

**HISTORICISING THE EFFECTS OF HUMAN ACTIVITIES ON HISTORICAL SITES:
A CASE OF NYERO ROCK PAINTING IN KUMI DISTRICT (1950 – 2023)**

BY

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(22/U/2037/MAH/PS)

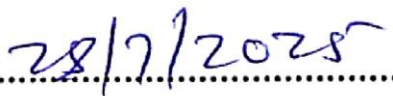
**A RESEARCH REPORT SUBMITTED TO THE DIRECTORATE OF RESEARCH AND
GERADUATE STUDIES IN PARTIAL FULFILLMENT OF THE REQUIREMENTS OF
THE AWARD OF MASTER OF ARTS IN HISTORY OF GULU UNIVERSITY**

JULY, 2026

DECLARATION

I, Ouma Emmanuel, affirm that the information contained in this research dissertation is my original work, and no part of this report has been submitted to any academic institution for an academic award.

Signature.....

Date.....

Ouma Emmanuel

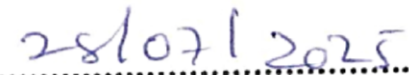
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APPROVAL

This research report titled “Historicising the Effects of Human Activities on Historical Sites: A case of Nyero Rock Painting in Kumi District (1950 – 2023)” has been written under our close supervision and is ready for submission with our approval.

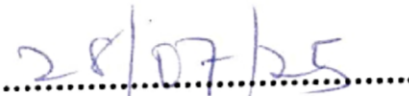
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DEDICATION

I dedicate this work to my late mother, Regina Aculo Ojuka, who laid the foundation for my education. I appreciate the patience of my wife, Monica Abuco, who gave me so much morale support and had to forego my presence many times to give me time to study.

ACKNOWLEDGEMENT

I would like to give thanks to God for enabling me to complete my research. I also acknowledge the support and tireless efforts of my supervisors, Dr. Agatha Alidri and Dr. Chombo Oketcho, for continually guiding me through the research and ensuring that I followed the right procedures and consulted relevant sources, which contributed greatly to the final success of the work. I appreciate the encouragement of my long-time friend Okello Simon, who inspired me to complete this study. I also acknowledge the love my children; Ouma Ojuka Aaron, Ocom Timothy, Akello Bridget, Daniel Ouma, Ouma Emmanuel Junior and my lastborn Amongin Grace Ouma for enduring my absence. I also, acknowledge my classmates, whose support, insight, and understanding made me through with the completion of this research.

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LIST OF ABBREVIATIONS

AYADO – African Youth Alliance Development Organisation

CBC – Community-based conservation

CHM – Cultural Heritage Management

EIA – Environmental impact assessment

FGD – Focus Group Discussion

ICDPs – Integrated Conservation and Development Projects

ICOMOS – International Council of Monuments and Sites

ICU – Iteso Cultural Union

IUCN – International Union for Conservation of Nature

NEMA – National Environmental Authority

NEPA – National Environmental Policy Act

UNDP – United Nations Development Programme

UNEP – United Nations Environment Programme

UNESCO – United Nations Education and Social Cultural Organisation

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ABSTRACT

This study historicised the effects of human activities on historical sites, a case study of Nyero Rock Painting in Kumi District, Eastern Uganda (1950 - 2023). The specific objectives of the study were: i) To explore the status of Nyero Rock Painting historical site by 1950, ii) To establish the current status of Nyero Rock Painting historical site, iii) To investigate the human activities that took place from 1950 to 2023 around Nyero Rock Painting historical site, and iv) To assess the effect of the human activities on Nyero Rock Painting historical site. The study used a qualitative approach with a historical-ethnographic research design combining ethnographic observations, oral history interviews, and historical surveys to explore the research questions of the study. Key findings indicate that historically, the site was a significant center of human settlement and activity, reinforced by existing oral histories, evidence of preserved animal and human bones, pottery, hunting tools, and grinding stones. The original paintings and inscriptions were clear, serving as communication, storytelling, or ritualistic expression. The current condition of the site is deteriorating, with fading paintings and damaged vegetation, and the site is currently used for academic tours, tourism, cultural/spiritual practices, recreation, grazing, and farming. Equally, these activities have had mixed effects. While some are positive, negative impacts include vandalism, habitat disruption, deforestation, and encroachment, all threatening the site's preservation. The study concluded that while the site was historically important with clear visual expressions, its current condition is poor and threatened by human activities. Lastly, the study recommends implementing sustainable tourism strategies and increasing community engagement and education to enhance the site's relevance and promote its preservation. The study contributes new knowledge by integrating oral histories and local narratives into the conservation discourse,

providing a long-term historical perspective on human-site interactions, and offering evidence-based recommendations grounded in community experiences.

Key words: Human activities, Nyero Rock Painting, Kumi District, Eastern Uganda

CHAPTER ONE

INTRODUCTION AND BACKGROUND TO THE STUDY

1.0 Introduction

Nyero Rock Paintings, located in Kumi District, Eastern Uganda, stand as a significant testament to the region's rich cultural and historical heritage. This study delves into the complex relationship between human engagement and the preservation of this invaluable site. Over the decades, Nyero has experienced a range of human interactions, from traditional practices and early settlement to modern tourism and land use changes. This research aims to document and analyze the cumulative effects of these activities on the integrity and condition of the rock paintings and their surrounding environment between 1950 and 2023, offering insights into the evolving challenges and opportunities for the site's long-term conservation. This section therefore introduces the background to the study, problem statement, general objective and specific objectives of the study, research questions, and scope of the study, theoretical framework as well as the significance of the study.

1.1 Background to the study

1.1.1 Historical background

Geographically, Nyero Rock Painting is in Kumi District, Eastern Uganda, about 8 kilometers west of Kumi Town. Ssenkaaba (2022) observed that these prehistoric rock art sites are situated amidst granite outcrops characteristic of the area. It is further believed that they are part of a broader collection of rock art found across East Africa, with a significant historical and cultural value tied to the Twa hunter-gatherers, the region's earliest inhabitants. Ssemanda and Ddamulira (2019) further support the view that the Nyero Rock Paintings are believed to have been created by the Batwa (Twa), an indigenous pygmy group that once inhabited vast regions of East Africa.

