings. There is a blob on the right of the panel, with three circles above the blob. The paintings are in monochromic red and light orange colour. There is charcoal graphite on the rock panel above the rock painting. The paintings on the boulder are about 2m wide and 2.9m high. The grids or ladders are in a fair condition despite runoff water and wasp nests which threaten the panel. The condition of lines with circles is poor due to direct exposure to sunlight, swallow nests, runoff water and poor rock background. The site is about 160m away from Mansha River. Test excavations on the lower right part of the boulder did not yield any archaeological material. The paintings of this site were drawn in the field note book.

Figure 7: Photographs of site KRS-3



Site CHV-1A: The site is named after Chimfwembe village due to its location in the perimeter of headman Chimfwembe's village. This site is 1.2km southwest from the junction of Kapishya hot springs road with the road leading to Shiwa Ng'andu House. This site consists of a large granite boulder with few paintings of long finger lines as shown below. The paintings, being 1.8m from the ground, are faded, leaving traces of dark red and purple strips or lines on the rock, which is the mixture used in the colour of paint for rock art.

Figure 8: Two photographs of sites CHV-1A and CHV-1B



CHV-1A-left



CHV-1B- right

SITE CHV-1B: The paintings are 2.1m above the ground. The site's paintings are equally on a small long smooth wall with very long orange finger lines or strips of about a metre long. This site faces south east and has the longest finger strips of about eight lines moving from north to south. It is in good condition although part of the wall has slightly faded, due to runoff water and direct sunlight.

SITE CHV-2A: The paintings are located on a panel protected by an overhang lying about 1.2m above the ground on the cave wall. The paintings on the boulder are about 1m by 80cm in length and width respectively. The panel has more than 5 pairs of concentric circles, divided circles and some finger strips in reddish and light orange colour. It also has a figure of a set of thin straight lines and a set of three finger strips. This is the only site where divided circles are joined forming shapes like cups, and semi U shaped figures. Some of the drawings on the left side of the panel have been washed off due to run off water and salts. Drawing and tracing of these paintings was done.

Figure 9: Photographs of site CHV-2A



SITE CHV-2B: It is an easily accessible, big, open, southward facing site at the base of the boulder and is the only site that yielded archaeological materials and artefacts. The boulder has a good number of concentric circles, a leaf like motif and a line. The paintings are on a boulder that is 10m long and 3.5m wide, although the rock shelter also has scattered paintings on it both on top of the rock shelter where it forms an overhang. The site has a cultural deposit with excavation potential. The site, as indicated in Chapter Two, yielded decorated potsherds, ochre, quartz fragments, pieces of haematite (iron ore), stone fragment, burnt clay, animal mandible, ash, egg shell, animal bones, plant seeds, stone tool, pebble stone and broken stone hand axe and some photos for these have been provided in the figure below. The pit was excavated down to the bedrock at 90cm from the datum point. The pit revealed the first organic layer on the northern wall at 12cm and while on the western wall it was at 10cm. The ash went up to 65cm on the western wall and 85cm at the deepest point on the northern wall. The brown layer was 22cm thick and the ash 22cm thick too up to the bedrock. After excavation, the pit was buried with polythene on the sides to preserve it for any future excavations. In summary, that the artefacts could be classified as burnt clay, stone artefact, animal bones and pottery. A chart (of a stratigraphic column of an excavated pit) and photos on the next page show work in progress west/east/north/south wall of the excavation.

Figure 10: Stratigraphic column of an excavated Pit (Not to Scale of cm)

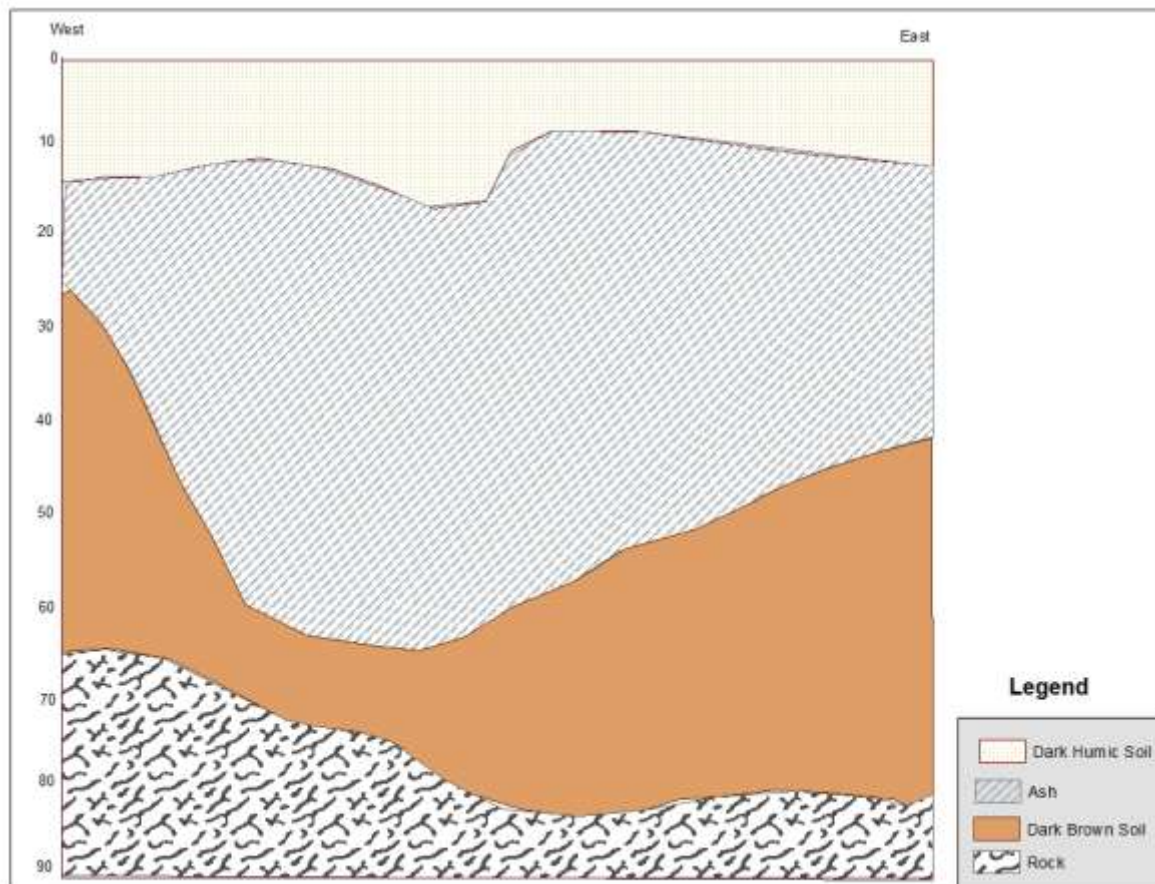


Figure 11: Photographs of site CHV-2B





SITE CHV-3: This is a larger sized site (with different motifs or figures) than what was common (concentric circles and finger dots and stripes) in the other sites in the study area. The wall had seven visible lines 35cm in length and one sun-like painting. Its motif was drawn in the field note book due to its poor condition and fading character because of direct sunlight, runoff water and insect wasp nests. This wall is 2.5m wide but the painted surface is only 30cm long and 35cm wide. The distance from the junction of Chimfwembe village to the rock paintings is 1.2km while the distance from the junction of Chimfwembe Village to Kapishya Lodge junction is 900m.

Figure 12: Photographs of site CHV-3

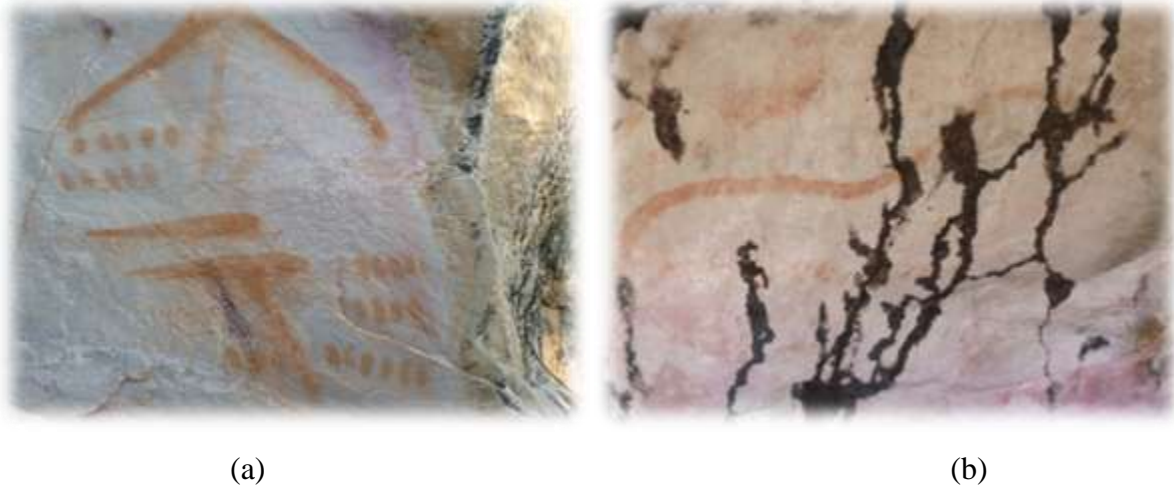


Busongwa rock art site 1 (BUSO-1): This rock art site faces north and is the only one among sites investigated in the Shiwa Ng’andu study area that opens up in a different direction from the others that are facing south-east . It is located 9 kilometres to the west of the Kapishya Lodge. The paintings on the panel are 1.8m by 0.8m in width and height respectively. The paintings are characterised by an elephant like outline and have long finger stripes and finger dots. Also, this area has other animal paintings as indicated in figure 13. Although the paintings are visible, the site is not in a good condition due to termite tunnel growth on three quarters of the paintings. There is also a bat nest, direct sunlight and signs of mineralisation on the painting. According to Smith:

there is a tendency for sites with depictions of animals to face northwest to north whereas those with geometric designs tend to face in the opposite direction southeast to south. It is hard to suggest an explanation for this trend but it is presumably a product of the variation in function between the art of the men and the art of the women. (Where rare red animal tradition was executed by men hence belonged to men, and the red geometrics to the women.)¹

¹ B.W. Smith, and the National Heritage Conservation Commission, Zambia’s Ancient Rock Art: The Paintings of Kasama, (Livingstone: National Heritage Conservation Commission, 1997), pp.47-49.

Figure 13: Photographs of Animal outlines from BUSO -1 [Two pictures of an Elephant like figure (right) and other Animal outlines (left) in Busongwa area].



FINDINGS FROM ROCK ART SITES

The findings from the Shiwa Ng'andu rock art site show that the paintings fall under two categories (red animal tradition and red geometric tradition). The paintings have two main stylistic rock art categories, namely, Naturalistic (Representational) and Schematic (Abstract Designs) which were both executed in monochrome (single colour). The figures from the sites are monochromatic in red and orange. The study showed that in the old classification stages monochromatic figures were considered within the earliest stage of drawing, implying that the art was very old. The style and, to a lesser extent, the subject matter of the paintings vary between sites such as the style of motifs in Kapishya and Chimfwembe are all in geometric figures and the motifs in Busongwa are animal figures. Out of the ten rock art sites investigated, no site indicated traces (lines) of more than one colour, that is bichrome or polychrome pigment. The most common colour used by the Shiwa Ng'andu painters was red. From the sites investigated, this area has great potential to yield many more future sites. From the study, all the rock art sites are characterised by paintings. No engravings were found in the area.

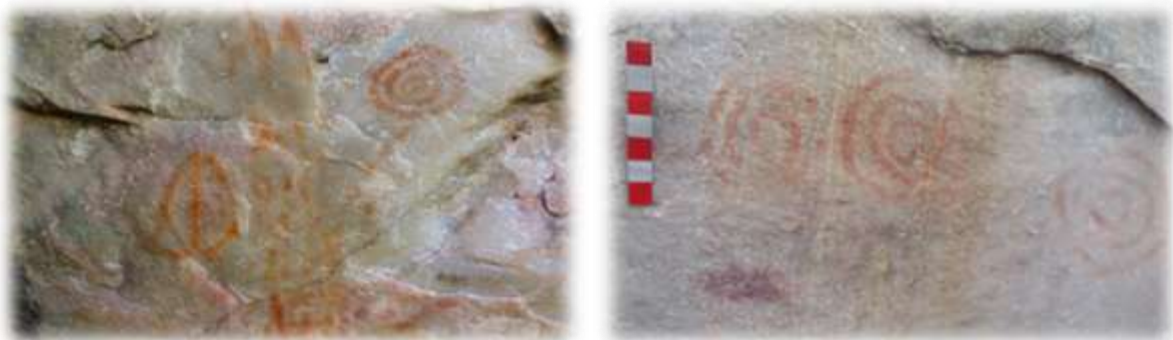
The red animal tradition comprises animal depictions in red pigment applied to the rock face. At BUSO-1 site, one motif is overlain by multiple rows of dots, hence animal depictions are associated with rows of dots that overlie the animal forms. The dots seem to be an integral part of the symbolism of this tradition. The study revealed that the animals were

drawn in outline, some were completely and others partly filled. In addition, there was no consistency in the style of depiction. (See figure 13)

Of the two red tradition motifs, the most prevalent pictographs or paintings in Shiwa Ng'andu fall under the Red Geometric Tradition. There is not a wide range of the red animal tradition category of painted images in the art of Shiwa Ng'andu compared to geometric designs. The term geometric enables shapes to be classified within a standard geometric form typology. Hence, words such as lines, circles, dots, grids or squares identify different images. Images described as 'stretched cow hide', 'acacia pod' designs or 'dumbbell' shapes, and 'canoes' co-occur with more simple geometric forms and so are categorised geometric — the descriptive names are simply labels of convenience.² Therefore, the study indicates that the Shiwa Ng'andu geometric art dominates the animal figures, and the two traditions go together as a pair. They co-occur across a large area. It is also important to mention here that all rock art sites are south-east facing except the rock art site of BUSO-1 which faces north.

Sites KRS-1A, KRS-1B, KRS2, KRS-3, CHV-2A and CHV-2B, mainly comprise geometric shapes such as circles, ladders, concentric circles, finger dots, lines (vertical, horizontal and parallel), arcs, grids, and divided circle spirals, dots, ladder-like forms, circles with radiating lines, and sunbursts (which resemble weather symbols) as shown in figure 14. The study indicated that these paintings were applied on rock surfaces by fingertips, a few by brush and some probably by a blunt implement such as a stick. In addition there were more paintings in this category compared to the red animal tradition. The pictures below depict the various paintings discussed above.

Figure 14: Nine (9) pictures of geometric (Schematic) styles in Shiwa Ng'andu



²C. Namono, 'Surrogate Surface: A Contextual Interpretative Approach to the Rock Art of Uganda', PhD Thesis, University of Witwatersrand, (2010), p.90. see also AncilaNhamo, Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe, PhD. Thesis, University of Zimbabwe, (2014), p.221.

Concentric circles (2)



Sun with radiating rays



Finger lines and Sun with radiating rays



Ladder like geometric designs



Circles and joined lines-left and Finger lines -right



Superimposed finger lines

THE SHIWA NG'ANDU ROCK ART CONTEXT IN HUNTER-GATHERER ARCHAEOLOGY

The dominant material culture north of the Zambezi River for the hunter-gatherer groups is the Nachikufan industry which is found in the central and northern parts of Zambia.³ This has been revealed by works undertaken by Clark, Miller, Phillipson and Musonda in which the Zambian rock art sits within a broad geometric rock art belt straddling East and Central Africa.⁴ The regional distribution of this homogenous geometric rock art tradition, defined by Clark as the 'Schematic Rock Art Zone', matches the distribution of a distinct Late Stone Age (LSA) tradition north of the Zambezi defined as the Nachikufan, dating from about 20,000 BP to historical times.⁵ Consequently, according to Mabulla, Clark postulated a link between the Nachikufan and the geometric rock art traditions.⁶

The pottery type that is associated with the Nachikufan III is very similar to that found in Shiwa Ng'andu (see figure 15 and 16). The appearance of pottery is first recognised during

³J.D. Clark, 'A note on the Pre-Bantu inhabitants of Northern Rhodesia and Nyasaland', *Northern Rhodesia Journal*, 1, (1950), pp. 43 also see Muianga, Rock Art and Ancient Material Culture of Cahora Bassa Dam, p.25.

⁴Catherine Namono, 'Pongo symbolism in the geometric rock art of Uganda', *ANTIQUITY*, 85 (2011), p.1209.

⁵Smith, *Zambia's Ancient Rock Art*, pp.19-21., see also J.D. Clark, A note on the pre-Bantu inhabitants of Northern Rhodesia and Nyasaland, p. 43., and Willcox, *The rock art of Africa*, p.80; A. Z. Mabulla., The Rock Art of Mara Region, Tanzania. *Azania*40, (2005), p.20; Clark describes this schematic (or geometric) zone as running "...from Uganda southwards to the Zambezi and from there to Angola, and eastwards into northern Mozambique..." Willcox (1984) noted that Chaplin (1959) attributed authorship of this geometric rock art to "... the BaTwa, a dancing cult whose practices seem to have taken over from a Negroid people preceding the present Bantu-speakers in the region"

⁶Mabulla, The rock art of Mara region, p.37., see also, Clark, A note on the pre-Bantu inhabitants of Northern Rhodesia and Nyasaland, pp. 43-5.

Nachikufan III, which is characterised by the predominance of small segments as the main tools, together with most of the previous Nachikufan tools. Clark and Miller have attributed the presence of pottery in Nachikufan III to have been the result of trade between hunter-gatherers and the first farmers.⁷

Figure 15: Cracked Bola stone and Iron Age potsherd in Shiwa Ng'andu Area



Figure 16: Round necked Iron Age pot from Shiwa Ng'andu



At the Shiwa Ng'andu site CHV-2B, Late Stone Age artefacts were found throughout the excavated levels associated with ceramics, while rock paintings related to the BaTwa hunter-gatherers were also found on the wall of the rock shelter. It can be also assumed that the same

⁷Clark, The Prehistory of Southern Africa, see also Miller, The Nachikufan Industries of The Later Stone Age in Zambia, pp. 291-302.

group of hunter-gatherers who did the artwork also produced the artefacts found at the site because there is no indication of a different group of inhabitants.