Specifically, the Twa were hunter-gatherers, known for their intimate connection with the environment, which is reflected in their art. Hence, the paintings, primarily geometric, are thought to have symbolic or ritual significance, perhaps linked to rainmaking, fertility, or spiritual beliefs.

Further oral records from the Iteso Cultural Union (2020) indicate that Nyero region are predominantly Iteso people, an ethnic group with a distinct Nilotic heritage. The Iteso are primarily agriculturalists, cultivating crops such as millet, sorghum, and cassava, and practicing animal husbandry. Their cultural practices include traditional ceremonies, dances like the *Ajosi*, and a strong oral tradition. Politically, the Iteso are a decentralized society with clans serving as a fundamental unit of social structure. Clans led by clan heads (Emuron) provide a sense of identity and solidarity, often mediating disputes and conducting cultural ceremonies. Socially, the elders play a vital role in maintaining traditions and adjudicating conflicts. Traditional marriage practices, initiation rites, and festivals highlight the community's rich cultural heritage. Hence, the interconnectedness of the Twa hunter-gatherers' artistic expressions with the Iteso people's identity, mirrors a continuity of heritage and adaptation in response to socio-political changes, such as the impact of colonial rule, as supported by Mason & Lowenthal (2021). There seems to be some historical connection in the Twa-hunter gatherers and Iteso people's movements in the interlacustrine and eastern region.

Clearly, these paintings, which are part of a broader tradition of rock art in Uganda, depict a variety of motifs, including animals, geometric shapes, and human figures (Smith, 2015, p. 501). The site is a crucial link to understanding the early human occupation and cultural expressions in Uganda, East Africa and the African continent. These rock paintings are believed to date back to the Late Stone Age, approximately 2,000 to 4,000 years ago, aligning with other rock art sites in East Africa

(Smith, 2018, p. 245). This period was characterized by the emergence of complex societies and the development of symbolic and artistic expressions. The paintings provide a window into the social and spiritual lives of the people who created them, illustrating hunting scenes, rituals, and possibly astronomical observations (Ki-Zerbo, 1981 p. 20). Related studies by Muzzolini (2001) assert that European explorers first documented the Nyero Rock Paintings in the early 20th century. Subsequent archaeological studies have aimed to date the paintings more accurately and interpret their meanings within the broader context of African rock art traditions. Historically, the region around the Nyero Rock Painting has been sparsely populated, which helped preserve the site. However, over the past few years, human activities such as quarrying, deforestation and farming have been identified as posing a threat to the site.

Most importantly, human activities in the area have led to various conservation efforts, including protective legislation through the National Environment Act and Historical Monuments Act No.5 of 2019, p. 66 (NEMA, 2019), community engagement programs to educate and involve locals in preserving their cultural heritage, and continued research and documentation of rock paintings (Smith, 2018 p. 245). Despite these efforts, challenges such as limited funding, inadequate law enforcement, and competing interests between development and preservation still threaten the Nyero Rock Paintings just like other historical sites across Africa (Lwoga and Adu-Ampong, 2020 p. 69).

1.1.1a Origin of the Iteso people living around Nyero Rocks

The Iteso people, are an ethnic group primarily residing in Eastern Uganda and parts of Western Kenya. According to Kandel (2018) the Iteso origins trace back to the larger Ateker group, a branch of the Plain Nilotes, which includes the Turkana, Karamojong, Kumam, and Maasai peoples. Oral

traditions and historical accounts suggest that the Iteso are believed to have migrated from Southern Ethiopia or Sudan over several centuries. Initially they settled in Karamoja around the 10th century AD. From there, they began migrating southwards, with significant settlement in the Teso region (comprising present-day districts such as Soroti, Kumi, Bukedea, Amuria, Serere, Ngora, Katakwi, Kaberamaido, Kapelebyong, Tororo, and parts of Busia in Uganda, as well as regions in Western Kenya) between the 16th and 19th centuries (Okoboi, 2016).

Emudong (1974) and Okalany (1980) document that the Iteso share linguistic and cultural affinities with the Karamojong, Turkana, and other Ateker-speaking peoples. The name "Iteso" is derived from the word "Teso," which refers to their ancestral homeland. The Iteso's oral traditions emphasize their identity as a cattle-keeping people who gradually adopted agriculture as they moved southward into more fertile lands. This transition from pastoralism to agro-pastoralism was a significant factor in their settlement patterns and social organization (Kandel, 2015).

1.1.1b Migration and Settlement of the Iteso People living around Nyero Rocks

Oral traditions describe a southward migration of the Iteso that occurred over centuries. It is widely believed that the Iteso, as part of the Ateker cluster, first settled in the Karamoja region of Uganda. From Karamoja, various groups began to disperse. Opak (2001) observed that the reasons for these subsequent migrations are often attributed to factors such as search for fertile land and water for their cattle, internal pressures, and sometimes external conflicts. Some historians like Emudong (1974) and Okalany (1980) suggest a split from the Karamojong due to differing cultural rituals and naming systems.

One significant stream of migration headed towards the areas around present-day Katakwi, Amuria, Soroti, and Kumi districts. These areas, with their suitable agricultural land and grazing

pastures, became core settlement areas for the Iteso. Oral traditions documented by researchers like Lawrance (1955) indicate that by the early 18th century, the Iteso were already firmly established in parts of what is now the Teso sub-region, specifically between 1652 and 1733. As the Iteso migrated and settled, they inevitably encountered other communities. In some areas, their arrival was peaceful, while in others, it may have involved conflict or displacement of earlier inhabitants. They interacted with Bantu-speaking groups like the Basoga and Bagwere, and other Nilotic groups like the Kumam and Lango.

According to Ogot (1999), the migration into the Tororo region, for instance, involved complex interactions with the Jopadhola. Some accounts suggest the Iteso arrived in Budama (part of Tororo) from Karamoja, initially settling at Magoro and Usuk before moving further south. The Iteso immigration into this area was reportedly leaderless and occurred in waves, particularly between 1700 and 1800. Initially, their presence did not bother the Jopadhola, but later, as their numbers grew, tensions and conflicts arose, eventually leading to distinct settlement patterns and, in some cases, forceful displacement, forcing some to migrate further south to districts like Iganga.