While investigations by Namono in Uganda have revealed that till 5,000 BP, hunter gatherers were the only inhabitants of the area, this work done in the Muchinga region of Zambia has shown that there were similar occurrences.⁸ Current evidence suggests that pottery (which appears in Nachikufan III) and animal bones seem to have been a vital cultural package in understanding the relationship between rock art and LSA assemblages. Namono also indicates that, pottery has been found in association with faunal remains of domestic animals and in places where there is evidence of hunting and stone tools. This evidence also indicates that the cultural package was a result of a long-term continuous southward migration of small groups of pastoralists.⁹ This was possibly done through trade and exchange. It is thus vital to mention here that pottery is a significant indicator of interaction among the LSA themselves as evident in Shiwa Ng'andu at site CHV-2B where pottery was found in association with Nachikufan III materials.

Archaeological evidence in Zambia shows that LSA sites overlapped with Iron Age sites and that there were long periods of interaction between hunter-gatherers and farmers.¹⁰ There is no doubt also that Bantu speaking farmers drew aspects of culture and belief from earlier peoples.¹¹ We can therefore suggest that this interaction benefited both groups, who seemed to have associated very well. Proof from both communities of LSA and EIA exist in the study area, such as stone tool remnants and pottery in the midst of rock art. Therefore, it can be assumed that the interaction between the different groups of people that settled in the areas such as the study area lived in harmony and cooperated without any conflict or competition that could disturb their livelihood. Musonda argues that this was possible because they inhabited different ecological zones with differing subsistence systems.¹² Clark adds that the presence of LSA and Iron Age material was evidence of two groups of people living alongside each other. The distribution of the LSA tools matches that of the regional geometric rock art. It can be concluded, therefore, that the makers of the tools must have painted the art.¹³

⁸Namono, 'Surrogate Surface', pp.14-16.

⁹Namono, 'Surrogate Surface', p.16

¹⁰J. Vansina, *Paths in the Rainforests: Towards A History of Political Tradition in Equatorial Africa*. (London: James Currey, 1990), p.56.

¹¹ C. Ehret, *An African Classic Age: Eastern and Southern Africa in World History, 1000 B. C to A. D. 400*. Charlottesville; Oxford: university Press of Virginia, 1998.pp.2-3.

¹²Musonda, Aspects of the Prehistory of Lunsemfwa Drainage basin, p.320.

¹³Clark, *The Prehistory of Southern Africa*, p.211. See also Namono, Surrogate Surfaces, p.60.

On the other hand, Phillipson goes further to state that the Zambian industries form a convenient reference point for a discussion of LSA societies over a much wider area as a member of one of the longest and best known mode 5 sequences in Sub-Saharan Africa. On the northern and eastern plateaux, separated by the Luangwa valley, microlithic industries are now known to have prevailed through the last 17 millennia, and strongly indicate that these may have been locally derived from their mode 3 MSA predecessors through a process which began some 700 years earlier.¹⁴

The last 4 millennia BC in northern Zambia are represented in the archaeological record by a variety of microlithic industries. Musonda notes that the Nachikufan III as defined by Miller is a set of occurrences which have in common the fact that they are late in time and that they have microlith dominated stone tools inventories that are basically similar to those of Nachikufan II A and IIB.¹⁵ Quartz fragments (indicating residues of a stone working area), stone fragment, stone tool, pebble stone and broken stone hand axe found in the excavated layers of CHV-2B in Shiwa Ng'andu could all qualify to belong to Nachikufan III. Included in this industry are Iron Age artefacts which are an integral part of all Nachikufan III assemblages in Zambia.¹⁶ This could then be linked to pieces of haematite (iron ore), that were found at the excavated CHV-2B site in Shiwa Ng'andu. In northern Zambia, mode 5 aggregates are made of mud stones and other fine-grained materials which differ markedly in fracture patterns from the quartz generally used elsewhere.¹⁷ In the final stages of LSA sequence in this area shows a huge degree of inter-site variation. There was a general diminution in size of microliths, and the types of these and scrapers recognised in the earlier phases continued, but with no particular forms in overall dominance. Grinded stones, bored stones and ground axes continued at most sites. The heterogeneous aggregates classed as Nachikufan III have yielded dates from the middle of the second millennium BC to the 19th century A.D.

From the above outline, the industries classed as Nachikufan covers a time span of more than 16 millennia. A consistency series of sequential phases has been recognised but the nature of the changes involved is not yet clear. In particular, it is not known to what extent the

¹⁴D.W. Phillipson, 'The Later Stone Age in Sub-Saharan Africa', in J.D. (ed.) *The Cambridge of African History Vol.1 from the Earliest Times to 500 B.C.*, (Cambridge: Cambridge University Press, 1982), p.441.

¹⁵F.B. Musonda, 'Aspects of the Prehistory of the Lunsemfwa Drainage Basin, Zambia, during the last 20,000 years', PhD. Thesis, Berkeley: University of California, (1983), p.323.

¹⁶Musonda, 'Aspects of the Prehistory of the Lunsemfwa Drainage Basin, p.323

¹⁷J.D. Clark, *From Hunters to Farmers: the Causes and consequences of Food Production in Africa*. (California: University of California Press, 1978), pp.107-52.

sequence is an illusory compartmentalisation of a continuous typological evolution. What is clear is that Nachikufan I is a representative of an earlier microlithic industry, characterised by a dominance of pointed backed bladelets, which was widely distributed in the plateau areas of east-central Africa and which was derived at least in substantial part, from the mode 3 industries of that region.¹⁸ The later Nachikufan phases were progressively localised and show increased inter-site variations.

Phillipson elaborates this point by emphasising the importance of this rock art to the student of traditional Zambian culture, as to the general public of Zambia that, the prehistoric rock art is of particular interest as it is one of the oldest forms of artistic expression to have survived into modern times.¹⁹ It can therefore be stated that rock art has come to be accepted like a modern invention which reveals much about human capacity for abstraction as it helps us also understand the social and economic activities of ancient human.

The rock art are particularly interesting as they are associated with habitation sites of hunter-gatherers of the Later Stone Age period whose technology was based on the production of microliths.²⁰ For instance, the red schematic art in the northern region of Zambia, that is in Kasama and the area surrounding Shiwa Ng'andu, are associated with the LSA Nachikufan II, which has been presumably dated to sometime upto 9,720+/-550 BP.²¹ Another example is drawn from the Congo/Zambezi watershed, at Chifubwa Rock shelter in Solwezi, where the Nachikufan I is associated with typical microlithic material, ochres, charcoal and fragments of bored stones.²² Some grindstones which were probably used for grinding red pigment and a number of haematite "Pencils" were also found.²³ This is a good indication that rock art might have been in existence continuously during the development of the Nachikufan industry, from Nachikufan I to III. Nachikufu cave is a clear example of continuous occupation from where casts of fragments of haematite and charcoal have been found among the microlithic industries.²⁴ This site has yielded rock art in form of painting materials in association with LSA assemblages just like most Nachikufan cultural sites including Shiwa

¹⁸Phillipson, 'The Later Stone Age in Sub-Saharan Africa', p.465.

¹⁹Phillipson, 'Prehistoric Rock Paintings and Engravings of Zambia', p. 7.

²⁰ LM, 775/6, Northern Province rock Paintings.

²¹Miller, 'The Nachikufan Industries', p.502 see also LM, ARCH/67/4, Letter by the National Monument Curator to the Northern Province Commissioner, Kasama, 30th June, 1955, p.1.

²² LM, 721/102, Letter to R. A Dart from D.J. Clark, 14th June, 1951.

²³ LM, 721/15, Letter by Clark to H.J. Braunholtz, 4th October, 1948, p.1.

²⁴ LM, 721/124, List of Material from Nachikufu Caves Displayed at the Site. See also LM, 721/71a, Press Communiqué No. 406, Important New Discoveries in Northern Rhodesia, p.1.

Ng'andu.²⁵ Musonda states that in Zambia, the LSA spans from a period back to 18080+/- 180 BP and possibly further back in yet unexcavated levels.²⁶ This means that the LSA rock art may have a greater time depth than most scholars earlier thought.

Clark and Phillipson have proposed that the material artefacts found in undisturbed caves and rock shelters with rock paintings in them suggest that Zambian rock art was being executed alongside stone and Iron Age assemblages.²⁷ For instance, the caves in Bimbewa Mpalabwe and Serenje Hills recovered a sizeable quantity of LSA tools and pottery alongside the paintings.²⁸ The above mentioned aspect of undisturbed settlement is seen in Shiwa Ng'andu (see site KRS-1A). Similar archaeological material were collected at the excavated site (CHV-2B) in Shiwa Ng'andu. They included charcoal, fragments of haematite, pottery, ochres and stone tool materials (see site CHV-2B). This depicts the lifestyle and beliefs of prehistoric humans. The rock art therefore leaves evidence of a rich African history in the context of Stone and Iron Age assemblages at Shiwa Ng'andu and Zambia in general.

Investigations of rock art sites in south-central Africa that contain stone age assemblages have been made at sites such as Nyero in Uganda, Cahora Bassa Dam in Mozambique, Chencherere in Malawi and many more (in central Africa rock art zone), and these have been associated with hunter-gatherers of the LSA period. This period in Zambia is believed to have begun more than 20,000 years ago.²⁹ Clark recognised and acknowledged the important link between rock art and cultural practice.³⁰ Therefore, the cultural practice and rock art leads to the link between the geometric or schematic rock art in Central Africa and the works of the Later Stone Age hunter-gatherers, or the BaTwa people. This was later backed by archaeological excavations from areas in Malawi and Zambia where LSA tool distribution matched the regional distribution of the geometric rock art.³¹

Archaeological sites in most parts of the country and in the region, throughout the LSA time, are both larger and more numerous than those of earlier times and a good example is that of Nachikufu. This may be because most parts or sites were less disturbed or obliterated than

²⁵LM, 721/124, List of Material from Nachikufu Caves Displayed at the Site.

²⁶ Musonda, Aspects of the Prehistory of the Lunsemfwa Drainage Basin, p.320.

²⁷LM, 721/71a, Press Communiqué No. 406, Important New Discoveries in Northern Rhodesia, p1.

²⁸ LM, 721/126, Nsalu, Vimbe and Nachikufu caves, Nsalu and Serenje Caves, see also LM, 721/71a, Press Communiqué No. 406, Important New Discoveries in Northern Rhodesia, p.2.

²⁹ Phillipson, 'Prehistoric Rock paintings and Engravings of Zambia', p.8

³⁰Clark, 'The Stone Age Cultures of Northern Rhodesia', p.26.

³¹Clark, 'The Prehistory of Southern Africa', p.211. See also Namono, 'Surrogate Surfaces', p.60.

older sites. A good example from the study area are the caves and rock shelters with rock art and settlements where people lived and went on with their daily pursuits. The floors of these caves and rock shelters in most cases such as site KRS-1A and CHV-2B contain soil levels with undisturbed deposits by modern human or animal activities, hence yielding results related to the Nachikufan industry.

Figure 17: Possible habitation Caves in Shiwa Ng'andu



Phillipson observes that one result of this adaptability was the steady proliferation of local industries such as rock paintings and the accompanying faster rate of cultural change that may be recognised in the archaeological record.³² This then was accompanied by increase in the size of individual groups and overall population levels, which could be attributed to the increased number of sites occupied and rock shelters painted. For instance, within the small radius of the Kapishya Hot Springs, a number of rock art sites were recorded on rock panels, rock shelters and caves (Figure 18). This can be related to the settlement of the LSA inhabitants of Shiwa Ng'andu and the evidence they left behind indicating a lifestyle of hunting, gathering, stone tool making and rock painting.

Figure 18: Left Rock outcrops with rock art paintings at sites CHV-2A and CHV-2B and Top Right- Concentric Circles on a rock a panel protected by an overhang at CHV-2B

³² Phillipson, 'African Archaeology', p.142.



The Shiwa Ng'andu LSA evidence relating to occupation is found in both open and sheltered sites similar to the occupation evidence at Nachikufu Cave and Mwela caves. Caves and rock shelters are abundant in regions where granite Kopjes are found, such as northeastern Zambia and the Kasama area.³³

However, the Stone Ages should not be considered solely in terms of fabricated stone tools, since humans utilised bone and wooden tools as well as grass and other fibres for cordage and matting.³⁴ By the end of the LSA period foundations had been laid for many diverse rich later African cultures such as burial customs, artistic traditions and also by the personal adornment that has been preserved.³⁵ Perhaps these were also rock art traditions which seem to have become a fundamental part of LSA peoples' lives seen from the increased number of sites identified not only in Shiwa Ng'andu but world over.

This era has been connected with an increase in the production of rock art in the region. Walker notes that this period engendered variations in material culture and social relations.³⁶ He suggests that rock art might have played a part in maintaining group boundaries by acting as a territorial marker since there is evidence of increasing importance of site ownership among these communities, hence accrediting rock art to LSA and EIA activities. Across Zambia there is evidence of this possibility of rock art division between the hunter-gatherer and agro-pastoralist communities as previously argued for by Phillipson and Smith.

A number of archaeologists such as Walker have argued that within the archaeology of the LSA and EIA, there is evidence of reduced mobility among the hunter-gatherer communities

³³ W.J. Veldkamp, *Soils of Zambia* (2nd.ed.). Soils Bulletin, 13, Soil Survey Unit, Mt. Makulu, Zambia, (1987), p.31

³⁴ NAZ, BOX 111 (shelf 17), *Archaeology in Zambia*, Livingstone Museum.

³⁵ NAZ, BOX 111 (shelf 17), *Archaeology in Zambia*, Livingstone Museum.

³⁶ N. Walker, 'The dating of Zimbabwean Rock art', *Rock Art Research* 4, 2, (1987), p.139.

which resulted in the curtailment of direct contact between separate groups, thereby entrenching variations in the cultural facets of the communities.³⁷ Reduced mobility enhanced settlement which in turn led prehistoric human to having adequate time to indulge in rock painting as their daily lifestyles. Issues such as social groupings across the landscape can only be understood by looking at differences in rock art styles and motifs, rather than the common aspects. Analysing variations in Shiwa Ng'andu rock art, (which is the subject of discussion in the next chapters can aid in this endeavour.

The hunter-gatherer rock art in Zambia is ascribed to the late Pleistocene period which by implication means that the Shiwa Ng'andu rock art belongs to the same time period. Understanding the other archaeological aspects that prevailed during this period is therefore essential. Nhamo points out that there could have been greater variability in the past since the archaeological record is more varied than is revealed by the modern day hunter-gatherer ethnographic literature.³⁸ Although it might be very difficult to show variation within rock art, rock art embodies the signatures of variation trait of this era, such as that of the hunter-gatherer groups and that of farming communities. In Shiwa Ng'andu, it could be evident by the analysis of different styles and motifs of both the geometric and animal paintings showing the different variations in rock art that seemed to have co-existed with stone assemblages. This is vital because rock art and other archaeological evidence in the form of stone artefacts demonstrate the actuality of variation within the LSA hunter-gatherer communities in southern and central Africa. Nevertheless, there is need to appraise the nature and extent of variation among the modern day hunter-gatherers as they are sources of analogies used in this research for the interpretation of variation in the archaeological record.³⁹

Another aspect that reveals that rock art and Stone Age assemblages were two phenomena of the hunter-gatherer lifestyle that took place synchronously was through occupational characteristics. Such as the stone and bone tool producing people occupied rock shelters, open air sites and lived along water shores where rock art was found. This is evident in Shiwa Ng'andu (where) overhangs, caves and open air sites containing rock art have been found located in proximity to Mansha River (see Figure 17,18 and 19) . They possibly used these

³⁷N. Walker, *Late Pleistocene and Holocene Hunter-gathers of the Matopos*. Uppsala: Societas Archaeologica Uppsaliensis, 1995, p.19.

³⁸Ancila Nhamo, *Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe*, PhD. Thesis ,University of Zimbabwe, (2014), p.55

³⁹Nhamo, 'Characterizing hunter-gatherer Rock Art', p.55

sites for residence, hunting, fishing and rituals. This is in line with Namono's observation that hunter-gatherers living and utilising such sites combined hunting and fishing with gathering, surviving on a diet of aquatic and plant resources, ostrich eggs, meat and fish.⁴⁰

Figure 19: Vegetation on the edges of the Mansha River and grassland/dambo area in Shiwa Ng'andu



By drawing on stone tool typological parallels, Clark suggested a possible link between the later makers of the Nachikufu industry and the geometric rock art tradition.⁴¹ He postulated that the rock art was derived from a working knowledge of a softer medium such as bark cloth, thereby acknowledging the important link between rock art and Nachikufan industrial practice. The distribution of the Nachikufan III matches the regional distribution of the geometric rock art tradition.⁴² It would appear that the same kind of situation prevailed in the Shiwa Ng'andu area where artefacts similar to Nachikufan III industry were found; for example at site CHV-2B in circumstances where geometric art was present.

In the same vein, climate possibly did not severely affect the prehistoric peoples of the study area directly in their choice of habitable regions such as caves, except that seasonal movements to permanent water sources such as the Mansha River was necessary in the drier

⁴⁰Namono, 'Surrogate Surface', p.13.

⁴¹Clark, 'Nachikufu culture of Northern Rhodesia', pp.43–45.

⁴² A.Z. Mabulla, 'The Rock Art of Mara Region, Tanzania', *Azania*40, (2005), p.37, see also P.S. Garlake, *The Hunter's vision*. (London: British Museum Press,1995)., and Smith, *Zambia's Ancient Rock Art*

regions. Different climates resulted in different ecological situations which then encouraged different subsistence patterns and activities.⁴³ This could have also influenced the prehistoric people of the Nachikufan industry to take part in rock art activities, pottery making and stone tool making in these habitable caves. Hence in as much as indirectly, climatic conditions affected prehistoric cultural developments that took place during the LSA, they did not prevent the Nachikufan people from continuing with their lifestyle activities and patterns. This could also explain the Nachikufan being found in association with art decorated with naturalistic and geometric paintings not only in open spaces but caves and shelters.

CONCLUSION

This chapter has argued that the LSA and Iron Age societies like that of Shiwa Ng'andu lived in harmony. There existed long periods of beneficial interaction to both hunter-gatherers and farmers where they drew aspects of culture and belief from earlier peoples. Further, the chapter has demonstrated that ecology played a critical role in the livelihoods of both the LSA and Iron Age people in Shiwa Ng'andu. For instance, it is clear that stone tool typological parallels linking the Nachikufan industry and the geometric rock art tradition did not display straightforward chronological changes but rather, overlapped due to shifts in activities and technological innovations within the same time period. In addition, it has been shown that Zambian rock art is associated with most stone and few Iron Age contexts as they existed synchronously. This clearly shows that the Shiwa Ng'andu rock art therefore, maybe associated with the LSA.

⁴³ Hewlett, 'Cultural Diversity among African Pygmies', p.218.

CHAPTER FOUR: COMPARISON BETWEEN THE SHIWA NG'ANDU AND BATWA ROCK ART

INTRODUCTION

This Chapter compares the rock art patterns of the Shiwa Ng'andu area and the BaTwa rock art of Central Africa. The comparison is based on such aspects as subject matter, technique of execution and the colour of paintings, in relation to those drawn from elsewhere in the country and other parts of the sub region whose rock art has been studied in comparison with that of Zambia. These include the rock art of Malawi, Uganda, Zimbabwe, northern Mozambique, central Tanzania, and South Africa. This will be done by analysing the characteristics of the BaTwa art.

The BaTwa left a legacy of their beliefs and lifestyle by recording and painting on rocks. Rock art, like other archaeological remains, occurs in many regions of the world. One way to approach the study of rock art, then, is to consider regional contexts.¹ Rock art is unique because of its authenticity and integrity yet its interpretation is the most controversial issue.² Rock art interpretation is particularly challenging since it constitutes an archaeological manifestation of symbolic behaviour which usually has multiple references.

A number of researchers such as Namono have discussed categories and identities of the rock art tradition. In Namono's view:

the hunter-gatherer rock art of Africa has been divided into three regions with sub-regions namely: the Maghreb and the Sahara with a sub-region relating to the Horn of Africa, Central Africa Art Zone with Central Tanzania sub-region and Southern African Art Zone with six sub-regions of Southern Africa.... Focusing on Central Africa, further categorised as the hunter-gatherer tradition of Zambia, Malawi, northern Mozambique, eastern Angola, southern Democratic Republic of Congo, and south and Western Tanzania termed the 'Central African "Twa" Art Zone', the rock art traditions of the Bantu-speakers, and areas with geometrics ...which include Uganda and Central African Republic.³

¹C. Namono, 'Surrogate surfaces: A Contextual Interpretative Approach to the Rock Art of Uganda', PhD Thesis, University of Witwatersrand, (2010), p.40

²Phenyo C. Thebe. 'Rock Art of Southern Africa', presentation, n.y, n.p, p29.

³Namono, 'Surrogate Surface', pp.41, 92. see also A.R. Willcox, *The Rock Art of Africa*, (Johannesburg: Macmillan, 1984), p.94. In Africa there is a broad spectrum of images that are widely categorised as geometric, and in most instances these shapes are less frequent than figurative shapes.

The countries that belong to the Central African Twa art zone are what this chapter concentrate on. These countries seem to have the same rock art features or motifs hence categorized as one region.

BATWA ROCK ART

This section focuses on the geometric rock art of the BaTwa or ‘Central African “Twa” Art Zone’. Nearly three thousand hunter-gatherer rock art sites have been found within this zone and some ninety percent of these comprise superimposed layers of massed, finger-painted, geometric designs. The other ten percent of sites comprise highly stylised and distorted animal forms plus rows of finger dots. Both seem to have a history extending back many thousands of years.⁴ These two designs or pair of art seem to exist side by side whilst the geometric art always dominates over the distorted animal forms plus finger dots. African rock art studies indicate that:

the two traditions go together as a pair: they co-occur across a huge area and are regularly found close by, but in only a handful of cases can they be found together in the same site. They seem to be kept near, but apart. Both are found in the same overall distribution. The dominance of geometric rock art makes this area immediately distinctive from the other hunter-gatherer rock art regions in Africa all of which, by contrast, contain a high percentage of brush painted animals, humans and human-animal confluents.⁵

The consistent difference in manner of depiction and placement between the BaTwa rock art in Central Africa and those depicted in Southern Africa is an indication of a cognitive divergence of authorship of the two rock art traditions North and South of the Zambezi. North of the Zambezi, there exists a strong pattern showing that the broad and common variables of colour, technique, shape, method including manner of depiction, suggesting that each regional rock art contains considerable variation that has a particular and distinct artistic tradition. First, images made using the brush are usually in red. Second, those applied with the finger are simply geometric and monochrome red and white or bichrome. Third, finger painted images are stylised depictions of animals and dots and lines.

⁴ 'Rock art of Africa', https://en.wikipedia.org/wiki/Rock_art (accessed on 5th, March, 2015)

⁵ 'Rock art of Africa', https://en.wikipedia.org/wiki/Rock_art (accessed on 5th, March, 2015)

On the other hand, those south of the Zambezi called Southern African Rock art are different in the manner of motif execution. The South African rock art tradition is often found on vertical rock surfaces, rarely deep in a shelter, and is often easily accessible. This tradition is clearly distinguishable from the geometric rock art tradition of Shiwa Ng'andu. For instance Pager, one of the greatest rock art recorders in southern Africa was able to demonstrate numerically that people were the commonest figures (58 percent), and in terms of group compositions (that is, recurrence in actual paintings), animals were the most numerous themes (about 58 percent) of pictographs in many sites.⁶

Another distinction the BaTwa zoomorphic figures from the paintings in Southern Africa (South Africa, Botswana, Namibia and Zimbabwe) is that in most cases the BaTwa pictographs took the form of a highly realistic shadow silhouette. In others, all bodily features were remarkably distorted in some cases making it practically impossible to decipher what species of animals was painted. Zoomorphic figures (animals) were executed in outline. Some were completely filled whilst others were partially filled.⁷ Smith argues that:

the red animal tradition that comprises animal depictions in red pigment applied to the rock-face in fine –line brush strokes. Some of the animals are executed in remarkable naturalism but most are depicted with gross distortions in body form making it difficult to discern the species of an animal. Most of these animal depictions are associated with rows of dots that overlies the animal forms.⁸

Within the category of geometrics in central and southern Africa there are three known rock art traditions. One of which belong to the BaTwa and the other two to the Bantu speakers. Namono notes the three traditions as being:

that of the Bantu-speakers, colloquially referred to as 'late-white' because it often occurs over other rock art traditions; the rock art of the herders; and the red geometric tradition linked to Pygmies. The rock art of Bantu-speakers or Iron Age farmer rock art consists mainly of anthropomorphic, zoomorphic

⁶ H. Pager, The rock paintings of the Upper Brandberg. Part III. Southern Gorges (Koln: Heinrich Barth Institute, 1995). p.31.

⁷ Billiard B. Lishiko, 'The Politics of Production of Archaeological Knowledge: A Case Study of the Later Stone Age Rock art Paintings of Kasama, Northern Zambia', M.A. Dissertation, University of Cape Town, (2004), p.110.

⁸ B. W Smith, Zambia's Ancient Rock Art- the Paintings of Kasama, (Livingstone: The National Heritage Conversation Commission, 1997), p.32.

imagery, animal forms, and images of people, spread-eagled designs and geometric images. No attempt is made to capture the true likeness of the figurative object and attention to detail is impossible. The pigment is usually a rough chalky white paste although red, orange and black monochrome pigment has been recorded.⁹

Namono further adds that herder rock art comprises geometrics depicted in finger-painted red and white monochrome pigment and is attributed to Khoekhoen (Khoikhoi) herders of southern Africa.¹⁰ The majority of the schematic geometrics linked to pygmies are similar to those described for sites spread across in Zambia and Malawi.¹¹ They are also similar to those in Uganda¹², Central and North-central Tanzania.¹³

It is possible that there should be an existence of regional variations within the Pygmy geometric rock art tradition. However, congruency in subject matter, pigment and stylised manner of depiction suggests an association in tradition. Such association has been the subject of past understandings of geometric rock art in east and central Africa.¹⁴ In the same line of association, Clark, using stone tool typological parallels, suggested a possible link between the later hunter gatherers of Zambia and those of Angola, northern and central Malawi, Democratic Republic of Congo and the equatorial region of the Congo basin.¹⁵ Namono further adds that Clark went on to link this to a rock art tradition, by claiming that:

In the late 1950s, Clark made initial recognition of rock art tradition when he described a concentration of rock art sites in south central and east Africa as far as eastern Uganda, the Nyasa and Tete provinces of Mozambique, southern Tanzania, Zambia and Malawi, Eastern Katanga Province of the Democratic Republic of Congo and eastern Angola as the 'Central African Schematic Art Group', which he later termed as the 'Schematic Rock Art Zone'. The

⁹ Catherine Namono, 'DikgatwaneTsaBasadi: A Study of the Link between Girl's initiation and the Rock Art in the Makgabeng Plateau, Limpopo Province, South Africa', M.A. Dissertation, University of Witwatersrand, Johannesburg, (2004), p.24.

¹⁰ Namono, 'Surrogate Surface', p.42.

¹¹ Smith, *Zambia's Ancient Rock Art*, p.24.

¹² Namono, 'Surrogate Surfaces', p.42.

¹³ A. Z. Mabulla, 'The Rock Art of Mara Region', Tanzania. *Azania*, 40, (2005), pp.36-7.

¹⁴ Namono, 'Surrogate Surfaces', p.42.

¹⁵ J.D. Clark, 'A note on the pre-bantu inhabitants of northern Rhodesia and Nyasaland', *Northern Rhodesia Journal*, 1, (1950), pp.43-5.

schematic zone was characterised by a predominance of red monochrome geometric grids and circular shaped motifs.¹⁶

Subsequently, Namono noted that the red geometric tradition is evident from Angola, Zambia, Malawi, Mozambique, the Democratic Republic of Congo, Northern Tanzania, Uganda to western Kenya.¹⁷ This was later backed by archaeological excavations from sites in Malawi such as Chencherere¹⁸ and Mwela in Kasama, Zambia,¹⁹ leading Clark to post the view that the presence of LSA and Iron Age material was evidence of two groups of people living alongside each other. As a result of the foregoing, he concluded that the makers of the red animal and red geometrics, particularly since the LSA tool distribution matched the regional distribution of the geometric rock art.²⁰ Thus this art is used to judge the merit of other rock art in the region. This tradition is evident in Shiwa Ng'andu but predominately found in Kasama, Zambia. This research's interest is on red animal and red geometric traditions which is evident in Shiwa Ng'andu.

Smith contends that farmer groups made the white spread-eagled and white zoomorphic paintings and that the tradition comprising red animals and the other, of red geometric paintings, belonged to BaTwa hunter-gatherers.²¹ Smith further argues that, the BaTwa hunter-gatherer tradition is widespread and found in greatest concentration in areas where oral tradition records a presence of pygmy groups. He also notes that farmer rock art is localised.²² This chapter's interest is the BaTwa red tradition as it comprises a lot of similar characteristics with the Shiwa Ng'andu rock art in terms of the location and type of motifs.

SHIWA NG'ANDU ROCK ART IN CENTRAL AFRICAN ROCK ART CONTEXT

A comparative analysis of paintings in Shiwa Ng'andu area is presented to determine their character on the basis of variation and similarities with those from within Zambia and other

¹⁶Namono, 'Surrogate Surfaces', p.43., see also J.D. Clark, 'Schematic Art'. South African Archaeological Bulletin 13, (1958), p.74.

¹⁷Namono, 'Surrogate Surfaces', p.44

¹⁸L.F. Zubieta, 'The Rock Art of MwanaWaChentcherere II Rock shelter, Malawi: A site- specific study of girl's initiation Rock Art', Leiden: African Studies Centre, (2003), pp.1-2.

¹⁹Smith, Zambia's Ancient Rock Art, pp.9-60.

²⁰J.D. Clark, The Prehistory of Southern Africa. (Harmondsworth: Penguin, 1959), p.211. See also Namono, 'Surrogate Surfaces', p.60.

²¹Smith, Zambia's Ancient Rock Art, pp.12-13, 41., see also Namono, 'Surrogate Surfaces', pp.44, 49. ..the red geometric tradition comprises images depicted in red pigment usually applied by fingertip, sometimes applied by brush. The most common images are sets of parallel vertical lines, dots and circle variants.

²²Smith, Zambia's Ancient Rock Art, pp.17, 28.

regions such as Uganda, Malawi, Northern Mozambique, Central Limpopo Basin in South Africa and Zimbabwe.

Other appropriate examples indicating that indeed Shiwa Ng'andu rock art sites have evidence of the Twa rock art are excavated archaeological evidence from Nyero 2 in Uganda suggesting a period of long LSA occupation and the likely supposition that the cave dwellers were the authors of the rock paintings.²³ Earlier excavations in the area yielded quartz, pottery,²⁴ and a bone incised with three concentric circles similar to designs found on the rock walls at Nyero 2, suggesting that the rock paintings belong to the LSA.²⁵ Further excavation of Nyero 2 in 1962 yielded two large pieces of prepared orange-red ochre 'pencils' and typical LSA artefacts.²⁶ Although the paintings and the excavated occupation layers are not necessarily contemporary, it is most likely that the LSA occupants incised concentric circles on bone and used ochre.²⁷

Also at Magosi 2 in Uganda, a large overhanging rock with geometric rock paintings, excavated in 1963 by Posnansky and Cole, yielded pieces of haematite, some red ochre 'pencils', pottery, ostrich eggshell with a few beads, hammer stones, several pestles, a shallow mortar, perforated stones, a partial bored stone and large quantities of LSA lithics, that probably represent the LSA and early Holocene period.²⁸ These LSA assemblages of the Holocene period could be safely compared to those of the Nachikufan industries, other than those at site CHV-2B in Shiwa Ng'andu, especially with the evidence of concentric circles, haematite, red ochre 'pencils', eggshells, pebble stones, quartz fragments, stone broken hand axe and pottery.

In Uganda, wherever geometric rock art has been found in association with an archaeological industry, this has been of LSA form.²⁹ The occurrence of ochre and rock art at LSA sites

²³J.C.D. Lawrence, 'Rock Paintings in Teso', *Uganda Journal*, 17, (1953), p.12.

²⁴M. Posnansky and C.M. Nelson, 'Rock Paintings and Engravings at Nyero, Uganda', *Azania*, 3, (1968), p.151, see also C.M. Nelson, 'The MSA/LSA Transition in East Africa', *NyameAkuma*, 3, (1973), p.30., and Namono, 'Surrogate Surfaces', pp.93-4.

²⁵M. Posnansky, 'Rock Paintings on Lolui Island, Lake Victoria' *Uganda Journal*, 25, (1961), pp. 109–110, see also Namono, 'Surrogate Surfaces', p.93.

²⁶Posnansky & Nelson, 'Rock Paintings and Engravings at Nyero', pp.154–5

²⁷Posnansky & Nelson, 'Rock Paintings and Engravings at Nyero', p.156

²⁸M. Posnansky & G. H. Cole, 'Recent Excavations at Magosi, Uganda: A Preliminary Report', *MAN*, 63, (1963), pp.105–106

²⁹Clark, 'The Nachikufan culture of Northern Rhodesia', p.89.

marks the importance of symbolic behaviour among these LSA populations.³⁰ A relative consistency of geometric motifs across Eastern, Central and South-central Africa suggests that the red geometric paintings have been in existence for a long time. The high degree of congruency in the geometric rock art in Uganda demonstrates a clear, consistent, distinct, homogenous pattern in method and manner of depiction to that within the geometric rock art zone.³¹

These similarities arise from the analysis of the geometric rock art in Shiwa Ng'andu compared with that from Uganda and the broader geometric rock art zone, demonstrating a clear, consistent, homogenous pattern of depiction within the region. This is comparable to the geometric rock art in Shiwa Ng'andu that shows a clear and consistent red animal and red geometric pattern like that of Uganda and the central African BaTwa rock art.

In Tanzania, these fine line and finger paintings include animal and people and possibly a few geometric designs. Usually, they occur in shades of red but are sometimes found in two or more colours. Animals appear to have been painted with fingers and the body smeared with the hand, some animals and most human figures were painted with some implement such as a frayed stick or even a brush.³² Just like most of the rock art in Central Africa, the painting was made using three ingredients, that is, pigment for colouration, a binder to bond the pigment together and a fluid to make it liquid. Tara elaborates that in Tanzania, the common pigments comprised iron oxides such as haematite (ochre) for red, limonite for yellow, lime, kaolin and manganese and charcoal for black.³³ In addition, red was mixed with black to create purple and with yellow to make orange.³⁴ Most commonly, the paint was applied with the fingers and hand but brushes and other implements were sometimes used. It is evident that the red animal tradition at site BUSO-1 and the rest of the red geometric tradition at Shiwa Ng'andu also applied these techniques. In Shiwa Ng'andu the red animal and red geometric tradition paintings from nine sites have a red orangish common pigment made from ochre and only one site CHV-1A has both red and purple pigments comprised in the paintings.

³⁰ M.E. Prendergast, L. Luque, M. Dominguez-Rodrigo, F. Diez-Martin, A.Z.P. Mabulla, and R. Barba, 'New Excavations at Mumbwa Rocks shelter, Tanzania', *Journal of African Archaeology*, 5, 2, (2007), p. 219.

³¹ D.W. Phillipson, *The Prehistory of eastern Zambia*. (Nairobi: British Institute in East Africa, 1976), p.201.

³² TARA, 'Rock Art in East Africa', <http://africanrockart.org/>, (accessed on 5th March 2015) p.6

³³ TARA, 'Rock Art in East Africa', p.8.

³⁴ TARA, 'Rock Art in East Africa', p.8.

The Shiwa Ng'andu art has shown undoubted connection with some of the Tanzania art styles, and provides the connecting link between that group of the painters.³⁵ Leakey also adds that, at first glance, the earliest figures at Kolo in Tanzania were crudely drawn in rather thick outline. These were followed by animals, and large dots apparently drawn by fingertips and dipped in some sort of wet colour. They were followed by wonderfully naturalistic outline drawings of animals in red.³⁶ This is all evident in Shiwa Ng'andu at site BUSO-1 demonstrating a relationship with BaTwa art in the region.

In addition, Nyero 2, Magosi and Kolo sites mentioned above not only match the regional distribution of the BaTwa geometric rock art but are part of the geometric art of the LSA with evidence at sites of both LSA and the early Holocene period. This also consolidates the assertion made earlier in the previous chapters, attributed to Smith that the geometric art belonged to the BaTwa.³⁷ Thus, rock art occurred earlier during the LSA than any other aspects of hunter-gatherer life continued and in use well into the Early Iron Age (EIA). It is most likely that the painters of the Shiwa Ng'andu are the BaTwa belonging to the Nachikufan LSA cultures.