1.1.1c The Organization of the Iteso People living around Nyero Rocks (political, social and economic)

Politically, the Iteso were organized into clans known as Ateker, each governed by a council of elders. As observed by Buckley (2008) these clan councils (Etem), were headed by and composed of elders aged 40 and above, who played crucial roles in organizing the clan, maintaining law and order, settling disputes, and defending the clan against external threats. The Iteso society was decentralized, with power vested in the community rather than a central authority. This structure

reflects their status as a stateless society, where leadership was based on consensus and communal decision-making (Vincent, 1977).

With regards to social organisation, the Iteso have a rich cultural heritage, characterized by vibrant music, dance, and traditional attire. Their clothing, often adorned with beads and intricate patterns, reflects their aesthetic sensibilities and cultural identity. Rites of passage, such as initiation ceremonies, play a crucial role in marking transitions in an individual's life and are integral to preserving their traditions. The Iteso also have a strong oral tradition, with storytelling and folk music serving as vital means of transmitting history and cultural knowledge across generations (Vincent, 1977).

Economically, the Iteso practiced a mixed economy, engaging in cattle and crop farming, and barter trade with neighboring groups like the Luo and Bantu, and introduced crafts such as basket weaving, iron working, and beer brewing using millet and sorghum. In the early 20th century, the Iteso adopted the ox plow, enhancing their agricultural productivity. Cotton became a primary cash crop, though challenges such as market access and fair pricing affected its profitability (Kandel, 2015).

Despite this organizational structure, the Iteso faced significant challenges during the colonial period, particularly during the late 19th century when they were conquered by the Ganda under Kakungulu (Vincent, 1977). This conquest led to the loss of much of their traditional culture and organization, including the decline of the age-grade system and the clan-based governance structure. Additionally, their indigenous religion, which centered on the worship of gods like Akuj (the omnipotent god) and Edeke (the god of calamity), was largely replaced by Christianity (Vincent, 2018).

1.1.2 Theoretical Background

The theoretical background of this study in studying the effects of human activities on historical sites in Eastern Uganda, specifically Nyero Rock Painting, integrates several interdisciplinary approaches. This framework draws on theories from cultural heritage management, environmental impact assessment, and community-based conservation. By applying these theories, the study aims to understand the complex interactions between human activities and the preservation of cultural heritage sites. These theories include;

i) Historical Value Theory – Alois Riegl (1903)

Riegl's Historical Value Theory centers around the notion that the value of monuments or cultural objects is not inherent but is shaped by their historical significance. In his essay 'The Modern Cult of Monuments: Its Origin and Its Evolution (1903)', Riegl articulates two main types of value: age value (Altertumswert) and historical value (Geschichtswert). Specifically, the age value refers to the appreciation of an object's age and its connection to a distant past, while the historical value emphasizes the value that a monument gains due to its association with a historical period (Riegl, 1903; Riegl, 2008). In the context of this study, the value of the Nyero Rock Paintings can be examined through two primary lenses: age value and historical value.

The Nyero Rock Paintings in Kumi District, Uganda, provide a compelling case for applying Alois Riegl's Historical Value Theory (1903), which emphasizes the dynamic nature of value assigned to cultural monuments. Riegl's theory distinguishes between age value, based on the artifact's age

and ancientness, and historical value, which grows as a monument reflects the evolving historical context (Uche, 2009). In the case of Nyero Rock Paintings, their historical value has evolved significantly since 1950, especially as tourism and national identity movements have redefined their significance. The site's value has grown as a symbol of cultural heritage and resilience in post-colonial Uganda, reflecting both the enduring link to ancient African history and the modern importance of cultural preservation. Human interactions, particularly through tourism and development, have increased both the appreciation of the site and the risks to its physical integrity, demonstrating the tension between preservation and alteration that Riegl describes.

Riegl's theory also highlights the role of societal shifts in shaping historical value, and in the case of the Nyero Rock Paintings, the evolving political landscape has influenced how they are perceived. During the colonial era, the paintings were largely ignored or undervalued, but in the post-independence period, they gained national significance as symbols of indigenous identity. From 2000 to 2023, pressures from urbanization and economic development have added new complexities to their preservation. As Riegl suggests, the historical value of the paintings is not fixed but changes as human society interacts with it. Thus, the Nyero Rock Paintings exemplify how monuments gain value through the intersection of cultural memory, human activity, and historical consciousness, continually reshaped by the needs and values of each generation.

ii) Cultural Heritage Management Theory

The Cultural Heritage Management (CHM) theory has evolved through contributions from various scholars and practitioners in the field of heritage conservation and management. Hence, it is not attributed to a single individual as its sole developer. Instead, it has been shaped by the collective work of many experts over time, such as; John Henry Merryman, David Lowenthal, Randall

Mason, ICOMOS (International Council of Monuments and Sites), and UNESCO. The Cultural Heritage Management (CHM) provides a foundation for understanding the significance of preserving historical sites. CHM emphasizes the value of heritage sites as repositories of cultural identity and historical knowledge (Smith, 2015 p. 501-518). This theory underlines the need to balance preservation with sustainable use, ensuring that heritage sites are protected for future generations while allowing for their contemporary relevance and utilization. For the specific purpose of this study, this theory was relevant because it highlights the importance of heritage sites in representing the history, beliefs, and practices of past societies, strategies to maintain the integrity of heritage sites while accommodating modern needs and uses, evaluation of the historical, artistic, and cultural importance of the Nyero Rock Painting to justify conservation, and creating sustainable preservation plans that mitigate the adverse effects of human activities, such as controlled tourism and community involvement in site management.

iii) Environmental Impact Assessment Theory

Environmental impact assessment (EIA) is crucial for identifying and mitigating the effects of human activities on natural and cultural heritage sites. This theory is a contribution from numerous scholars, policymakers, and practitioners over several decades. These include; The U.S National Environmental Policy Act (NEPA) of 1969, Clifford A. Rechtschaffen and David L. Markell, Lawrence W. Canter and the United Nations Environment Programme (UNEP). EIA involves a systematic process of evaluating the potential environmental consequences of development projects and other human activities (Glasson et al., 2012). In the context of heritage sites, EIA helps to anticipate and manage the physical and ecological effects that threaten the preservation of these sites. This theory was significant because it recognizes the types and sources of environmental impacts caused by human activities, and implementation strategies to reduce or

eliminate adverse impacts on the environment on heritage sites for its specific application to Nyero Rock Painting. It helped in evaluating the specific effects of agricultural practices, urbanization, and tourism on the Nyero Rock Painting, as well as proposing measures such as erosion control, pollution reduction, and visitor management to protect the site.

iv) Community-Based Conservation Theory

Community-based conservation (CBC) is also a collaborative and evolving approach rather than the work of a single individual. It is the result of contributions from various scholars, practitioners, and organizations over several decades, combining insights from conservation biology, social sciences, and community development to create a holistic approach to conservation that benefits both biodiversity and local communities. These include; Western and Wright, International Union for Conservation of Nature (IUCN), United Nations Development Programme (UNDP), Elinor Ostrom, and Integrated Conservation and Development Projects (ICDPs). This theory emphasizes the involvement of local communities in the management and preservation of natural and cultural resources (Western & Wright, 1994 p.14-21). CBC is grounded in the belief that local communities have a vested interest in conserving their heritage and possess valuable knowledge and practices that can contribute to effective conservation.

The theory involves engaging local communities in decision-making processes related to heritage site management, and empowering communities through education and capacity-building to take an active role in conservation efforts. Its application to Nyero Rock Painting is relevant because it calls for efforts involving local residents in the conservation of the Nyero Rock Painting through participatory planning and management, and developing educational initiatives to raise awareness about the importance of the site and promote sustainable practices among the community.

Generally, this integrative approach combining these theoretical perspectives provided a comprehensive framework for studying the effects of human activities on the Nyero Rock Painting. This integrative approach allowed for a holistic understanding of the challenges and opportunities associated with preserving historical sites in the face of modern development pressures. Also, using insights from CHM, EIA, and CBC helped to analyze the multifaceted impacts of human activities on the Nyero Rock Painting. Lastly, it helped in developing multifaceted conservation strategies that address environmental, cultural, and social dimensions of heritage site preservation.

However, while these theories provided valuable frameworks for managing cultural heritage, assessing environmental impacts, and involving communities in conservation, they each have specific weaknesses and gaps that affected their effectiveness in protecting Nyero Rock Painting from the detrimental effects of human activities. For example, CHM theory often relies on Western-centric frameworks which did not fully align with the local cultural contexts and values associated with Nyero Rock Painting. This can lead to strategies that are not culturally sensitive or appropriate, potentially alienating local communities and overlooking indigenous knowledge and practices. Equally, there is limited public and local community involvement in EIA processes can result in a lack of comprehensive data and local insights. This can lead to decisions that do not fully consider the perspectives and needs of those most connected to the heritage site. Lastly, CBC relies heavily on the active participation and resource capacity of local communities, which can be variable and sometimes insufficient. Hence, the limited resources and expertise within the local community may hinder effective conservation efforts for Nyero Rock Painting. This study therefore believes that addressing these gaps requires a more integrated, culturally sensitive, and resource-adequate approach that balances local participation with expert guidance and long-term planning.

1.1.3 Conceptual background

Understanding the interplay between human actions and cultural heritage across time scales is examined through this work. Historical sites are repositories of cultural heritage and identity, providing insights into the past and forming a bridge to future generations. However, these sites are increasingly vulnerable to human activities, which often result in their degradation. The Nyero Rock Paintings, located in Kumi District, Eastern Uganda are very important, culturally, historically and artistically because these paintings bridge between past communities and today's people. However, some of these sites are subject to a larger variety of human activities that risk their integrity. This conceptual context places the study within wider discourses on cultural heritage preservation and opens a dialogue about the role of human involvement and shifting consequences of developmental changes.

The study focused on Kumi District in Eastern Uganda, a region characterized by significant cultural diversity and socio-economic transitions. The time frame of 1950–2023 encompassed key historical events, including Uganda's independence, socio-political upheavals, and contemporary globalization effects, all of which have influenced land use and cultural resource management (Kamuhangire, 1991). Also, "Historicising" entails examining historical developments and changes over time to understand their impact on cultural or environmental phenomena (Lowenthal, 1985). In the context of this study, it involved tracing the transformations in human interactions with the Nyero Rock Paintings from 1950 to 2023. By doing so, the research provides insights into the socio-economic, political, and environmental factors shaping the site's current status.

On the other hand, this study conceptualized human Activities and Historical Sites as both direct and indirect and pose a threat and a force of transformation to the Nyero Rock Paintings. These activities include agriculture, settlement expansion, vandalism, and infrastructure development (Agnew & Demas, 1998). In the case of Nyero Rock Paintings, farming activities around the site, combined with the use of rocks for domestic purposes, have accelerated the degradation of these ancient artifacts (Ssemugooma et al., 2020). Furthermore, inadequate protection measures and increased tourism without sustainable practices exacerbate the threats. Equally, historical sites are vital repositories of cultural and archaeological heritage, representing the values and traditions of past societies (Timothy, 1997). Hence, by examining past and present human activities, the research aimed to inform sustainable heritage management practices.

Key terms defined for this study include:

Cultural Heritage: The legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present, and bestowed for the benefit of future generations. This includes tangible heritage (such as the Nyero Rock Paintings themselves) and intangible heritage (such as oral traditions, rituals, and cultural practices associated with the site).

Human Activities: The various actions and practices carried out by people that interact with or affect the Nyero Rock Paintings and its surrounding environment. These include both direct activities (tourism, vandalism, farming, grazing) and indirect activities (urbanization, infrastructure development).

Historical Sites: Places that hold cultural, archaeological, or historical significance, serving as tangible evidence of past human activities and cultural expressions. The Nyero Rock Paintings are a prime example of such a site.

Historicising: The process of examining historical developments and changes over time to understand their impact on cultural or environmental phenomena. This study, it involves tracing the transformations in human interactions with the Nyero Rock Paintings from 1950 to 2023.

Community-Based Conservation: An approach to conservation that emphasizes the involvement of local communities in the management and preservation of natural and cultural resources, based on the belief that local communities have a vested interest in conserving their heritage.