The finger painted BaTwa rock art, dominated by geometric forms in small size by bizarre and varied stylised forms of animals all in red comprise the legacy left behind,³⁸ and is similar to the red tradition in Shiwa Ng'andu. The red pigment was likely made from red ochre which is widely available from a form of decaying reed matter found in wet areas such as dambos which when heated or dried turns bright red. These substances must have been grounded into a powder and mixed with a liquid to form a paste and then applied to the rock-face in fine-line brush strokes or by fingers.³⁹ Hence the symbolic behaviour and clear, consistent, distinct, homogenous pattern in method and manner of depiction of red geometric art is very similar to that found in Shiwa Ng'andu.

Unlike charcoal and beeswax that could be directly dated using radio-carbon method, clay and ochres which were used in painting are not easy to date.⁴⁰ In the case of red animal and

³⁵ LM, 721/71a, Press Communiqué No. 406, Important New Discoveries in Northern Rhodesia, p.2.

³⁶ Mary D. Leakey, 'Tanzania's Stone Age Art', National Geographic, 1,164, (1983), p.92.

³⁷ Smith, Zambia's Ancient Rock Art, pp.17-18, see also D.W. Phillipson, 'Zambian Rock Paintings', World Archaeology, 8, (1972), pp.313-327.

³⁸ B.W. Smith, and L. F. Zubieta, 'The rock art of Mpumalanga. In P. Delius, Mpumalanga History and Heritage: Reclaiming the past, defining the future, (Scottville: University of Kwazulu Natal Press, 2006), p. 87

³⁹ Smith, Zambia's Ancient Rock Art, pp.15, 32.

⁴⁰ Smith, Zambia's Ancient Rock Art, p.19.

red geometric traditions in Shiwa Ng'andu, the consistent pattern of LSA evidence from excavated finds has helped suggest a connection between the makers of the LSA objects and the rock art as indicated in Chapters Two and Three. Across space, the minimal variation in image depiction raises the possibility that, if some sites are of different dates, the shapes depicted would not have changed significantly over time.⁴¹ Thus, if it is accepted that the geometric imagery was made by Pygmy 'BaTwa' hunter-gatherers then the rock art of Shiwa Ng'andu probably dates from the Holocene (or LSA) period.

Arising from what is stated above, the Shiwa Ng'andu rock art would then be deemed to fall within two broad categories. The first category consists of naturalistic paintings which conform to recognisable shapes, such as animals, and people. The second, and the majority, of the rock art shapes are geometric. They include concentric circles, concentric circles with radiating lines, dots, dotted lines, straight lines, horizontal lines and vertical lines and interlinked lines. The method of application varies from brushwork to finger application and daubing. Most geometric shapes are in red monochrome pigment, often finger-painted but sometimes painted with a brush in as much as traces of white pigment were not found at sites where shapes are now predominantly red which could be that white pigment was once more common but it has not survived or has not yet been found.

Regionally, there is a continuity of cultural material between north-eastern Angola and the rest of the Congo Basin and adjacent areas in Kenya, Tanzania and Uganda.⁴² In Angola, at Tchitundo-Hulo engravings and paintings include a high percentage of geometric forms.⁴³ These geometric forms comprise a dominance of concentric circles, rayed circles, dots, lines similar to those commonly depicted in the Shiwa Ng'andu area (dumbbell shapes and concentric circles). This strong similarity attests to a widely distributed homogenous symbolism in the region as far as Tanzania to the east and from northern Mozambique in the south stretching to the geometric rock art tradition of Uganda.⁴⁴ Namono also adds that

⁴¹Namono, 'Surrogate Surfaces', pp.93-7.

⁴²J.D. Clark, Prehistoric Cultures of Northeast Angola and Their Significance in Tropical Africa. 1-2, (Lisbon: PublicacoesCulturais, Muesu do Dundo.1963), pp. 210-212.

⁴³M. Gutierrez, 'The Rock Art of Angola'. in P.G. Bahn, and A. Fossati, (eds.). Rock Art Studies. News of the World 1. (Oxford: Oxbow Monograph, 1996), p. 87, see also C. Everdosa, ArquelogiaAngolana. (Lisbon: Limitada-Lisboa, Edicoes, 1980), pp.318-9.

⁴⁴J.H. Chaplin, 'The Prehistoric Art of the Lake Victoria Region', Azania, 9, (1974), pp. 35-39.

variation in depiction at some sites in Mozambique is evident in the detailed rendering of shapes similar to those in Uganda and Zambia.⁴⁵

These examples of the geometric rock art depicted in red pigment and in a manner similar to those demonstrated in the pattern observed in Shiwa Ng'andu area indicates that the rock art found in Shiwa Ng'andu belongs to the BaTwa rock art of Central Africa. This is also due to the analysis and comparison to the geometric rock art zone of Central Africa and that of the geometric rock art in Shiwa Ng'andu in particular and Zambia at large. There is an indication of a strong and consistent pattern in space between the Zambia rock art and the wider Central African geometric rock art tradition.

The authors of the geometric rock art present at Shiwa Ng'andu, Kasama, Nachikufu, and the rest of Central Africa belong to hunter-gatherer communities that occupied the region north of the Zambezi. Drawing on scholars such as Namono, Clark and Smith, the images analysed in the region give confidence and suggest a consistency of shared beliefs and practices between the Nachikufan industry and the 'BaTwa' authors of the geometric rock art of the broader geometric rock art zone of central Africa,⁴⁶ and particularly that in Shiwa Ng'andu. These formal similarities in the rock art in Shiwa Ng'andu suggest a possible cultural link between the makers of the rock paintings in Kasama and the other BaTwa rock art in Central Africa. Hence, a connection can be said to exist between the BaTwa rock art and the Nachikufan industry of Central Africa of which Shiwa Ng'andu was an integral part.

BaTwa rock art has evidence for much greater regional diversity including more motif types than those in Shiwa Ng'andu yet they were the same type of motifs painted, such as concentric circles, dumbbells different lines, and animal motif types. This could be because the study area does not cover a very wide area, hence fewer motif types than those elsewhere in the region. Due to its limited size, the study did not record certain shapes or types found under the BaTwa rock art motifs such as the sausage and U shapes. Yet, with sites that cover a wide space or area, a lot of different shapes of BaTwa rock art have been found. For example, there is only a limited overlap between the motifs employed in Kasama and Uganda with motifs in Shiwa Ng'andu. Kasama and Uganda have more and a variety of motifs compared to the Shiwa Ng'andu motifs. For instance, there are plenty U-shaped motifs in

⁴⁵Namono, 'Surrogate Surfaces', p.127

⁴⁶Smith, Zambia's Ancient Rock Art, p.41

Uganda but no animal paintings yet vice versa in Shiwa Ng'andu. However, both areas have concentric circles, dumbbells and the rest of the other shapes. The decorations found in Shiwa Ng'andu have common or similar designs with the BaTwa rock art of Kasama, Nachikufu, Uganda, Malawi, northern Mozambique and other areas of central African rock art. Therefore there is evidence for connections/similarities between the rock art found in these areas to natural surfaces in the landscape.

There are different connections of motifs in other areas beyond the BaTwa art zone such as those depictions where animals outnumber human figures in Zimbabwe.⁴⁷ Nhamo observes that the Kudu is prominent in the paintings in Zimbabwe.⁴⁸ Similarly, the elephants are more prominent than other animals in the rock art of Uganda and that of Shiwa Ng'andu.

These particular designs are not among the features that extend across north of the Zambezi River. They may appear once like the elephant at site BUSO-1, there is none for the kudu among the paintings in the study area. In spite of the two groups of decorations overlapping occasionally when it comes to monochrome colour used and the occurrence of LSA cultures in the stratigraphy of the excavated sites, they do so at an entirely different level. The rock art in Shiwa Ng'andu shares some features with the monochromic decoration found across south of the Zambezi and that may be one of the few connections in which there is a close relationship between the two groups.

In line with variation in subject matter, investigations from the study area show that some depictions are common in almost all the sites such as the concentric circles in eight sites (except CHV-1A and BUSO-1) and the rest of the schematic rock art zone of central Africa. Others are only found in one or two of the areas, such as the straight lines at CHV-1A and animal figures at BUSO-1. The red geometrics are generally depicted more frequently than any other subject matter in the rock art in Shiwa Ng'andu. The second most frequent are the red animal depictions. Overall, the occurrence of rock art in the Shiwa Ng'andu area shows a close relationship between that of the BaTwa rock art of Kasama, Nachikufu and the entire Central Africa geometric rock art tradition.

⁴⁷Nhamo, 'Out of the Labyrinth', p.10.

⁴⁸Nhamo, 'Characterizing hunter-gatherer Rock Art', p.384., see also A. R. Willcox, The rock art of Africa. (Johannesburg: Macmillan, 1984).

Figure 20: Deposition of insoluble salts, or minerals, over the walls at site KRS-3.



Figure 21: Water running on paintings resulting in washing away of some paintings at site KRS-1A-left and insect nests on the surface of the paintings resulting into staining and erasing them at site BUSO-1-right.



CONCLUSION

It is important to state that the results of investigations reported here are a catalyst to more findings of rock paintings and other hunter-gatherer activities in the Shiwa Ng'andu area. Thus, this Chapter has given a description of the nature of the rock art spread across the study area in relation to BaTwa rock art of Central Africa. This chapter has discussed the patterns of motifs in the study area relating it to that of the BaTwa art in the region. It has compared and contrasted data from the study areas while paying particular attention to the BaTwa aspects that were analysed. These aspects include subject matter, the technique of execution

and colour and establishing that the red geometric and red animal rock art tradition found in Shiwa Ng'andu was monochromic. It also drew comparisons from elsewhere in Zambia using information gathered from publications. Reference was made to parts of the sub-region whose rock art has been related to that from Zambia, such as the rock art of Malawi, Uganda, Zimbabwe, northern Mozambique, central Tanzania, and South Africa. The study has indicated that the rock art at the ten rock art sites in Shiwa Ng'andu are similar to the BaTwa rock art of central Africa.

CHAPTER FIVE: THE SYMBOLIC MEANING OF THE SHIWA NG'ANDU ROCK ART PAINTINGS

INTRODUCTION

Rock art images are of particular interest as they are one of the oldest forms of artistic expression to have survived into modern times. People have described these images differently and often interpret them in multiple ways. It has been argued that although early descriptive reports on rock art may not satisfy modern scholars, they are useful in forming a basis for further rock art research.¹

This chapter focuses on ethnographic data and symbolic meaning of rock art paintings of Shiwa Ng'andu. It also weighs and evaluates the research carried out by previous scholars on symbolic meaning to contextualise the objectives of the research within the broader theoretical and methodological approaches in rock art studies.

SYMBOLIC MEANING

In terms of symbols and what the geometric shapes may 'mean', Douglas states that symbols are meaningful only in terms of their relation to other symbols in a pattern, stating that 'the pattern gives the meaning'.² One geometric rock art shape has a relational significance where part of its meaning is actively constituted in relation to other geometric shapes. Hence, no shape in the pattern can carry meaning by itself isolated from the rest of the shapes. Identifying shapes does not lead automatically to an understanding of the meaning of that shape.

By considering symbolism, it is possible to look into the minds of people who lived in Shiwa Ng'andu thousands of years ago. Rock art in Shiwa Ng'andu can take us back to a time when the world was very different.³ In that art we can thus see and celebrate the richness and diversity of modern African culture, but at the same time we are reminded of our common and unifying ancestry. Thus, rock art in modern times helps us understand the social and economic activities of the past. Mushokabanji complements this by stating that, rock art

¹C. Namono, 'Surrogate surfaces: A Contextual Interpretative Approach to the Rock Art of Uganda', (PhD Thesis), University of Witwatersrand, (2010), p.50

² M. Douglas, *Natural Symbols Explorations in Cosmology*. (London and New York: Rutledge, 2003), p.32.

³ 'Rock art of Africa', https://en.wikipedia.org/wiki/Rock_art (accessed on 5th, March, 2015)

“affords an insight into the beliefs, practices, intellectual life and cultural patterns of humans long before the invention of writing”.⁴

The present knowledge of rock art has provided the general idea about the makers of the art and the ethnographic information has provided ideas, customs and social behaviours that might have formed the context within which the art was produced and consumed. With this general idea about the rock art, one can interrogate the variability that exists in that art. Understanding variation will lead to a holistic interpretation of the meaning of the art. It also helps in reconstructing the economic, social and possibly political organisation of the artists, in as much as the symbolism behind it is correctly interpreted.

Many theories have contributed to the challenge of interpretation and understanding what messages the artists were trying to convey.⁵ However, Smith argues that there is little within the symbolism to indicate why the art was painted. We also have little ethnographic information concerning the BaTwa that could help to reconstruct a picture of their past technological, social, economic, spiritual and other cultural activities and indicate possible reasons why they might have painted in the Shiwa Ng’andu area. The rarity of human figures has also not helped much⁶ thereby making the BaTwa or prehistoric man’s artistic red traditions prove remarkably complicated to interpret. Inevitably, this has necessitated the need to use formal methods to learn from the evidence of the pictures themselves.

Like the rock art of many countries in Central and Southern Africa, Zambia’s rock art has received various interpretations from different researchers. Controversies have been over the authors of the rock art and the meaning of the pictographs or petroglyphs. It is this BaTwa art that is used to judge the meaning of the Shiwa Ng’andu rock art, as it is an integral part of the LSA BaTwa rock art culture.

⁴LiywailiMushokabanji, 'Survey Report of the Discovered Muzandu Rock Art Site', Livingstone Museum, (2001), p.1.

⁵Michael G. Kenny, 'The Symbolism of East African Rock Art', *Zeitschrift fur Ethnologie* 1, 101, (1976), p.148.

⁶B.W. Smith, And the National Heritage Conservation Commission, *Zambia’s Ancient Rock Art: The Paintings of Kasama*. (Livingstone: National Heritage Conservation, 1997), p.32. In both Southern Africa and Australia it has been analyses of human figures and their relationships to other designs that have led to significant advances in our understanding of rock art in those areas. In studying the BaTwa art we are somewhat handicapped by the rarity of human figures.

The most hotly debated issues in rock art studies involve the inference of meaning in art forms. Yet according to Clottes, approaching a workable theory for the production of rock art requires the conquest of several methodological difficulties. Failure or use of inappropriate approaches would result in archaeologists or art historians continuing to impose their own interpretations on the rock art.⁷ It is important to keep in mind that similar artistic outputs [expressions] from two different cultural groups do not imply identical significance and causes although ethnographic parallels can help to interpret the rock art.⁸ Secondly, a behaviour must be understood before attempting to understand its meaning.⁹ The mere selection of only certain attributes during research is highly questionable; so is the fact that the meaning of the pictographs is not inherent in the quantified data.¹⁰ Boas has pointed out that the use of ethnographic parallels or comparative methods cannot account for all types of cultures. Similar rock art motifs observed in different geographical locations in the world may not imply that the designs had the same historical development (origins) and meaning, nor were they developed from the same psychic law.¹¹ It is imperative that, if ethnographic parallels are used, the process and the history of the development of the customs and beliefs that are depicted by rock art motifs must be taken into consideration.¹²

Therefore, these artistic expressions should not be generalised. Rather, they should be contextualised within the particular hunter-gatherer groupings. There is also need to look at other factors such as cultural and environmental factors that influenced motif selection beyond just the religious ones. For example, Nhamo gives an illustration of the selection of

⁷J. Clottes, 'Who Painted What in Upper Paleolithic European Caves', in D.S. Whitley, & L. Loendorf, (eds.), New Light on Old Art: Recent Advances in Hunter-Gatherer Rock Art Research, (Institute of Archaeology, Los Angeles, University of California, Monograph 36. 1993), pp. 1-8.

⁸P.J. Ucko, And A. Rosenfeld, 'Paleolithic Cave Art. Verona: World University Library', (Officine Grafiche Arnoldo Mondadori, 1967), p.153. see also Billiard B. Lishiko, 'The Politics of Production of Archaeological Knowledge: A Case Study of the Later Stone Age Rock art Paintings of Kasama, Northern Zambia', M.A. Dissertation, University of Cape Town, (2004), pp.119-20.

⁹B. Trubshaw, What did Prehistoric People Think? The Science of Cognitive Archaeology, <http://www.indigogroup.co.uk/edge/> (Accessed 5th May 2014). See also C.A. Bjork, Semiotic Relationships and Rock Art Sites, <http://www.goldrush.com/~cbjork/ResearchFP.htm> (Accessed 5th May 2013) Carl A. Bjork who observes that to understand the message that the rock art symbols are communicating we must fully understand the world view of the artist and what motivational pressures and impacts were controlling this person

¹⁰J.D. Lewis-Williams, & J.H.N. Loubser, 'Deceptive appearance: A critic of Southern Africa rock art Studies', Advance in World Archaeology, 5, (1986), pp.255-258.

¹¹F. Boas, 'The Limitation of the Comparative Method of Anthropology', Science, Illinois, Springfield, Charles C. Thomas Publishers, (1896), p.95.

¹²Boas, The Limitation of the Comparative Method of Anthropology, p.87.

female kudu as the main symbol seems not to be grounded in the shamanistic ideals but rather in the characteristics of the animal that resonate with moral concerns of the societies.¹³

As observed by Smith, earlier researchers in Zambia such as Clark and Phillipson have used narrative or descriptive approaches to theories which did not indicate what the motifs meant or interpret the rock art but merely stated what they thought the motifs depicted.¹⁴ In line with Smith's work in Kasama the interpretation of the Shiwa Ng'andu rock art is based on two major ethnographic sources.¹⁵ These are artistic traditions among surviving forager cultural groups from the neighbouring countries and traditions and customs held by modern agro-pastoralist cultural groups.¹⁶ This was done through the study of artistic traditions namely the red animal and red geometric traditions which are evident in Shiwa Ng'andu. Smith has also highlighted ethnographic information that is important to our understanding and interpretation of the meaning of the broader symbolic role of the rock art of Shiwa Ng'andu. This is very important in order to fully appreciate the significance of the Shiwa Ng'andu rock art. There is need to decipher its meaning and motives. In order to do so, we need to:

Start with the site, studying the pictographs of the site, its relationship to its spatial environment ...and the many other values that would make a site useful to a culture.¹⁷

The importance of studying the above features as a prerequisite to understanding the painters and the motives behind such painting activities in a landscape has equally been stressed by Tilley and Ingold.¹⁸ Therefore, comprehensive rock art knowledge cannot be produced by the single approach advocated by Lewis-Williams.¹⁹ It is not possible to answer all archaeological empirical questions by using one theoretical perspective. No material culture can be studied

¹³Ancila Nhamo, 'Characterizing hunter-gatherer Rock Art: An analysis of Spatial Variation of Motifs in the prehistoric Rock art of Zimbabwe', PhD Thesis, University of Zimbabwe, (2014), p.407.