1.1.4 Contextual Background

Generally, Eastern Uganda is a region rich in cultural and historical heritage, characterized by diverse landscapes ranging from the plains of Karamoja to the highlands of Mount Elgon. This region is home to numerous archaeological sites, including rock shelters and paintings, which provide valuable insights into the prehistoric cultures of the area. The Nyero Rock Painting site, located in Kumi District, Teso sub-region, is one of the most significant of these cultural treasures. Specifically, the rock painting is an exceptional example of African rock art, representing the artistic expression of early human communities in Eastern Uganda. These paintings, estimated to be between 2,000 and 4,000 years old, depict various motifs, including animals, geometric patterns, and anthropomorphic figures, which are believed to have symbolic and ritualistic meanings (Smith, 2018, p. 245-263). The site offers a unique glimpse into the social, spiritual, and economic life of the prehistoric communities that once inhabited the region.

As a declared national monument since 1972, Nyero exemplifies the need for active heritage management in Uganda. Overall, Nyero Rock Painting is a critical part of Uganda's cultural heritage, offering insights into the region's prehistoric communities and their artistic expressions. However, the influence of globalization and urbanization has become increasingly vital to understanding the contemporary challenges faced by heritage sites like Nyero Rock Paintings. For example, tourism dynamics in Uganda, accelerated by globalization, introduce both opportunities for economic growth and threats of environmental degradation, prompting a critical evaluation of sustainable practices (Harrison & Holtorf, 2020).

Understanding the factors affecting its preservation and the likely effects they could pose was essential for maintaining this link to the past. Correspondingly, this site's invaluable record of human expression and societal development in Eastern Uganda made its preservation a priority for cultural heritage and historical studies (Marchant, 2022, p. 39). Hence, the indigenous knowledge is vital for effective heritage conservation, with emphasis on programs that prioritise local environmental practices and cultural narratives in conservation strategies that argue efforts to protect the site, with modern scientific approaches, as supported by (Ostrom et al., 2019, p. 88). Hence, this study aimed to explore from a historical angle the existing human activities and their corresponding effects on this historical-cultural tourist site in Eastern Uganda.

1.2 Problem statement

Across the globe, historical sites face multifaceted threats from human activities, including encroachment, vandalism, tourism pressure, and climate change (Falk and Hagsten, 2024, p. 3). In East Africa and Uganda specifically, these challenges have resulted in notable physical damage and loss of cultural landscapes due to urbanization and agricultural expansion (Dinesha et al., 2023, p. 217), as observed in India. Specific threats observed at Nyero Rock Paintings, including

increased visitor numbers leading to wear and tear, and local agricultural practices causing soil erosion, underscore the urgent need for tailored preservation strategies. While existing studies on Nyero highlight threats like climate change and policy gaps (Nsibambi, 2018, p. 19; UNESCO, 2018), they do not adequately explore the specific community behaviors (activities), local economic pressures, and cultural practices that have contributed to these threats across the historical period under study. By historicising, documenting, and understanding these localized effects, this study aimed to reveal the unique human activities and related socio-economic landscapes driving the degradation of the Nyero Rock Paintings in the colonial and post-colonial periods. In so doing, it will facilitate the protection of Nyero Rock Painting for posterity through the development of effective, evidence-based conservation strategies to inform coordinated efforts among government agencies, conservation organisations, local communities, and stakeholders, ensuring the sustainable preservation of this critical cultural heritage for future generations.

1.3 General objective

To explore the effects of human activities on Nyero Rock Painting in Kumi District, Eastern Uganda, in the period 1950 – 2024.

1.3.1 Specific objectives

1. To explore the status of Nyero Rock Painting historical site by 1950.
2. To establish the current status of Nyero Rock Painting historical site.
3. To investigate the human activities that took place from 1950 to 2024 around Nyero Rock Painting historical site.
4. To assess the effect of human activities on Nyero Rock Painting historical site.

1.3.2 Research Questions

1. What was the status of Nyero Rock Painting historical site before 1950?
2. What is the current status of Nyero Rock Painting historical site?
3. What are the human activities that took place around Nyero Rock Painting historical site between 1950 and 2024?
4. What are the effects of human activities on Nyero Rock Painting historical site?

1.4 Scope of the study

1.4.1 Geographical scope

For the purpose of this study, Eastern Uganda formed the broader geographical context for the study. The region is characterized by its diverse cultural and historical heritage, including various archaeological and rock art sites. This region includes several districts, with Kumi District being a focal point for this study. The district is known for its significant archaeological sites, including the Nyero Rock Paintings. The district is part of the Teso sub-region and has a rural setting, which influences the types of human activities that impact historical sites. The district's socio-economic activities, such as agriculture and grazing, play a crucial role in understanding the local human impact on these sites (Kumi District Local Government, 2018). Specifically, Nyero Rock Painting symbolizes prehistoric rock art that holds cultural and historical importance (Uganda Ministry of Tourism, Wildlife and Antiquities, 2020). It was the primary focus of the study, examining how human activities such as tourism, agriculture, and settlement affect the preservation and condition of these ancient artworks. The site was also significant for understanding the broader context of rock art conservation in Uganda.

1.4.2 Content scope

The study focused on exploring the effects of human activities on historical sites in Eastern Uganda, specifically on Nyero Rock Painting in Kumi District. This is undertaken within the context of environmental history which aims at historicizing and documenting the change over the historical period: colonial and post-colonial period. This was primarily because of the need to document and understand the multifaceted impacts of human activities on historical sites, ensuring that effective measures are taken to preserve and protect cultural heritage for future generations. Specifically, the content of the study was based on three objectives, which helped the study to understand the human impacts in the study area, their impact, and possible solutions to conservation and management strategies to mitigate adverse effects.

1.4.3 Time scope

The time scope for this study was from 1950 to 2024. This time scope encompassed significant historical, social, and environmental changes that have impacted the site. For example, colonial and post-colonial political and social changes in land policies and ownership structures affected rural and peri-urban areas, including regions around historical sites like Nyero. These reforms sometimes led to increased agricultural activities and land clearing, impacting the conservation of historical sites (Kyemba, 2016). Similarly, agricultural expansion and urbanization that have been primary drivers of land-use change, often encroaching on protected areas, including historical sites (Dinesha et al., 2023, p. 217). Therefore, the chosen time scope allowed for an in-depth understanding of how human activities have evolved and their cumulative impacts on the Nyero Rock Painting site, highlighting the interplay between historical events, policy changes, and socio-economic development over more than seven decades.