¹⁴B.W. Smith, 'Rock art in South Central Africa: A study based on the pictographs of Dedza, District, Malawi and Kasama District, Zambia', PhD. Thesis, University of Cambridge, (1994), p.186.

¹⁵Smith, 'Rock art in South Central Africa', p.286.

¹⁶Smith, 'Rock art in South Central Africa', p.286.

¹⁷Bjork, 'The importance of studying prominent topographical features', See also C.A. Tilley, Phenomenology of Landscape: Places, Paths and Monuments, (Oxford, Berg, 1994).

¹⁸Tilley, Phenomenology of Landscape, p.12. See also T. Ingold, 'The temporality of the landscape', World Archaeology, 25, 2, (1993), pp.152-172.

¹⁹Philip Barker, 'Analysis: Recognizing and Recording of the evidence, Interpreting of Evidence and Scientific Aids', Techniques of Archaeological Excavation, (London: Anchor Press Ltd., 1979), pp.187-201,216. On the importance of the use of other scientific approaches, See Philip Barker's chapter 8, 10 and 11. See also A.C. Spaulding, 'Statistical Analysis', in Fagan, B. M. (ed.), Introductory Readings in Archaeology, (Boston, Little Brown & Company, 1970), pp.219-232.

using one approach but approaches from a combination of various scientific disciplines, alongside the iconographical studies which have largely characterised the sub-discipline.²⁰

The red animal tradition in the Kasama area has been attributed to Shamanism by Smith. The shamanistic explanation is closely related to the interdisciplinary neuropsychological and altered states of consciousness model developed by Lewis-Williams and Dowson based on the argument that some of the San art was made by shamans as recollections of the visions they experienced during episodes of a trance.²¹ Shamans could go into altered states of consciousness to contact the supernatural world, heal the sick, control animals and influence the weather.²² The images they recalled would also be related to these aspects.

Therefore, the above approach sees rock art as essentially religious, depicting the experiences of trancers or shamans.²³ The making of the art is seen as situated within a range of hunter-gatherer shamanistic beliefs, rituals and experiences. Thus, the art consists of symbols of supernatural potency, images of trance dancers, fragments of trance dances, processed visions, transformed shamans, monsters and beings from the spiritual world.²⁴ The shamanistic hypothesis has always generalised the interpretation of every painting of rock art.²⁵ The red animal tradition that obviously depicts people can thus be seen to have elements which suggest a connection with trance or trance dancing hence linked to shamanism.²⁶ The rows of dots in animal paintings have been said to represent potency and that potency is said

²⁰A. Solomon, 'The Antiquity of Man (Exploring human evolution and the dawn of civilization). Meanings, models and minds: A reply to Lewis-Williams', South African Archaeological Bulletin, June, (1999) <http://www.antiquityofman.com/index.html> (Accessed 3rd June, 2014).

²¹J.D. Lewis-Williams, and T. Dowson, Images of Power: Understanding Bushmen Rock art. (Johannesburg, Southern Book Publishers, 1989), p.26-36. This approach was initially termed the trance hypothesis and later known as the shamanistic explanation (or hypothesis).

²²Smith, Zambia's Ancient Rock Art, p.33.

²³Lewis-Williams and Dowson, Images of Power, p.33. See also J.D. Lewis-Williams, 'The San shamanic dance and its relation to rock art', in Dagan E.A (ed.), The Spirits dance in Africa: evolution, transformation and continuity in sub-Saharan. (Montreal: GalerieAmrad African Art Publications, 1997), pp.8.

²⁴J.D. Lewis-Williams, 'Quanto? The issue of many meanings in southern African San rock art', South African Archaeological Bulletin168, (1998), p. 87. Nhamo, 'Characterizing hunter-gatherer Rock Art', pp.77-8. Animals are part of this spirit world, which is believed to lie behind the walls of the rock shelter. Some of the rock art images are considered as hallucinations and visions from the spirit world seen by shamans during trance.

²⁵J. Parkington and A. Manhire, 'Processions and groups: human figures, ritual occasions and social categories in the rock paintings of the Western Cape, South Africa', in M. W. Conkey, O. Soffer, D. Stratmann& N.G. Jablonski, (eds.), Beyond Art: Pleistocene image and symbol. (San Francisco: Memoirs of the California Academy of Sciences, 1997), p.302.

²⁶Smith, Zambia's Ancient Rock Art,p.37

to become visible only during trance states,²⁷ and thus the same can be said of the animal painting at site BUSO-1(Figures 13).

A look at the interpretation of human and animal pictographs of Kasama shows that Smith concurs with Lewis-Williams's shamanism hypothesis. According to Lewis-Williams, human and animal figures (in some cases accompanied by dots) depict a trance dance, a symbol of potency metaphor of trance experience and hallucinations of people in a trance.²⁸ According to this interpretive model, when in a trance, dancers are believed to acquire powers which they use for healing the members of their groups, as well as powers of rain divination and hunting.

Consequently, these rock art paintings are believed to have been created as part of a culture's religion or ritual expression.²⁹ Religion developed in order to explain the puzzling phenomena people encountered in their everyday life. The existence of spiritual beings continues to remain a core belief in many parts of the world, and these beings, especially animals, also comprise a large share of rock art imagery.³⁰ Spirituality is not a static concept. It is diverse, especially of how spirituality and rock art have been viewed by different cultures at different points in time.³¹

Making of the art is therefore seen as situated within a range of hunter-gatherer shamanistic beliefs, rituals and experiences. The art consists of symbols of "supernatural potency and processed visions".³² Animals are part of this spirit world, which is believed to lie behind the walls of the rock shelter. Some of the rock art images are considered as hallucinations and visions from the spiritual world seen by shamans during a trance.³³ Although these concepts can be considered within the social theory, the emphasis on the religious experiences sets rock art apart from general applications of the theory. However, rock art has underplayed the

²⁷ Smith, *Zambia's Ancient Rock Art*, P.36

²⁸J.D. Lewis-Williams, 'Beyond style and portrait: A comparison of Tanzania and southern African rock art', in Vossen, R. &Keuthmann, K., (ed.), *Contemporary Studies on Khoisan*, (Hamburg, Helmut Busker 1987), pp.93-139.

²⁹L. Donna, et al, in Gillette et al, *Rock art and sacred Landscapes*. (New York: Springer,2014), p.1

³⁰Gillette, 'Introduction to Rock Art and Sacred Places', p.1.

³¹Gillette, 'Introduction to Rock Art and Sacred Places', p.8

³²Lewis-Williams, 'Quanto?', p.87

³³J.D Lewis-Williams, 'Putting the record straight: Rock art and shamanism', *Antiquity*, 77, 295, (2003), pp.166.

role of social aspects in the production and consumption of rock art.³⁴ Shamanistic hypothesis still underlies many of the interpretations of hunter-gatherer rock art in southern Africa.³⁵

The problem of shamanism is that it emphasises the role of the experience of the shamans.³⁶ Dowson has argued that too much focus has been centred on the person of the shaman when the ethnographic evidence shows that among hunter-gatherers even the supernatural arena is for everyone, not only a preserve of the medicine people.³⁷ Hence strongly challenging the argument that shamanism permeates all facets of life. Everyone and everything, including plants and animals had the power to influence the supernatural through the potency that they possess. The exhibition of the potency does not necessarily require one to enter into a trance or the altered state of consciousness. This has also led to a neglect of most aspects of hunter-gatherer culture in the interpretation of the rock art.³⁸

The Shiwa Ng'andu rock paintings can also be linked to the hunting-magic theory. For instance, the painting (in figure 13b-right) does not depict human figures as those of Kasama and hence they are different in some aspect. This could imply that the Shiwa Ng'andu red animal tradition could however also be attributed to the hunting-magic theory. This theory also suggests that rock art is a manifestation of sympathetic magic designed as an aid for hunting, to "secure control over particular species of animals which were crucially important in human food supply."³⁹

The social context is further elaborated by the fact that naturalistic rock art from Shiwa Ng'andu seems to emphasise hunting symbolism. This has been found in paintings at site BUSO-1 in Shiwa Ng'andu in which groups of hunters have been depicted. Similar

³⁴ R. Layton, 'Shamanism, Totemism and rock art: Les Chamanes des la Prehistoire in the context of rock art', *Cambridge Archaeological Journal* 10, (2000), p170.

³⁵ N. Walker, 'Paintings and ceremonial activity in LSA of the Matopos, Zimbabwe', in J.D. Lewis-Williams, and T.A. Dowson (eds.) *Contested Images: Variation in Southern African rock art research.* (Witwatersrand University Press, 1994), pp. 119-130. See also Nhamo, 'Characterizing hunter-gatherer Rock Art', p.80.

³⁶ A Solomon, 'Myth, shamanism and San rock art'. Paper delivered at the Valcamonica Symposium, Sulzano, Italy', (1998). The fact that shamanism is taken as the 'overriding cosmology' means variation in other beliefs is not considered in influencing motif selection in the rock art.

³⁷ Nhamo, 'Out of the Labyrinth', p. 52.

³⁸ Solomon, 'Myth, shamanism and San rock art', this is what has been considered as fluidity of modern hunter-gatherer groups in southern Africa. The focus on the person of the shaman has led to domination of the shamanistic interpretation, overlooking the contribution of other members of the society in the production of the rock art. There is rigid separation of religion and aspects such as myths and legends.

³⁹ TARA, 'Rock Art in East Africa', p.3

depictions have also been identified in Zimunya, in Zimbabwe.⁴⁰ This hunting symbolism could be referring to a number of beliefs. Some researchers have argued that these depictions show rituals relating to the control of game or rainmaking and thus might not illustrate actual hunts.⁴¹ This has been linked to differing roles of men and women in that culture.⁴² For example, hunting was mainly a male activity, whilst gathering of roots, nuts and berries was mostly done by women.⁴³ It is assumed that men painted these animal or hunting motifs.

Among modern hunter-gatherers such as the San, hunting symbolism is integrated in several rituals, even those that are not directly connected with the actual hunting activity. For instance, depiction of arrows has been argued to symbolise the release of potency, sickness or the cause of sickness from sick individuals.⁴⁴ Guenther has argued that hunting pervades all aspects of hunter-gatherer social and economic lifeways, and that rituals and ceremonies unquestionably carry hunting symbolism.⁴⁵

The images from all sites investigated in Shiwa Ng'andu except CHV-1A, B and some images from CHV-2A are similar to those from Mwela rocks in Kasama and Nyero and Magosi in Uganda, Kolo in Tanzania and Cahora Bossa in Mozambique. However these depict more animal figures compared to Shiwa Ng'andu which has few animal paintings at site BUSO-1. The available evidence suggests that the ceremonies depicted in Shiwa Ng'andu were set by the hunting symbolism similarly used elsewhere in the region but in a different social context.⁴⁶

Reinach, has propagated a theory of sympathetic magic and totemism, which suggests that the major reason for executing this type of rock art depicting game animals and hunting

⁴⁰Ancila Nhamo, 'Out of the Labyrinth: An enquiry into the Significance of Kudu in San rock art of Zimunya, Manyikaland, Eastern Zimbabwe', MA. Dissertation, University of Bergen, (2005), p.21.

⁴¹J.D Lewis-Williams, & D. Pearce, 'San Spirituality: Roots, Expressions and Social Consequences'. (Cape Town: Double Storey, 2004), p.26.

⁴²P. Bahn, 'Stumbling in the footsteps of St Thomas: Rock art scholars are stuck in their drug- culture phase', Council for British Archaeology, <http://www.britarch.ac.uk/ba/ba/html> (accessed 5th May 2013)

⁴³'Rock Art in Namibia its Past, Present And Future' <http://www.natmus.cul.na/events/rockart/open.html> (Accessed 31st March, 2014).

⁴⁴J.D. Lewis- Williams and T.A. Dowson, 'Through the veil: San rock paintings and the rock face', The South African Archaeological Bulletin 45, 151, (1990), pp.5-16.

⁴⁵M.G. Guenther, 'Tricksters and Trancers: Bushman Religion and Society'. (Bloomington: Indiana University Press, 1999), p.27.

⁴⁶E. Goodall, 'The Rock Art of Mashonaland', in Summers, R. (ed.) Prehistoric Rock Art of the Federation of Rhodesia and Nyasaland, (Salisbury: National Publications Trust, 1959), p. 37. See also Nhamo, 'Characterizing hunter-gatherer Rock Art', p.383.

scenes was the success that hunters wished to bring about. The primitive hunter would depict his quarry merely to gain control over it through his magic arts thereby facilitating the kill.⁴⁷ As expounded by Pager, these images were executed in order to gain magical control over the movements, reincarnation and procreation and killing of the prey.⁴⁸

Magic rituals may not have a direct material outcome, but they boost the confidence and have a direct psychological benefit, which increases the success of hunting activities. In this context, rock art is seen as a tool to magically benefit the group's subsistence, encouraging the success of the hunters.⁴⁹ Using this theory, magic plays a significant role in tribal life. This sympathetic magic theory has also emphasised the idea that magic can be a psychological response to social and economic concerns. Scholars such as Werner and Vinnicombe, using numerical methods, demonstrated that the most frequently painted animals in an area such as elephant, kudu and eland are concluded to have been important animals to the artists.⁵⁰ This comparative approach to the interpretation of rock art is based on the assumption that material cultures are intimately connected with the behaviour of those who produce or use them.⁵¹

The old theoretical perspectives such as the hunting magic had variation as an inherent component, yet scholars had problems in accounting for it. The hunting magic theory's weakness in this regard according to Nhamo:

was in its failure to explain why there was great variation in the rock art. From a hunting magic point of view, depictions, especially of the hunting scenes, were understood as a way of wishing for a successful hunt. This would mean that the art could be as diverse as the animals that were considered food. The problem came in explaining non-food subject matter that is widespread in the art....⁵²

⁴⁷P.J. Ucko, & A. Ronsefeld, Paleolithic Cave Art. (Verona: World University Library, Officine Grafiche Arnoldo Mondadori, 1967), p.123.

⁴⁸H. Pager, Stone Age Myth and Magic: As document in the rock paintings of South Africa (Akademische Druck-u, Verlagsanstalt, 1975), p.38.

⁴⁹B. Malinowski, Magic, Science and Religion and other Essays. (Kessinger Publishing, LLC, 1948), p.31

⁵⁰P. Vinnicombe, 'Rock painting analysis', South African Archaeological Bulletin, 22, (1967), pp.129-41, see also A. Werner, 'Bushman Paintings', Journal Roy African Society, 7, (1908), pp.387-393 and Nhamo, 'Out of the Labyrinth', p13.

⁵¹K. Flannery, 'Cultural history vs. culture process: A debate in American archaeology', Scientific American, 217, 2, (1967), pp.120-122. See also M.H. Salmon, Philosophy and Archaeology, (London, Academic Press, 1982), p.57.

⁵²Nhamo, 'Characterizing hunter-gatherer Rock Art', p.292.

This theory never became popular due to its failure to account for the limited occurrence of hunting scenes, the preponderance of human depictions and non-hunting depictions in the art.⁵³ The failure of the hunting magic theory to explain the rock art especially of Central and Southern Africa led to firming of the art-for-art's sake hypothesis.

Another aspect to be considered in the interpretation of rock art such that the environment is a significant factor in influencing the choice and selection of symbols that would best deal with the surrounding circumstances. The choice of symbols would be done in the same way that systems of social structure, kinship and land tenure are adopted and adapted among the modern day hunter-gatherers. These depend on the environmental conditions and each group would choose what is best for their locality. The choice of animal subject matter, for example, was probably based on qualities that best represented the focus of the communities.

Deciphering the geometric symbols of Shiwa Ng'andu has indicated that geometric figures such as concentric circles, figures or outlines of animals are a representation of different meanings. For instance, the use of the concentric circle at most sites in Shiwa Ng'andu such as KRS-2 and CHV-2A may represent many things, whereas in some paintings, concentric circles may seem to be a waterhole or a camping place. While in others it can indicate a "honey ant nest" or a "native figure" or even "eggs of a python". The symbol usually represents a site that is a part of an intricate story being recorded and told by the artists.⁵⁴ Concentric circles with what appears to be rays have been associated or connected with chiefs or chiefly figures.⁵⁵

Apart from the animal depictions, circumscribed geometric depictions such as flecks and formlings also show differences in belief systems. Dowson has argued that flecks show the presence of supernatural potency seen in the spiritual world.⁵⁶ Whether or not the flecks have the same meaning as dots is not clear. Flecks and dots as those shown in Fig.19 (a) represent

⁵³C.K. Cooke, Rock art of Southern Africa. (Cape Town: Books of Africa 1969), p.19.

⁵⁴Charles P. Mountford, Art, Myth and Symbolism, Records of the American-Australian Scientific Exploration to Arnhem Land, 1, (Carlton, Melbourne University Press, 1956), p.36. see also Uluru- Kata, p.3

⁵⁵Michael G. Kenny, "The Symbolism of East African Rock Art." Zeitschrift fur Ethnologie 1, 101, (1976), p.152.

⁵⁶T. A. Dowson, 'Dots and dashes: cracking the entopic code in Bushman rock paintings'. South African Archaeological Society Goodwin Series, 6, (1989), p. 91.

the same potency, but their occurrence together in the rock art suggests that they may have been used to symbolise different things.⁵⁷

Chaplin has suggested that concentric circles and dumbbells such as those at site KRS 1A in Shiwa Ng'andu area should be seen as shrines or sites for ritual.⁵⁸ Clark recommended that purely schematic art is symbolic, contains some esoteric meaning and is a 'well-known feature accompanying initiation ceremonies in Africa,'⁵⁹ such as those practiced among the Bemba or Bisa in the study area. Namono considers circular shapes such as those at site KRS-2 to be connected to sun worship,⁶⁰ while Sassoon states that the geometric rock art had ritual significance associated with rain-control.⁶¹ Smith has shown that the pictographs from Kasama appear to resemble meteorological phenomena such as moons, suns, and rain drops, which imply weather symbols.⁶² He argues that the red geometric pictographs could be interpreted under two broad themes: weather divination and fertility.⁶³

The fertility interpretation, falls in the sympathetic magic interpretation framework under the social theory approach. The fertility interpretation proponents believed that some animals such as those recorded at BUSO-1 site were painted for procreation purposes in the landscape or were viewed as performing reproductive rites or symbolised fertility.⁶⁴ The result of the rites was that there would be an increase in the number of animals in the artist's landscape.⁶⁵

The basis for this interpretation was that the Bemba of northern Zambia draw geometric circles on the walls of the girls initiation hut during the *chisungu* ceremony.⁶⁶ Secondly, Smith cites the works of Redinha which claims that concentric circle designs were used as fertility tattoos by one ethnic group in northeast Angola,⁶⁷ and the works of Prins and Hall, which

⁵⁷P.S. Garlake, *The Hunter's vision*. (London: British Museum Press, 1995), p.32. See also Nhamo, 'Characterizing hunter-gatherer Rock Art', p.376.

⁵⁸J.H. Chaplin, 'The Prehistoric Art of the Lake Victoria Region', *Azania*, 9, (1974), p.39.

⁵⁹Clark, 'Rock Paintings of Northern Rhodesia', p.217–218.

⁶⁰Namono, 'Surrogate Surface', p.167.

⁶¹H. Sassoon, 'Report on archaeological research in Uganda', *Nyame Akuma* 2, (1973), p.8.

⁶²Smith, *Zambia's Ancient Rock Art*, p.43. See also B. Lishiko, 'The Politics of Production of Archaeological Knowledge: A Case Study of the Later Stone Age Rock art Paintings of Kasama, Northern Zambia', University of Cape Town, M.A., Dissertation, 2004, p.119. and see fig.1 in Lishiko work.

⁶³Smith, 'Rock art in South Central Africa', p.286.

⁶⁴P.J. Ucko, and A. Rosenfeld, *Paleolithic Cave Art* (Verona: World University Library, Office Grafiche Arnoldo Mondadori, 1967), p.184.

⁶⁵P. Graziosi, *Palaeolithic Art* (New York: McGraw Hill, 1960), p.184.

⁶⁶Smith used the works of Audrey I. Richards on the Bemba *Chisungu* initiation ceremony and 1992 research on the same *chisungu* ceremony.

⁶⁷Smith, *Zambia's Ancient Rock Art*, p.45.

claim that the Venda of Northern Province of South Africa used similar designs to symbolise fertility.⁶⁸ Fertility interpretation has been made on the basis of motifs painted on the walls of initiation huts in Bemba speaking areas of northern Zambia. These include hoes, axes, plants, human figures, snakes, birds like guinea fowl, animals, sun, moon, straight lines and letter V shapes, crocodile and a plus sign with a cross on it.⁶⁹ This revealed tribal attitudes to sex, fertility, marriage, and the rearing of children, and celebrated the attainment of sexual and social maturity.⁷⁰ Besides it should also be noted here that this rite of passage is undertaken for different purposes such as bringing rainfall, peace to the village, and taking anger from men's hearts.⁷¹

With regard to the purpose⁷² and meaning⁷³ of individual motifs, they were interpreted as follows: the moon was a warning to the initiate that when she was having her menstrual period, she should not put salt in her husband's food, as it would make him sick.⁷⁴ The V and straight lines were said to be mere decorations, whilst the sun was meant to teach the initiate on the importance of time management. The initiate was expected to sweep her yard early in the morning (06:00 hours) and prepare a bath for the husband and meals on time.⁷⁵

The motifs of an initiation ceremony of the Bemba, not only carried different meanings⁷⁶ but represented different cultural contexts.⁷⁷ It is evident that the inclusion or exclusion of certain designs during *chisungu* imply that meanings of designs changed, depending on the

⁶⁸Smith, *Zambia's Ancient Rock Art*, p.45. See also Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.126-7.

⁶⁹Lishiko, 'The Politics of Production of Archaeological Knowledge', p.126.

⁷⁰Chisungu: A Girl's Initiation Ceremony among the Bemba of Zambia', *Editorial Review/Book Description*, <http://www.amazon.com/Richardsbooks&vi=reviews> (accessed 25th September 2014).

⁷¹A. I. Richards, *Chisungu: A girls' Initiation ceremony among the Bemba of Northern Rhodesia*. (London: Faber and Faber, 1956), p.112.

⁷²D. Maybury-Lewis, *Tribal wisdom is it too late for us to reclaim the benefits of tribal living?* http://www.geocities.com/pippin_ph/culture.htm (accessed on 25th September 2014). They were used for instructing the initiates in their new status.

⁷³Richards, *Chisungu*, pp.52-3. Meanings were said to be diverse depending on the *nachimbusa*.

⁷⁴Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.126-7. Lishiko's work notes that the belief that a woman who is having a menstrual period puts salt in relish of not only the husband but other members of her family would make the members sick is held by almost all the seventy three ethnic in Zambia. Interview with *Nachimbusa*(2) of Luyeye Village, Informant requested to remain anonymous (5th January 2003).

⁷⁵Lishiko, 'The Politics of Production of Archaeological Knowledge', p.127. Lishiko conducted Interviews with *Nachimbusa*(1) of Kasama Village, Informant requested to remain anonymous (4th January 2003).

⁷⁶Richards indicated that the meaning of the motifs depended on the *nachimbusa* or rite of passage mistress.

⁷⁷S.J Cole, *Legacy on Stone: Rock Art of the Colorado Plateau and Four Corners*. (Region Johnson Books, Boulder, 1990), p.37.

surrounding social and pictorial context. Hence Smith interprets the Bemba initiation as a fertility rite.⁷⁸

Some of the rock art sites such as Katolola B in eastern Zambia, Dedza in Malawi and Gwanda in Zimbabwe were used as rain shrines by the ancestors of agro-pastoralist cultural groups. The Sandawe in Tanzania recognise rock shelters as the “aboriginal womb” where all life was created. The act of not painting finished images, may possibly activate the power within the shelter/womb to produce rain (or perhaps success in the hunt).⁷⁹

Odak suggests that the geometric shapes are associated with ancestral worship and rain-control,⁸⁰ while Chaplin & McFarlane associate them with games.⁸¹ According to Lim, the underlying purposes of other regional rock art works are more obscure, but they may well symbolise objects of reverence. The gongs could have been used to summon the spirits that were believed to live in the ground, to create rain and, to some extent, to control human wellbeing.⁸² In Shiwa Ng’andu and other parts of Zambia and Central Africa where rock art sites are known to the local community, their origins and significance are not remembered apart from oral traditions linking the art to ancestors, most probably those of the recent past.⁸³

Sanders has argued that in Africa there is a strong link between rain and fertility, hence rain rites are full of fertility symbolism and are directed towards the ancestors from whom help is sought.⁸⁴ For example, Nyero rock art site in Uganda is regarded as a magical place around which rain-control ceremonies are performed.⁸⁵ Rain-control specialists were often interred near large rock boulders and it is upon these graves that offerings and the concluding of rain rites were performed.⁸⁶ Therein rests the power to make rain. It is possible that the Shiwa

⁷⁸Smith, Zambia’s Ancient Rock Art- The Paintings Of Kasama, p.45.

⁷⁹ E. Anati, 'The Rock Art of Tanzania and East African Sequence', Bolletino del Centro Comuno di Studi Preistoriei 23, (1986), p.61.

⁸⁰O. Odak, 'Rock art in Kenya', Bolletino del Centro Comuno di Studi Preistoriei, 24, (1988), p.77.

⁸¹J. H. Chaplin, & M.J. Mc- Far lane, 'The Moniko Petroglph', Uganda Journal, 33, (1967), pp.207-8.

⁸² L. I. Lim, A site-Oriented approach to Rock Art: A study from Usandawe, Central Tanzania, PhD Thesis, Brown University, USA, (1992), p.56.

⁸³Namono, 'Surrogate Surface', p.167. See also C.D. Lawrence, 'Rock Paintings in Teso'. Uganda Journal, 17, (1953), pp. 12–13, C.D. Lawrence, The Iteso. (London: Oxford University Press, 1957), p.6. M. Posnansky, 'Rock paintings on Lolui Island, Lake Victoria', Uganda Journal, 25, (1961), p.109.

⁸⁴T. Sanders, 'Gendering the weather: rainmaking and reproduction in Tanzania', in: S. Strauss, & B.S. Orlove, Weather, Climate, Culture. (Berg, Oxford, 2003), pp. 84–85.

⁸⁵S.M. Cole, Pre-History of East Africa. (London: Weidenfeld and Nicolson, 1964), p.246, and also Chaplin, 'The Prehistoric Art of the Lake Victoria Region', p.40

⁸⁶A.C.A. Wright, 'A Rainmaking Ceremony in Teso', Uganda Journal, 10, 1, (1946), pp.25–28; see also K. Ludger, 'Rainmakers in Teso', Uganda Journal, 18, 2, (1954), p.185.

Ng'andu rock art may have been made in the context of fertility and rain-control, and rain control ceremonies exist in the cultural spheres of the Bisa and Bemba speaking people. But such conclusions can only be obtained from an understanding of the painters/authors' worldview.

Puberty and initiation rites have been practised in many parts of Africa by different groups of people, such as the Bisa in the study area, the Bemba in Kasama and most ethnic groups in Zambia. Puberty rites seek to promote and control the fertility of the individuals upon reaching adolescence, while initiation focuses on the transition from social childhood to adulthood.⁸⁷ Initiation may come before or after attaining puberty.⁸⁸ Where initiation occurs, it is inextricably linked to gender and ethnic identity,⁸⁹ which has been observed among the Bisa and Bemba, in and around the study area

One of the issues that has to be noted here is that just as in Uganda, most of the diverse groups in Zambia practicing rain-control, puberty, fertility and initiation rites engage in rock art or have any knowledge of the significance of rock art.⁹⁰ These groups may use their environment or landscape for rain control but not have any knowledge of the significance of the rock art. Lishiko observes that groups like the Bemba indicated that whenever they wanted rains they conducted special rituals that involved sacrifices and not painting or weather symbols on rocks. He further states that:

the people of Kasama used the landscape with pictographs for rain rituals or rain divination in the early 1960s and late 1970s, they did not recognise the importance of the pictographs in any way in their rituals. Secondly,... the Bemba did not go to this landscape because of its numerous pictographs but because they believed that the spirits of their ancestors dwelled in some sacred places within the landscape. The Bemba invoked ancestral help and guidance in order to perform rituals for good rains and harvest. The same was done when the Bemba were befallen with calamities such as famine.⁹¹

⁸⁷Namono, 'Surrogate Surface', p.254

⁸⁸J.S. La Fontaine, *The Gisu of Uganda*. (London: International African Institute, 1959), p.11.

⁸⁹S Heald, 'Celebrations of Masculinity: Circumcision and Male Gender Ideology in East Africa', in C.Verschuur and I. Droz (eds.) *Quel Genre D'homme: Construction Sociale De La Masculinite relations De Genre Et Development*. (Geneva: Institutuniversitaire d'etudes du developpement, 2001), p.45.

⁹⁰Namono, 'Surrogate Surface', p.255

⁹¹Lishiko, 'The Politics of Production of Archaeological Knowledge', pp.119-20. Lishiko Sources his data from an interview with Headman Nsata and Danistan Cubwa, of Kasama, (10th December, 2002).

This performance of rituals to invoke ancestral help and guidance for good rain and harvest among the Bemba and Bisa speaking people. They asked for help through their ancestors.⁹² At no time did the Bemba worship for rain using weather divination symbols or geometric motifs. Rain rituals were actually sacrificial.⁹³ All rain rituals did not involve drawing or painting of any symbols either on the ground or on rock panels.⁹⁴ It is therefore unlikely that the rock art was made in these contexts and by these groups but was certainly the work of earlier inhabitants (BaTwa) of the area.

According to Cole, symbols such as rock art images are most likely to be meaningful when examined within the contexts of time, place, culture and society and with the knowledge that symbolism is part of information exchange or communication systems and acts to express and reinforce social identities.⁹⁵ In other words, when we cannot observe x but we can y, which is sufficiently like it, we can hope to infer things about x Hill based on observations of y.⁹⁶ Unfortunately the Shiwa Ng'andu rock art lacks any surviving traditions that relate specifically to the pictographs and there are also no modern Bisa or Bemba rituals in the area that use or evoke the rock art or its symbolism.⁹⁷

The different ways in which people interpret these visions depend on their cultures. For instance, in southern Africa, the shamans are influenced by their San culture, beliefs and cosmology to understand these images. Therefore, one has to rely on the ethnography of the San for information regarding cultural connection in order to interpret trance related imagery.⁹⁸

⁹²A.I. Richards, Labour and Diet in Northern Rhodesia, (London: Oxford University Press, 1939), pp.363, 367, 370.

⁹³Lishiko, 'The Politics of Production of Archaeological Knowledge', p.120

⁹⁴Lishiko's interview with the following: Mr. ChepauaKashinka, (a Lenje) the Vice President of Zambia Traditional Healers Association, 1st August, 2003; a Luavle traditional healer, Mr. John Kandengu, 2nd August, 2003; a Lozi traditional healer Mr. SiangaSimbotwe, 3rd August, 2003 a Nguni traditional healer, Lazarus Phiri, of Libuyu Township, 4th August, 2003 and Mr. FanwellMweembe, (a Tonga), in Monze, Bwengwa Village, July, 14 July, 2003.

⁹⁵S.J. Cole, Legacy on Stone: Rock Art of the Colorado Plateau and Four Corners Region, (Johnson Books, Boulder, 1990), p.37.

⁹⁶P.C.S. Taçon, & C. Chippindale, The Archaeology of rock art through informed methods and formal methods., in C. Chippindale, &P. C. S. Taçon, (eds.),The Archaeology of Rock Art, (Cambridge, Cambridge University Press, 1998), p.8.

⁹⁷Lishiko, 'The Politics of Production of Archaeological Knowledge', p.120, see also Smith, Ancient Rock art, p.30. The 1992 interviews by Smith conducted with the locals of Kasama during the Kasama rock art research revealed the above.

⁹⁸Nhamo, 'Characterizing hunter-gatherer Rock Art', p.78. The ethnography from modern day hunter-gatherers shows that the pan-San concepts are partially valid, but numerous differences are found as well amongst the

Early rock art analysts believed the paintings to have been made for merely aesthetic reasons, that is, interpreting it as art for art's sake, or as a documentation of everyday events.⁹⁹ According to Paul Bahn, this view holds that there is nothing but the product of an idle activity with no deep motivation behind it, that is, a "mindless decoration".¹⁰⁰ This is attributed to the artists having plenty of time at their disposal.¹⁰¹ In addition, Breedlove states that rock art is a priceless cultural heritage with significant scientific value, although this legacy is also fragile. In addition to being narrative or historic, rock art is more often a scene of beauty remembered for its aesthetic qualities.¹⁰² It is also vital to consider rock art as a historical source, whether its primary intentions is magical, religious, narrative, or simply a description of the ancient people's daily life and customs.¹⁰³ Rock art was of significance to the hunter-gatherer artists who generated it.

In line with pictorial representations or analysis, these do not necessarily speak for themselves, nor do explanations emerge logically or inescapably from masses of data, as has been assumed by various researchers such as Woodhouse in their rock art statistical studies.¹⁰⁴ In analysis, properties of artefact are not given and countable. What actually is countable are the properties human beings agree to count as vital, hence an argument cannot be based on a count of them or how frequent certain figures such as elephant, kudu or eland appear.

The fertility hypothesis has been criticised to the extent that researchers such as Ucko and Rosenfeld have discarded it on the grounds that there are very few animal pictographs. Where most animal pictographs depict scenes of copulation, animals showing carrying young ones

groups. The concept has served well in the understanding of the commonalities that are found in rock art but will not serve much in delving into the differences that can help in distinguishing the groups.

⁹⁹ D. Whitely, 'Rock art and rock art research in a worldwide perspective: an introduction', in D. Whitely, (ed.), Handbook of Rock art research (Altamira, Walnut Creek, 2001), p.8-9., see also See P. J. Ucko, & A. Ronsefeld, A., Paleolithic Cave Art, p.117., Wilcox, Rock art of South Africa, p. 266., and Cooke, Rock art of Southern Africa, p.50

¹⁰⁰ P. Bahn, The New Penguin Dictionary of Archaeology. (London: Penguin, 2004), p.12.

¹⁰¹ Ucko, & Ronsefeld, Paleolithic Cave Art, p.117. It's argued that the environment was so rich with animals hence it was easy to kill animals of their choice and had more than enough time to adorn themselves and their surroundings.

¹⁰² G. Breedlove, South African Conservation Policies. (University of Pretoria, Pretoria, 2002), p.2.

¹⁰³ A. Beltran, Rock Art of the Spanish Levant. (Cambridge University Press, Cambridge, 1982), p.38.

¹⁰⁴ B. Woodhouse, The Bushmen Art of Southern Africa, (Cape Town: Purnell, 1979), p.55. See also J. Rudner, & I. Rudner, The Hunter and his Art, (Cape Town, Struik (Pty) Ltd, 1970), p.40.

in their wombs and sexual organs¹⁰⁵ just as observed in Shiwa Ng'andu where they are few animal motifs not indicating any fertility signs for interpretation.

CHALLENGES IN ROCK ART INTERPRETATION

A number of challenges arise in the application of rock art interpretation theory to understanding the symbolic meaning of the art. One of these involves the reliability of the environment approach when used without recourse to the ethnography. Smith and Blundell have argued that much of the failure to employ the environment as an explanation may be due to the way researchers integrate it in studying the variation of rock art motifs.¹⁰⁶ They expect the environment to be deterministic of the symbols in a particular area basing on what environmental conditions are present or absent.

Some researchers such as Ouzman have vehemently argued that the differences do not matter much but the underlying similarities are more significant.¹⁰⁷ Motif variations across space were explained as reflecting a replacement of the common symbols with local variants but with similar meaning.¹⁰⁸ For example, elephants (and other great animals) could replace the eland.¹⁰⁹ Therefore, the elephant takes the place of the eland in rock art. There has not been any detailed comparative analysis to substantiate these conclusions even within the realm of the shamanistic hypothesis. As McCall argues, this is a matter of preference because even within the shamanistic interpretation, it is possible to explore variation by investigating how the shamanistic practice varied from place to place and time to time rather than looking for a generalised model of shamanism.¹¹⁰ Nhamo adds that variation in motif representation is a result of differences in the social setting of the production of the rock art.¹¹¹

This setting may be in terms of localised beliefs that were held by different hunter-gatherer groups. It can also be due to differences in the social issues being addressed by the artists

¹⁰⁵Ucko, & Ronsefeld, *Paleolithic Cave Art*, p.117

¹⁰⁶B.W. Smith, and G. Blundell, 'Dangerous ground: a critique of landscape in rock art studies', in Chippindale, C and Nash, G. (eds.) *The Figured Landscapes of Rock Art*. (Cambridge: Cambridge University Press, 2004), p. 241.