1.5 Justification of the study

This study was justified by the need to document and understand the multifaceted impacts of human activities on historical sites, ensuring that effective measures are taken to preserve and protect cultural heritage for future generations. Generally, the study provided room to understand the historical and cultural significance of Nyero Rock Painting, which scholars have described as a critical part of Uganda's cultural heritage, offering insights into the region's prehistoric communities and their artistic expressions (Okello et al., 2020). Understanding the factors affecting its preservation was essential for maintaining this link to the past. Similarly, the cultural heritage value attached to Nyero Rock Painting was an invaluable record of human expression and societal development in Eastern Uganda, making its preservation a priority for cultural heritage and historical studies (Marchant, 2022 pp. 39-114). Also, the increasing human impact of the site in Eastern Uganda has undergone significant demographic and socio-economic changes since 1950, resulting in increased human activity around historical sites. Coupled with the rapid population growth and urbanization in the region, these have led to increased encroachment on historical sites, intensifying pressures on the Nyero Rock Painting (UN-Habitat, 2019). More notably, the study was significant because the study period (1950-2024) covered a time of substantial agricultural and industrial development, which has affected land use patterns and environmental conditions around historical sites.

Similarly, the extensive agricultural practices and industrial activities have transformed the landscape, leading to habitat destruction, soil erosion, and pollution, all of which threaten the integrity of rock paintings (Tumusiime, 2018). Human activities, including vandalism and tourism, have direct and often detrimental effects on historical sites. While tourism can promote awareness, it can also lead to physical degradation if not properly managed. Uncontrolled tourism can result

in damage to the paintings through physical contact and environmental wear (Akello, 2020). Equally, changes in climate conditions have accelerated the deterioration of rock surfaces and paintings, making it crucial to study these impacts in the context of ongoing human activities (Chirikure, 2020). Lastly, because of the need for valuable insights into the effectiveness of current conservation policies and practices, highlighting areas where improvements are needed, this study was justifiable because it explored the impacts of human activities on the Nyero Rock Painting, which can inform better conservation strategies and policy-making, ensuring the protection of Uganda's cultural heritage (Peterson, 2016).

1.6 Significance of the Study

i) To the surrounding community and the country

The study could contribute to Cultural Preservation. Understanding the effects of human activities on historical sites like Nyero Rock Painting is crucial for preserving Uganda's rich cultural heritage. By identifying the specific threats and impacts, conservation efforts can be targeted more effectively to safeguard these invaluable assets for future generations.

It could contribute to broader environmental conservation efforts by highlighting the interconnectedness between human activities and the degradation of natural and cultural landscapes. Addressing the factors that endanger historical sites, such as agricultural encroachment and pollution, it supports sustainable land management practices and biodiversity conservation in Eastern Uganda.

It could contribute to socio-economic development. Historical sites like Nyero Rock Painting have the potential to contribute to local economies through tourism and cultural heritage preservation initiatives. By understanding the impacts of human activities on these sites, policymakers and

stakeholders can develop strategies to promote sustainable tourism while mitigating negative socio-economic and environmental consequences.

The study could further promote community engagement and empowerment. Engaging local communities in the study and preservation of historical sites fosters a sense of ownership and pride in their cultural heritage. By involving community members in conservation efforts and raising awareness about the importance of protecting these sites, the study promotes social cohesion and empowerment in Eastern Uganda.

Similarly, it could help the government in policy formulation and implementation. The findings of the study can inform the development and implementation of policies and regulations aimed at conserving historical sites and mitigating the impacts of human activities. By providing evidence-based insights into the drivers of degradation and effective conservation strategies, policymakers can enact measures to ensure the long-term sustainability of cultural heritage in the region.

ii) To the researcher

It could help the researcher in terms of professional growth, contribution to knowledge, networking opportunities, personal fulfillment, career advancement, and personal interest. Engaging in this research not only enriches the researcher's understanding of heritage conservation and environmental sustainability but also offers avenues for personal and professional development.

iii) To other researchers

The study could contribute to academic knowledge by providing empirical evidence of the effects of human activities on historical sites in Eastern Uganda. It adds to the body of research on cultural heritage conservation, environmental management, and sustainable development, thereby enriching scholarly discourse and informing future studies in related fields.

Conclusively, the study on the effects of human activities on historical sites in Eastern Uganda, focusing on Nyero Rock Painting, holds significant implications for cultural preservation, environmental conservation, socio-economic development, community engagement, policy formulation, and academic research. By addressing these dimensions, the study contributes to the broader goal of promoting sustainable heritage management and ensuring the continued protection of Uganda's cultural legacy.

1.7 Conceptual framework

The conceptual framework below guided the investigation into the strategies for effective cultural heritage management and conservation of Nyero Rock Painting in Kumi District, Eastern Uganda. This addressed the guiding questions of the study: (i) What was the status of Nyero Rock Painting historical site before 1950? (ii) What is the current status of Nyero Rock Painting historical site? (iii) What are the human activities that took place around Nyero Rock Painting historical site between 1950 and 2024? and (iv) What are the effects of human activities on Nyero Rock Painting historical site? The independent variable was human activities such as agricultural activities, urbanization, infrastructure, tourism activities, and cultural and religious practices. These are the primary drivers of change at the Nyero Rock Painting historical site, directly impacting its physical condition, cultural significance, and accessibility.

The relationship was typically negative, as most human activities, if unmanaged, result in degradation. The dependent variable was the status of Nyero Rock Paintings, which includes: the physical condition of the paintings, site accessibility, and cultural and historical integrity. These reflect the outcome of both human activities and conservation efforts, indicating whether the site is being successfully preserved for future generations. The intervening variables were the

conservation strategies, such as policy implementation, community engagement, education, and awareness. These are mitigating actions that aim to reduce or eliminate these impacts.

The above variables demonstrated a cause-and-effect relationship between human activities, the current status of the Nyero Rock Paintings, conservation strategies, and the goal of effective cultural heritage management and conservation.

Human activities were the initial factor influencing the state of the Nyero Rock Paintings. These include tourism, deforestation, and vandalism. While tourism offers economic benefits and promotes cultural appreciation, it can lead to overcrowding and physical damage to the site. Deforestation around the area contributes to environmental degradation, while vandalism directly harms the paintings. Together, these activities pose significant threats to the preservation of the site. The status of the Nyero Rock Paintings reflects the impact of these activities. Visible effects include fading colors, cracks in the rock surface, and accelerated deterioration. This declining state highlights the urgent need for targeted interventions to protect this important cultural heritage. Conservation strategies play a critical role in mitigating the adverse effects of human activities. Strategies such as installing fences to restrict access, placing educational signage to inform and guide visitors, and engaging local communities in protection efforts are vital. These measures not only reduce direct harm but also raise awareness about the site's cultural and historical significance.

Clearly, when these elements work together effectively, they lead to effective cultural heritage management and conservation of the Nyero Rock Paintings. This outcome ensures the site's long-term preservation, enhances tourist satisfaction, and safeguards its cultural significance for future generations. In summary, while human activities pose significant threats to the Nyero Rock Paintings, well-implemented conservation strategies provide a pathway to address these

challenges, ultimately achieving sustainable management and conservation of this invaluable cultural heritage.

1.8 Theoretical framework

This study was guided by two theoretical frameworks in heritage conservation and human-environment interaction, namely:

Cultural Landscape Theory. This theory is associated with Sauer (1889-1975), in his influential 1925 work *'The Morphology of Landscape'*. Over time, this theory was developed and expanded within the context of World Heritage studies and landscape heritage management, particularly by organizations such as UNESCO scholars like Taylor and Lennon (2011), offering a critical lens through which to understand the historical transformation of heritage sites like the Nyero Rock Paintings. Rooted in the disciplines of geography and heritage studies, this theory conceptualizes landscapes as dynamic entities shaped by the interaction of natural processes and human cultural practices over time. It recognizes that sites of historical and cultural significance, such as Nyero, do not exist in isolation but are part of broader cultural landscapes that reflect the values, beliefs, and activities of the communities that inhabit them. Therefore, this framework was particularly relevant to the study of Nyero Rock Paintings, which have undergone various phases of interaction with local populations, tourists, and government interventions from 1950 to 2023. The theory allowed for an exploration of how activities like farming, religious rituals, tourism, and informal settlements have influenced the site's physical and cultural dimensions.

By framing the Nyero site as a cultural palimpsest, Cultural Landscape Theory facilitated a deeper understanding of how human presence has both preserved and compromised its integrity over time. As Mitchell, Rössler, and Tricaud (2009) argue, managing such landscapes requires balancing

conservation with the recognition of evolving cultural practices, while Taylor and Lennon (2011) emphasize the need to bridge nature and culture in heritage management through landscape-based approaches.

Political Ecology Theory. This theory emerged in the 1970s and 1980s and was initially shaped by the works of Piers Blaikie (1942-2022) and Harold Brookfield (1926-2022), particularly in their 1987 book *Land Degradation and Society*, which examined how socio-political factors contribute to environmental degradation. This theory complements this study by focusing on the socio-political and economic forces that underpin environmental and cultural change. This theory examines how power dynamics, institutional decisions, and economic structures influence human interactions with the environment, often leading to degradation or contested resource use. In the context of Nyero Rock Paintings, Political Ecology provided a framework to understand how broader structural factors such as post-colonial land policies, governance challenges, development pressures, and community disenfranchisement have affected the site. For instance, land use changes driven by agricultural expansion, urbanization, and infrastructural development can be analyzed not merely as ecological events but as outcomes of political and economic decision-making. Political Ecology thus enabled a deeper examination of why and how degradation has occurred, shedding light on the roles of government institutions, local communities, and external actors in either preserving or threatening the site.

As Bryant and Bailey (1997) assert, environmental issues in the Global South including Uganda, are often closely tied to power inequalities and historical injustices, while Robbins (2012) highlights the need for critically examining who benefits and who bears the costs of environmental change. Applying this theory allowed this study to move beyond descriptive accounts of damage

to a critical analysis of the underlying systems and actors responsible for shaping the site's fate over the decades.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section focuses on critically examining prior by synthesizing existing literature from diverse sources across different regions of the world, Africa and specifically Uganda regarding the phenomenon under study. The review highlights key themes, debates, and methodologies while underscoring the contributions and limitations of existing scholarship. This systematic approach not only strengthens the rationale for the research but also ensures alignment with established frameworks, enhancing the study's academic credibility. This literature review was structured in a way that allowed the research to situate itself within the broader field, drawing insights to inform its objectives. It also drew attention to areas where further investigation is needed, justifying the originality and necessity of the proposed study.

2.1 The status of Rock Paintings historical sites by 1950

World over, rock painting historical sites are among the oldest and most significant cultural artifacts, reflecting the continent's rich prehistoric heritage. In Africa, Bleek and Lloyd (1911) assert that these artworks, primarily created by early hunter-gatherer communities, predate recorded history and offer insights into ancient societies' spiritual, social, and environmental interactions. Hence, before 1950, rock art sites were sparsely documented, primarily by European explorers, missionaries, and early archaeologists. Their understanding of these sites was limited and often marred by Eurocentric interpretations.

Although rock paintings in Africa can be categorized into geometric and figurative styles, these however represent different periods and cultural contexts. Bleek and Llioyd (1911) observed that

primary regions of importance include; Southern Africa, where the San people, indigenous hunter-gatherers, created extensive rock art in South Africa, Namibia, and Botswana. Equally, paintings at sites like Drakensberg and Tsodilo Hills reflect spiritual practices, including shamanistic rituals. By 1950, colonial interest had led to some documentation, but little effort was made toward conservation. Early studies by Bleek and Lloyd (late 19th century) described the San's lifestyle but did not emphasize the preservation of rock art. In other parts, such as North Africa (Sahara region), particularly in Algeria (Tassili n'Ajjer) and Libya (Acacus Mountains), rock art features date back over 10,000 years (Ssemanda and Ddamulira, 2019). The art depicts large fauna, human activities, and symbolic motifs. Early explorers such as Henri Lhote documented these sites, interpreting them as evidence of a "lost civilization," reflecting a Eurocentric lens rather than understanding their cultural significance. Equally, UNESCO (1980) noted that East Africa's rock art, primarily geometric and abstract, is attributed to early hunter-gatherers like the Twa people. Sites such as Kondoa (Tanzania) and Nyero (Uganda) showcase paintings likely linked to spiritual or ritualistic practices. Before 1950, these sites were recognized locally but were largely unknown to the broader archaeological community.