¹⁰⁷J.D. Lewis Williams, *The imprint of Man: The rock art of Southern Africa*. (Cambridge: Cambridge University Press, 1983), p.53.

¹⁰⁸Lewis-Williams, *The imprint of Man*, p.54.

¹⁰⁹J. Parkington, 'Eland and Therianthropes in the Southern African rock art, *African Archaeological Review*, 20, 3, (2003), pp.136-7.

¹¹⁰G.S. McCall, 'Add shamans and stir? A critical review of the shamanism model of forager rock art production', *Journal of Anthropological Archaeology* 26 2, (2007), p.32

¹¹¹Nhamo, 'Characterizing hunter-gatherer Rock Art', p.318.

through the art. These issues might emanate from environmental, economic or cultural variables in the community. Therefore, the production context of the rock art was deeply rooted in the social relations of the communities that practised it.¹¹² Ouzman argues that rock art is the best evidence to use for archaeologically observing forager thought and life ways, or mindscape because it relies on the articulation of social variables. The commonalities and variations in the art are a reflection of the similarities and differences in cultural needs and values of the different communities from which the artists emanated.¹¹³ But there is no agreement on the particularity of the social context in which rock art was produced. Evidence from archaeological, ethnographic, and rock art research is used to interweave spatial motif variation with the outlined working hypothesis of the research.

Lishiko argues that there are no universal explanations that can be applied to all petroglyphs and pictographs and demonstrates that like scientific approaches, ethnographic analogies have their merits and problems.¹¹⁴ Moreover, the ethnography provides no simple straightforward explanations of the art.¹¹⁵ Researchers (anthropologists, archaeologists, and art historians) have long recognised the problems of ethnography and the difficulties of obtaining accurate and understandable information about beliefs, values, and meanings directly from informants who may not be able to articulate meaning or beliefs. Instead they may use metaphoric language, may themselves misunderstand cultural symbols, and may be disinclined to articulate them, or may intentionally mislead and make false statements.¹¹⁶

¹¹²T. A. Dowson, 'Reading Art, writing history: rock art and social change in Southern Africa', Word Archaeology, 25, 3, (1994), p.337.

¹¹³S. Ouzman, 'Toward a mindscape of landscape: Rock-art as expression of world understanding', in: C. Chippindale, and P.S.C. Tacon, (eds.), the Archaeology of Rock-Art, (Cambridge: Cambridge University Press, 1998), p.35.

¹¹⁴Lishiko, 'The Politics of Production of Archaeological Knowledge', p.67.

¹¹⁵J.D. Lewis-William, 'The syntax and function of Giant's Castle rock paintings', South African Archaeological Bulletin, 27, (1972), p.64 In regard to the unreliability of San's ethnographic records in early 1970s before he championed its use later in 1981: Ethnography is fragmentary, extensive as it is, it is of course, not a complete inventory of Bushmen life and belief. Not only is ethnography criticized for exaggerating the specific cultural importance of rock art in some cases, but also for undervaluing for it. Nhamo adds that Ethnographic analogies, are laden with various problems. These may range from reliability of the sources, authenticity, selectivity, inclusions, exclusions and silencing of other information by either the source or the researcher.

¹¹⁶Smith, 'Rock art in South Central Africa', p.286

Other demerits in the use of ethnographic records are the issue of authorship, the between languages, and the translation from oral to written (rock art interpretations) history.¹¹⁷ Or worse still: What of the fallibility of human memory?¹¹⁸ What of the human tendency to impose a narrative structure on events that may not be closely connected? What of the self-serving motives of the storyteller? What of the power relationships between interviewer and interviewee that affect what and how events are reported?¹¹⁹ What of the differences between the spoken and written word? What of the inaccuracies that creep into meaning when trying to put a conversation onto paper?¹²⁰ What about the question of accuracy of the oral life reminiscences, the reliability and validity of the data used or collected? What about the fact that memory, whether individual or collective, is not a mere repository of images, stored in some subterranean gallery of our thought, but the selective reconstruction and appropriation of aspects of the past that respond to the needs of the present?¹²¹ There is no way to ask the artist what he or she intended by the work, what ceremonies revolved around it (or vice-versa), and what significance rock art had to his or her community. A researcher is very hard pressed to keep his own prejudices and assumptions out of his interpretation because of this void of evidence. The implication of the above is that seeing is not believing and beliefs do not make facts.¹²² This is because interpretation of rock art is based on the concepts established by various disciplines, such as history of religion, history of art, economic anthropology and others.

Another argument is that symbols may mean different things to different people depending on their access to the knowledge that enables them to read or decipher a given symbol or set of symbols. Some symbols may only be identifiable precisely by context amongst other

¹¹⁷C. Rassool, 'Local Resistance, Collective Identities and Ordinary experience: Social History and the Productions of Lives in South Africa', Problematizing History and Agency: From Nationalism to Subalternity, paper presented at UCT, (1997), p.16.

¹¹⁸T. Keegan, 'Facing the Storm: Portraits of Black lives in Rural South Africa', (David Philip: Cape Town, 1988), p.152-62. Human memory is given to error, misconception, elision, distortion, elaboration and downright fabrication.

¹¹⁹ A. Bank, (ed.) 'From pictures to performance: Early learning at the hill', Kronos, Journal of Cape History, 28, (2002), pp.94-98. Bank has clearly illustrated the kind of relationship (submissive, resistance oppressive, dominating, interviewee made to perform and so forth) that existed between Bleek and his informants.

¹²⁰Trubshaw, B., 'What did prehistoric people think? The science of cognitive archaeology' <http://www.indigogroup.co.uk/edge/> (accessed 5th May 2014).

¹²¹C. Rassool, G. Minkley, & L. Witz, 'Thresholds gateways and spectacles: Journeying through South Africa hidden pasts and histories in the last decade of the twentieth century', Paper presented at the Future of the Past Conference, UWC, (July 1996), p.14.

¹²²W.D. Hyder, 'Some Problems in the Use of Sign Language to Interpret Rock Art', Paper presented at the 15th annual meeting of the American Rock Art Research Association, Ridgecrest, (CA., University of California, Santa Cruz, May, 1988). Hyder paraphrased Lewis-Williams. 'Seeing is Believing: Meanings in Southern San Rock Paintings', (London: Academic Press, 1981).

symbols. This method demands looking at rock art images as a collection of symbols and trying to get to the meaning behind that symbol. It also involves looking at patterns of structure within the symbols, without trying to understand the thoughts behind them, but getting some sense of dichotomy or linearity in the ideas, symbols and motifs are believed to be grammar in their own right. As such, it is difficult to reconstruct the exact message represented by some rock art without a suitable record of continuity into more recent historic times. Thus, even today, there is no agreement on the particularity of the social context in which rock art was produced, whether at Shiwa Ng'andu or anywhere else.

The above discussion shows how researchers have tried to connect rock art and culture especially in central and southern Africa and the challenges of the methods used. All these views show that rock art is an integral part of culture. There is no longer a need to dogmatically align oneself with one theory as in the past.¹²³ Even the religious symbols are chosen based on social circumstances.¹²⁴ For example, the eland plays a part in other social facets that are not necessarily religious.¹²⁵ Therefore, the widely held beliefs and traditions amongst the authors of the rock art most likely have relevance to most, if not all, of the geometric rock art.

The variation found in archaeological materials from the LSA period and the ethnography of the modern day hunter-gatherers justify the study of variation in rock art. Jones and Leonard have argued that, "...without the measure of diversity, we actually have very little knowledge of our materials."¹²⁶ A detailed analysis of the art can contribute to the reconstruction of both the meaning of the rock art and the social history of its makers. In this regard, rock art is a pragmatic tool for investigating prehistoric cultural variability.

As explained by Pager, the images which were executed in order to gain magical control over the movements, reincarnation and procreation and killing of the prey¹²⁷ have since been discarded. This is on the grounds that archaeological remains associated with rock art showed

¹²³G. Blundell, 'Introduction', *South African Archaeological Society Goodwin Series*, 9, 2005, p.6.

¹²⁴Guenther, *Tricksters and Trancers*, p.48

¹²⁵J.D. Lewis-Williams, *Believing and Seeing: Symbolic meanings in southern San rock paintings*, (London: Academic Press, 1981), p.13.

¹²⁶G.T. Jones, and R. D. Leonard, 'The diversity concept' in R.D. Leonard, and G. T. Jones (eds.). *Quantifying Diversity in Archaeology*. (Cambridge: Cambridge University Press, 1989), p.2.

¹²⁷ Pager, *Stone Age Myth and Magic*, p.38.

that pictographs did not necessarily depict a menu card of the diet of the artist.¹²⁸ Neither did they represent a fair sample of the animals encountered in the normal course of daily living.¹²⁹ The other ground on which the above theory was discarded is the fact that only a small percentage of all the animals depicted were dead or wounded. The above theory actually falls short in many of the same respects that the narrative idea does, such as the entopic phenomena, and other abstract forms.

Apart from beliefs, another possible explanation for variation in rock art motifs is in differences in social activities that are depicted in the art. It has been illustrated that activities such as communal dances, ceremonies and rituals provided the social context from which the motifs were derived.¹³⁰ These could have differed from place to place, resulting in different representations in the art. The differences in what was selected reflect the importance ascribed to a specific activity by a particular community. For instance, in Shiwa Ng'andu area, among the Bisa and Bemba, initiation ceremonies have been widely performed and there is a great possibility that LSA hunter-gatherers also performed them. However, the images do not show any connection to this.

This research takes into cognisance the bearing of the environment on the selection of motifs. From the study area, direct influence of the environment on the selection of the subject matter has been noted since most of these, especially animals, are drawn from the surrounding environment. No exotic animals that were not in keeping with the environments of the surrounding areas have been identified. The same observations were made by those who noted that "the animals depicted in the rock art are not "exotic".¹³¹ This shows that the environment provided the menu from which communities chose their subject matter. Closer examination of some animal depictions with restricted distribution also shows some co-relationships between the rock art and the environment.

Suggestively, the animals that are depicted in rock art were most likely the ones that were naturally occurring in the area.¹³² The people would therefore draw their symbols from the

¹²⁸ J. Parkington, & C. Poggenpoel, 'Excavated at De Hangen', South Africa Archaeological Bulletin, 26, (1968), pp.3-36.

¹²⁹ P. Vinnicombe, People of the Eland: Rock Paintings of the Drakensberg Bushmen as a Reflection of their Life and Thought, (Pietermaritzburg: University of Natal Press, 1976), p.151.

¹³⁰ Lewis-Williams, Believing and Seeing, p.23.

¹³¹ Walker, The Painted Hills, p.31

¹³² Nhamo, 'Characterizing hunter-gatherer Rock Art', P.398

animals that they very well knew. It is also likely that the ubiquity and importance of the animals could also have influenced their integration into the belief systems. For example, the availability of permanent water sources could have influenced the integration of aquatic resources into the social symbolism of the society.

However, as noted above, caution is called for in this approach since it seems that the occurrence of an animal in the natural environment did not guarantee its inclusion in the rock art. Generally, the limited number of species depicted in the art does not correlate with the wide variety of animals that were found in the natural environment.

Additionally, the abundance of animal depictions in the rock art of an area does not necessarily mean that it was also abundant in the area. Some animals occur in the art even when they were not common in the area. Walker argues that the giraffe and kudu are not well-adapted to the Matopo Hills although they are found in neighbouring areas in the Lowveld of the country.¹³³ These animals were abundant in the rock art of the area. This shows that the animal was especially chosen for its qualities that were known to the artists. Kudu are common to most case study areas but other animals such as giraffe may have been chosen for qualities that suited certain environments.

The nature of societal engagement with the physical environment leads to the evolution of divergent concerns and beliefs. Strategies of dealing with environmental variables are usually integrated into the fabric of beliefs and thought systems of societies.¹³⁴ This has also been observed by Binford in hunter-gatherer groups such as the Nunamuit.¹³⁵ Instead, environmental explanations should be taken as having both direct and indirect influences on motif selection.

Another significant issue is that the emphasis on different animals in different parts of the country may also have been linked to the issue of identity marking either intentionally or unintentionally. The emphasis on certain animals could have resulted in groups becoming

¹³³Walker, *The Painted Hills*, p. 31 see also Nhamo, 'Characterizing hunter-gatherer Rock Art', p.399.

¹³⁴F.A. Hassan, Environmental perception and human responses in history and prehistory. in J. Tainter, R. McIntosh, and S. McIntosh, (eds.), *The Way Wind Blows: Climate, History and Human Action*. (New York: Columbia University Press, 2000), pp.121.

¹³⁵L. Binford, 'Willow smoke and dog's tails: hunter-gatherer settlement systems and archaeological site formation. *American Antiquity*, 45, 1, (1980), p.11.

known as “people of the eland,” “people of the kudu,” and “people of the elephant”.¹³⁶ The use of animals as identity markers is especially feasible since there is the possibility that totemism was part of hunter-gatherer cosmology. The existence of totems has been noted predominantly among groups in eastern Botswana and western Zimbabwe.¹³⁷ Also, the occurrence of distinctive markers such as the striped art from northern Nyanga shows that communities could have deliberately distinguished themselves from others through rock art.

This research subscribes to the broad social theory that considers the production and consumption of rock art to have been embedded in the economic, intellectual and religious circumstances of the whole community. Therefore, the choice of rock art motifs would be influenced by the beliefs, ethics and aspirations of a particular community. The rock art symbols are therefore part of the shared cosmos. This was not a preserve of the few individuals (shamans), although they played their part in the whole system.

Consequently, images that can be attributed to the religious context are taken to be a reflection of the beliefs and rituals associated with this rather than experiences of a particular individual. The trance dance and rituals are a communal undertaking in many hunter-gatherer groups in southern Africa.¹³⁸ Any member of the group can initiate the dance itself whether they are trancers or not. The dance serves purposes beyond just healing and going into a trance. It entertains, de-stresses and unifies the communities.¹³⁹

Beyond the variation in religion and beliefs, Nhamo argues that:

motif variation resulted from differences in foci on the social issues addressed by the rock art. Spatial motif variation is taken to result from variation in availability of resources, beliefs and the social circumstances surrounding the production of art in different areas. The social circumstances surrounding the production of rock art will result in differences in motif selection. Issues of identity and territoriality cannot be excluded. Rock art could have been intended as a marker for group identity.¹⁴⁰

¹³⁶Nhamo, 'Characterizing hunter-gatherer Rock Art', p.395.

¹³⁷Nhamo, 'Characterizing hunter-gatherer Rock Art', p.395.

¹³⁸Guenther, *Tricksters and Trancers*, p.43.

¹³⁹Guenther, *Tricksters and Trancers*, p.47.Nhamo, 'Characterizing hunter-gatherer Rock Art', pp.83-4.

¹⁴⁰Nhamo, 'Characterizing hunter-gatherer Rock Art', pp.83-4.

Rock art is visible, permanent and ceremonial and therefore, it conforms to the aspects of group identity.¹⁴¹ Increase in territoriality has been insinuated by LSA evidence from around the Central African region. This is the period with the highest intensity of rock art production and is associated with reduction in mobility and an increased sense of territoriality.¹⁴² Although the differences that are noted in the art may not have been a result of intentional group or territorial marking, they might have been used as such. Today, researchers can also use these differences to understand the organisation of different LSA groups over space.

What Vinnicombe, proposed and was supported by Blundell and Nhamo as the social theory in rock art interpretation is based on the premise that the major point in making rock art was to communicate societal concerns and principles.¹⁴³ The production of art was embedded in the social, political, economic, and religious circumstances of the whole community.¹⁴⁴ This was also the context for the consumption of the art. It was intelligible to the viewers because it fell within the broader framework of the symbolism and experience of the wider society.¹⁴⁵

Rock art as material culture may tell us about the living culture that produced it. But, in trying to decipher the past from material culture the archaeological knowledge or interpretations have been questioned especially whether the material culture is really able to tell the public what was in the maker's minds and how (if not what) our predecessors were thinking. The world over, the study of rock art has produced various interpretations over the motives underlying the production and the significant meanings of the art as will be shown below. Although rock art occasionally provides historical information, paintings and petroglyphs are not historical documents. In studying the art, the archaeologist is forced to seek all imaginable clues. Hence in the interpretation of rock one needs different theories to understand and decipher the figures.

¹⁴¹P. Wiessner, 'Style and social information in Kalahari San projectile points', *American Antiquity*, 48, (1983), p.256.

¹⁴²N. Walker, 'Paintings and ceremonial activity in LSA of the Matopos, Zimbabwe', in Lewis-J.D. Williams, and T.A. Dowson (eds.), *Contested Images: Variation in Southern African rock art research*. (Witwatersrand University Press, 1994), pp. 127-8.

¹⁴³Vinnicombe, *People of the Eland*, p.24, Nhamo, 'Out of the Labyrinth', p.37.

¹⁴⁴P.S. Garlake, *Structure and meaning of Zimbabwe -Hans Wolff Memorial*

Lecture (Bloomington: Indiana University Press, 1987), p.37.

¹⁴⁵Lewis-Williams, *Believing and Seeing*, pp.19-28.

The Shiwa Ng'andu rock art provides a rich historical and ritual significance because of its substance in the application of colour and use of realistic and abstract forms. Usually assumptions have been drawn to the ritual purpose of most paintings. Phillipson noticed that:

“their creation had not only an aesthetic appeal to the artist, but a very real function within the cultures which produced them. These are not idle doodles, but acts of cultural significance and therefore should be treated as important elements of the traditional culture of this country.”¹⁴⁶

Similarly, it is in this context that rock art of Shiwa Ng'andu should be viewed as an important component of the cultural life of the LSA peoples of the area in the same way microlithic tools helped shape their lifestyles. From the research it, has been understood that the importance of a site is determined by its significance to “the human story”, yet local inhabitants value sites for different reasons.

However, taking rock art as reflective of culture has its own problems. The art images themselves are not always transparently representative and sometimes a particular subject matter may signify different mental constructs. Nevertheless, today many of the researchers on rock art have either implicitly or explicitly taken rock art as reflective of culture. This information includes data from the archaeological record and anthropology of the modern day hunter-gatherers.

Therefore, rock art is now considered as a product of artists who were full-fledged members of their societies not the work of some “isolated geniuses driven by some powerful aesthetic imperative” who were divorced from the “ebb and flow” of daily life.¹⁴⁷ Their artistic decisions were informed, inspired and restricted by the cultural ethos of their communities. Hence, the rock art articulates and communicates the perceptions of their societies.¹⁴⁸ It was socially informed and sanctioned. For example, some hunter-gatherer groups viewed animals such as eland, elephants and kudu as mirroring of the human situations. Thus, they may have used them as such in symbolic representation in the art.¹⁴⁹ This approach is grounded in taking rock art as an integral component of the hunter-gatherer culture.

¹⁴⁶David. W. Phillipson, Prehistoric Rock Paintings and Engravings of Zambia, (Lusaka: Government printers, 1972), p.5.

¹⁴⁷J.D. Lewis-Williams, 'Rock art and Ritual: Southern Africa and Beyond', Complutum, 5, (1994), p.277.

¹⁴⁸R. Corbey, J. Layton and J. Tanner. 'Archaeology and Art', in J. Bintliff (ed.) Companion to Archaeology, (Malden: Blackwell Publishing, 2008), p.359.

¹⁴⁹Vinnicombe, People of the Eland, p.24. see also Nhamo, 'Out of the Labyrinth', p.17 .

The social nature of rock art was noted as far back as the 1930s when Leo Frobenius proclaimed that the art was 'a symbolic art' concerned with 'symbolic concepts' that had a 'prescribed vocabulary of forms which was followed by a 'rigid, canonically strict code'.¹⁵⁰ Today, this framework underpins the basic understanding of rock art. Rock art is seen as an expression of cultural aspects such as belief systems, moral codes, societal aspirations and religious experiences.¹⁵¹ Through the exploration of such images in a particular civilisation or society, we learn about the ideas and values that intrigued and informed a people.¹⁵² Therefore, the production context of the rock art was deeply rooted in the social relations of the communities that practised it.¹⁵³ In this regard, rock art is a pragmatic tool for investigating prehistoric cultural variability. Ouzman argued that rock art is arguably the best evidence to use for archaeologically observing forager thought and life ways, or mindscape because it relied on the articulation of social variables.¹⁵⁴ The commonalities and variations in the art are a reflection of the similarities and differences in cultural needs and values of the different communities from which the artists emanated.

The framework within which this research was conceived is that some of the variations in motifs indicate variations in belief systems that are not limited to the religious ones but include myths, legends and folklore characters. As Jolly has pointed out, there is no need to assume that these were not influencing each other.¹⁵⁵ The research on modern hunter-gatherers has shown that there is no rigid differentiation between these.¹⁵⁶

It could therefore be said that Shiwa Ng'andu in particular and Zambia at large, has a rich artistic heritage, with some art that consists of mere designs and the other pictures meant to represent subjects, part of it contains pictures meant to evoke multiple and complex levels of imagery. Some art is made simply for pleasure and the other has a very particular purpose
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 . In recent times it can be seen that rock art was just one form of art among many others, used by particular people for particular purposes. Rock art thus only gives us a

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<sup>150</sup>P.S. Garlake, 'The first eighty years of rock art studies, 1890-1970', in G. Pwiti, (ed.). Caves, monuments and texts: Zimbabwe Archaeology today. (Uppsala: Department of Archaeology and Ancient History, 1997), p.43, Namono, 'Surrogate Surface', p.75.

<sup>151</sup>Vinnicombe, People of the Eland, pp.19-20.

<sup>152</sup>Namono, 'Characterizing hunter-gatherer Rock Art', p.166.

<sup>153</sup>T.A. Dowson, 'Reading history: rock art and social change in Southern Africa', World Archaeology 25, 3, (1994), p.334.

<sup>154</sup>Ouzman, Toward a mindscape of landscape, p.35.

<sup>155</sup>P. Jolly, 'Sharing Symbols: A Correspondence in the Ritual Dress of Black Farmers and the South-eastern San', South African Archaeological Society, Goodwin Series, 9, (2005), pp.90.

<sup>156</sup>Guenther, Tricksters and Trancers, p.52.

glimpse of the artistic practices and traditions of Zambia's past inhabitants, but it serves as a testament to a history of artistic achievement within Zambia that stretches back many thousands of years.<sup>157</sup> With this in mind we could say that the specific meanings are clear when the story of the paintings is told. Yet the true meanings of the rock paintings rest with the artists and rarely with their descendants.

## **CONCLUSION**

This chapter focused on symbolic meaning of rock art painting in relation to the Shiwa Ng'andu rock art site. It also weighed and evaluated the research carried out by previous scholars on symbolic meaning to contextualise the objectives of the research within the broader theoretical and methodological approaches in rock art studies. Data collected in terms of symbolic meaning of the Shiwa Ng'andu paintings, provides historical, economic, social, cultural and religious significance. Ethnography in Shiwa Ng'andu rock art suggests that some art was made simply for pleasure, fertility, weather divination, hunting-magic, trance or shamanism to mention but a few. The study indicates that rock art was just one form of art among many others, used by particular people for particular purposes studies.

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<sup>157</sup> Smith, Zambia's Ancient Rock Art, p.21

## CHAPTER SIX: CONCLUSION

Amongst the rock art sites so far investigated in Zambia, the Shiwa Ng'andu cultural landscape remains one of the richest and significant in the country. This is due to the presence of hunter-gatherer sites of the Later Stone Age period in the area and suitable rock surfaces where red geometric and animal traditions were painted. These are part of the wider central African rock art zone. The Shiwa Ng'andu rock art sites compares favourably with other site in the region such as those in Malawi, southern Congo, Uganda, eastern part Angola, northern Mozambique, and north eastern Tanzania in terms of concentration of paintings, representation, and production of images.

This study set out to investigate the context of the Shiwa Ng'andu rock art paintings within the hunter-gatherer upper Pleistocene and Holocene chronological framework and traditions in Zambia. In a quest to respond to the first objective, it examined the nature of the paintings, considered who the painters of the art were, the reasons for which they did the paintings and the meaning of the paintings. This was done in line with other investigations of rock art traditions that have been undertaken in Zambia and other regions in central Africa. Several conclusions have emerged from the study.

The presence of rock art in Shiwa Ng'andu cultural landscape is a major contribution to the already abundant rock art tradition of Zambia. This study therefore has immensely increased our understanding of the distribution of rock art tradition in the country. The study has confirmed J. Desmond Clark's assertion made in 1958 that Zambia belongs to a broader Central African schematic/geometric rock art zone, something that is of great significance to the archaeology of the Shiwa Ng'andu area.

The study has also demonstrated that Zambia's rock art comprises both petroglyphs (engravings) and pictographs (paintings) and that the rock art in Shiwa Ng'andu area consists of paintings only. Despite the detailed investigations carried out in the area, not a single engravings site was found. But it needs to be acknowledged that most of Zambia's rock art sites are found in the northern and eastern parts of the country with the former having the largest number.

The study is largely based on the investigations of ten rock art sites all of them located in Shiwa Ng'andu area resulting into a cultural landscape. It revealed the presence of Schematic or geometric paintings at all the sites. These fall into two categories, namely, the naturalistic and schematic paintings. Both types belong to the red traditions, that is, the red animal and red geometric traditions. Geometric figures were found at nine sites while the red animal figures were only present at BUSO-1. It seems possible that geometric figures may have been painted by women while animal figures were executed by men. These conclusions are in line with earlier suggestions by other scholars such as Smith and Namono and have thus helped to reinforce the suggestion that both men and women were involved in the production of rock art in Zambia.

The study also established that the Shiwa Ng'andu rock art, particularly the geometric tradition, is similar to the rock art of the Nachikufan tradition located north of the Zambezi, dated from about 10,000 to 18,000 BP. This rock art tradition is associated with an area along the Muchinga Escarpment, a geological feature that is part of the Great Rift Valley which extends southwards from East Africa and ends a few Kilometres north of Lusaka. Hence, due to the large area characterised by this rock art tradition, it is more likely that there are more undiscovered sites along this geological feature.

Among all the sites investigated in Shiwa Ng'andu area, CHV-2B is the only one that was excavated and yielded large quantities of stone tool residues, ash, animal bone artefacts, pottery and hematite (ochre). The CHV-2B assemblage bears similarities to the Nachikufan industries especially Nachikufan III stage.

Another site other than CHV-2B that was investigated and revealed undisturbed cultural deposits such as stone artefacts and pottery was KRS 1A. These were products of hunter-gatherers who inhabited the sites. These were the same people who made the paintings found there. Although they remain undated, their typological similarity to Nachikufan materials may be an indication that the paintings were the works of the same people who inhabited the sites. Research in regional sites have established similarities of paintings in settlement areas that have been linked to locations of initiation ceremonies such as the female initiation rites called the *Chinamwali* held at first menstruation among the Chewa. It is this kind of evidence that tends to suggest that possibly even in Shiwa Ng'andu, that some settlement areas may have been used as locations of *ichisungu* initiation ceremony.

In an attempt to seek the identity of the painters and analyse the similarities between the Shiwa Ng'andu and BaTwa rock art, the research has established that the similarities between the Shiwa Ng'andu paintings and those of the Nachikufan tradition which have been attributed to the BaTwa would suggest that even the Shiwa Ng'andu rock art was the work of the same people. In most parts of the country where the BaTwa have been recognised, they are believed to be remnants of the LSA people. Presently they are found living in areas such as the Kafue and Bangweulu swamps. These are the people who are associated with authorship of the Shiwa Ng'andu rock art. They are also associated with the painting of the geometric Central African rock art which stretches from Uganda in the north to northern Mozambique in the southeast. The study also indicated that there is no justification or linkage between the Bisa and the BaTwa (rock art). This is different from what is prevalent in the eastern province of Zambia where the painters of the art are linked to the ancestors of local tribes, Chewa-Nyanja.

Therefore the investigations at Shiwa Ng'andu area have revealed a dominance of geometric rock art paintings over other forms of paintings bringing the study area closer to the findings in the Nachikufan art tradition. This closeness would suggest an extension of the geographic region of the Nachikufan way of life to the northern parts of the Muchinga region which were previously unknown.

Investigations in the study area disclose that the patterns of motifs in Shiwa Ng'andu compared well (in association) with the BaTwa art in the region especially the red animal and red geometric traditions. Paintings in the study area were evidently executed in monochrome red-orangish colour. Reference has been made to parts of the sub region as it was observed that the Shiwa Ng'andu rock art was closely related to that in other parts of Zambia, and others in the region, such as the rock art of Malawi, Uganda, Zimbabwe, northern Mozambique, central Tanzania, and eastern Angola. This work has therefore confirmed J.D Clark's work on the identification of the rock art in Zambia to belong to the geometric rock art zone of Central Africa.

Another conclusion drawn from this research concerning the relationship between the Shiwa Ng'andu and BaTwa rock art indicates that similarities and differences were drawn between the two. Variables of colour, technology, shape, method and manner of depiction yielded

strong similar patterns between Shiwa Ng'andu and BaTwa rock art north of the Zambezi and drawing a line of differences with those that exist in Southern Africa. The rock art of Southern Africa is different from that of Central Africa as people and animals are the most common motifs of the former. This is unlike Central Africa where more geometric symbols, circles, lines, ladder-like forms, circles with radiating lines, and sunbursts, dots and grids with few naturalistic, animal or human figures occur and mostly as a pair. It has been argued that this is usually due to distortion of motifs in Central Africa, with more geometric figures that are monochromic in nature than those in Southern Africa. This leads to a suggestion that the places chosen for their paintings, the manner, colour, style and choice of depiction of paintings they decided to portray all created an impressive scenic effect of the rock art paintings to its audience to depict its prehistoric landscape and mythical narrative.

A study of the orientation of images on panels in Shiwa Ng'andu area revealed that there were similarities in the way painters executed images in the Kasama area. It was found that the red animal motifs associated with males face north to northwest whereas those with red geometric designs associated with females tend to face in the opposite direction, south to southeast. However, it is hard to suggest an explanation for this trend. It is this kind of evidence that provides some direct link between the BaTwa rock art of Central Africa and the Shiwa Ng'andu rock art.

In a quest to analyse the symbolic meaning of the Shiwa Ng'andu rock art paintings, the study illustrated that recent investigations of rock art images of the geometric tradition in southern and central African sites have depended on ethnographic studies of modern hunter-gatherers in the region. This has led to the conclusion that rock art is related to economic, cultural, historic, social aspects in society and gender synergies in hunter-gatherer (pygmy) lifestyles. In most cases pygmy ethnographies in Central Africa such as Uganda have indicated that rituals were strictly gendered, as are most of their daily activities, which could have been the same with painting. The pygmy ethnographies show that in the Central African rock art zone, the red animal tradition have been attributed to men and usually depicts animal figures, (concerned with hunting) and the red geometric tradition are attributed to women, (concerned with fertility and divination). This would suggest that even the geometric rock art of Shiwa Ng'andu could be attributed to gendered art (male and female art). A comparison of motifs in Central African rock art zone and Shiwa Ng'andu has shown that the red animal tradition are paired to their geometric rock art traditions.

Research in Shiwa Ng'andu has demonstrated that in as much as the red animal tradition are paired to their geometric rock art traditions, they are not found at the same sites. Rather they occur at different sites within Shiwa Ng'andu area. This leads to a conclusion that perhaps these locations were forbidden to the opposite sex, hence, one might have been prohibited to be found in the same place or site as the other. This could relate to modern day societies where during rituals or traditions of one sex the opposite sex is forbidden to be present. It can therefore be argued that in Shiwa Ng'andu for the red animal tradition, the women were forbidden to be present at men's ritual (sites) places. In the same vein, for the red geometric tradition, men were not allowed to attend women's ritual ceremonies, hence the traditions were territorially exclusive.

The findings of this study are in agreement with Benjamin Smith's suggestion that the red animal and red geometric traditions occur in the same landscape as a pair, hence forming a conceptual whole. It can further be stated that one tradition forbids the other from being present in another's location and I further infer that these two traditions formed an interrelated network resulting into different physical and spiritual (ritual) places or locations in prehistoric societies in the late Pleistocene and Holocene periods.

Using ethnographic studies, investigations at Shiwa Ng'andu have exposed that gender symbolism may depict a dominance of motifs inclined to the female gender such as shapes or motifs of (concentric circles and circular motifs) geometric type. Others portray an inclination for male gender such as the animal like motifs. This kind of evidence is what may suggest that sites with gender symbolisms show a distinction of male and female sites respectively both in Central Africa rock art zone and Shiwa Ng'andu area.

This rock art study suggests that some symbols or motifs are probably polysemic, meaning that rock art has more than one symbolic association for its motifs. In this study the symbolic meaning was derived from contextual associations. Generally, however contextual association differs from place to place, tradition to tradition, and hence contextualised within the particular hunter-gatherer groupings. The study further suggests other possible theories for the symbolic meaning of Shiwa Ng'andu rock art implying that rock art motifs could carry more than one symbolic meaning. For instance, the red animal traditions were previously associated with the Lewis-Williams' Shamanism theory, and contrary to Shamanism is the hunting magic theory where animal motif depictions are showing rituals to do with the

control of game or rainmaking. Among modern hunter-gatherers, hunting symbols are integrated in several rituals even those that are not directly connected with the actual hunting activities. Looking at Shiwa Ng'andu, all these could be applicable in explaining the symbolic meaning of the red animal traditions. The same would apply to the symbolic meaning of the red geometric tradition where theories of weather, fertility and divination would apply. Overall, theories of ritual (spiritual) and art for art's sake (some art was made simply for pleasure) would apply to the two red traditions that are in Shiwa Ng'andu. That rock art was just one form of art, among many others, used by particular people for particular purposes would be another theory applicable to Shiwa Ng'andu area. All these theories could fit into the prehistoric complex structure. Investigations have revealed that these paintings mattered to the painters, because they added meaning to these rock art places and their cultural, historic, economic, social and spiritual lifestyles which could and continue to tell prehistoric stories for posterity. Therefore, the study showed some art that consists of motifs meant to represent subjects intended to evoke multiple and complex levels of imagery in symbolic meaning.

This work has linked the symbolism set in the motifs from the association of sites in the past to the ancestral spiritual or ritual world based on ethnographies. However, these geometric motifs may indicate other meanings and symbolisms for the current users since it is quite difficult to deduce or understand the meaning and symbolism of these rock art motifs. The inability to deduce the past meaning and symbolism of these motifs enhances the aura of ancestral power, hence the interpretation of these motifs is attached with new meaning and new values read into the motifs.

The location of paintings at the ten sites investigated indicated that Shiwa Ng'andu has a rich artistic heritage. From all the data collected in terms of symbolic meaning of the rock art in Shiwa Ng'andu paintings, the study provided various historic, economic, social, cultural and religious (spiritual) significance. It showed that some art has a very particular purpose such as portraying the theories (theme) of fertility, weather divination, hunting-magic, trance or shamanism. Thus, rock art in Shiwa Ng'andu not only gives us a glimpse of the artistic practices and traditions of Zambia's past inhabitants, as it creates a link with the past, but serves as a testament to a history of artistic achievement within Zambia that stretches back many thousands of years. It also indicates that rock art sites must have been important to those who painted them.

Above all, it is vital to state that from the outcome of the fieldwork, further survey would yield more rock art sites in Shiwa Ng'andu. Hence, this study did not cover a lot of sites due to several limitations. As such, a more extended and intensive research is needed to confirm or question the validity of the pattern used to identify and evaluate the integrated model used in this study. However, the study has overall shown that the rock art of Shiwa Ng'andu is an interpretative window to understanding aspects of the geometric rock art of the late Pleistocene and Holocene periods in the region.

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Interview, Mwaba, Joseph. (Mr) Kapishya Hot Springs, Shiwa Ng'andu District, 18 November, 2015.

## **APPENDICES**

Appendix 1: **ROCK ART RECORDING FORM**

**Date:** .....

**Time of Recording:**.....

**Site Name:**.....**Site Number:**.....

**Location:**.....

**Elevation:** .....

**Land Owner:**.....

**Site Description:**

.....  
.....  
.....

**Vegetation:**.....**Soil Type:**.....

**Site Type:** Cave Overhang Rock shelter Boulder

Other:.....

**Number of Panels:**

**Size of Panels:** Width Height Area

**Estimated number of paintings:**.....

**Colour of Paintings:**

**Monochromes:** Red Orange Yellow Purple White Black Brown

Other:.....

**Bi-chrome:**.....

**Polychromes:**.....

**Subject Matter: Human:** Male Female Indeterminate

Therianthrope:.....

Group Scenes: .....

Other:.....

**Animal:**

.....  
.....

**Geometric:** Dots Lines Formlings Circles

**Other:**.....

**Comment on Association of images:**

.....

.....  
**State of Preservation:** Fading Faded clear Very clear.....

Other weathering processes:

.....  
Vandalism: .....

**Other Archaeological Finds:**

.....  
**Comments:**.....

**Recording:** Photographs Drawings Tracings

Other:.....