Focusing specifically on Nyero, Ssemanda and Ddamulira (2019) provide the most comprehensive study of these paintings, describing them as geometric and attributed to the Twa people, who likely used them for ritualistic purposes. The authors note that local oral traditions kept the history of these sites alive, but formal documentation only began with colonial explorers and missionaries. Early mentions of Nyero emerged in colonial reports, which identified the site as a curiosity rather than a cultural treasure. The Eurocentric perspective of these reports often dismissed the indigenous knowledge and significance of the paintings.

Namono (2010, 2018) has made significant contributions to understanding Nyero's cultural significance. In her work, she emphasizes that among the Iteso and other communities in the area, the rock paintings were integrated into spiritual and social practices. However, the colonial administration regarded these traditions as superstitions, further marginalizing the cultural importance of the sites. Namono (2010) also notes that before 1950, no formal measures were in place to preserve rock art sites in Uganda. Local communities' reverence for the sites provided some protection, but colonial infrastructure developments, such as roads and settlements, began to threaten their integrity.

Nelson (1990) further documents the integration of Nyero into the spiritual and social fabric of the Iteso people, describing how the site was used for healing, fertility rites, and other ritualistic practices. This finding is crucial for understanding the status of the site before 1950, as it demonstrates that Nyero was not merely a passive location but an active center of cultural and spiritual life.

The documentation of Nyero before 1950 is also found in colonial administrative records. Lawrance (1955), in his study of the Iteso, makes passing reference to the rock paintings, noting that they were known to local communities but not formally studied or protected. This colonial indifference to indigenous heritage sites reflects broader patterns across Africa, where European administrators often viewed such sites as curiosities rather than valuable cultural resources deserving protection.

2.2 The current status of historical sites

Across the globe, historical sites serve as tangible links to our past, offering insights into the cultures, societies, and technological advancements of previous civilizations. Related studies

conducted in Asia, indicate that Angkor Wat, located in Cambodia, is one of the largest religious monuments in the world and a pinnacle of Khmer architecture. The site has a rich history, architectural grandeur and sophisticated water management systems that supported the surrounding urban area (Coe, 2003 p. 50). Damian Evans in his 2016 study on airborne laser scanning, revealed the extensive and intricate infrastructure that underpinned Angkor Wat's development, further illustrating the complexity of the Khmer civilization (Evans, 2016 p. 96). This is very close to the religious and cultural importance of Angkor Wat, tracing its evolution from a Hindu temple to a Buddhist site (Higham, 2001 pp. 70-115). Further studies especially in Europe, identify the Colosseum in Rome, which stands as a testament to Roman engineering and social life. Several scholars for example Hopkins (2011), stressed the architectural innovations that made the construction of the Colosseum possible and its role as a venue for public spectacles, including gladiatorial contests and mock sea battles. Indeed, Coarelli (2001) places the Colosseum within the broader context of Roman urban development, discussing the conservation challenges posed by modern urbanization.

Furthermore, in North America, Chichen Itza, a major Mayan city in Mexico, is famous for its iconic pyramid, El Castillo, and its complex of temples and ball courts. Linda Schele and David Freidel's "*A Forest of Kings*" examines the city's role as a political, economic, and cultural hub, with a focus on its intricate iconography and architecture (Freidel, 2001 p. 266). Similarly, Aveni (2001), provides an in-depth analysis of the astronomical alignments of Chichen Itza's structures, highlighting their significance in Maya cosmology and calendar systems. In other parts of South America, existing studies indicate that Machu Picchu, the Incan citadel in Peru, is celebrated for its architectural ingenuity and its scenic location in the Andes. This site's construction, purpose, and historical significance are unique in a way that they help in tracing its rediscovery by Hiram

Bingham in 1911 (Burger, 2004 pp. 218-225). Michael E. interestingly, the broader context of Incan civilization, are worthy discussing, given the fact that there were outstanding technological advancements and societal structures that made Machu Picchu possible (Moseley, 2001).

In other parts of the world for example Oceania, the Easter Island, or Rapa Nui, is best known for its Moai statues, which have intrigued scholars and visitors alike. Scholars for example, Diamond (2005) explored the environmental and societal factors that contributed to the island's collapse, providing a cautionary tale about resource management. Also, Hunt & Lipo (2011) challenge traditional theories about the transportation of the Moai, presenting new evidence and interpretations of Rapa Nui's history. This explains why detailed studies for example Jo Anne Van Tilburg's *Easter Island: Archaeology, Ecology and Culture*, offers a comprehensive overview of the island's archaeological record, emphasizing the cultural significance of the Moai statues (Van Tilburg, 1994 p.15).

In Africa, the Great Zimbabwe, an ancient city in present-day Zimbabwe, is renowned for its impressive stone structures and as a symbol of the Shona civilization. Existing studies on this historical area indicate the socio-political and economic contexts of Great Zimbabwe, examining its rise and eventual decline (Pikirayi, 2001). Additionally, the site is also famously known for its unique agricultural practices and trade networks that sustained the city, providing a comprehensive understanding of pre-colonial urbanization in Southern Africa (Huffman, 2007 p. 256).

In the East African context, existing studies stress that the region is home to numerous historical sites that reflect its rich cultural heritage and diverse history. For example, Lamu Old Town, in Kenya, is one of the oldest and best-preserved Swahili settlements in East Africa, reflecting the cultural heritage of the Swahili people. The UNESCO World Heritage site has been the subject of

various studies focusing on its architecture, urban structure, and cultural significance. Historically, the site was a major trading center in the Indian Ocean, with its architecture reflecting a blend of African, Arab, and Indian influences, making it a unique representation of Swahili culture (Sheriff, 1987, p. 115). Although the site has faced and continues to face several challenges, including modern development pressures and environmental threats, efforts to preserve its unique architecture and cultural heritage have been ongoing, with initiatives aimed at maintaining traditional building techniques and materials (National Museums of Kenya, 2011). Among other interesting sites in East Africa, Kilwa also has significant prominence as a Swahili city-state, with its economic prosperity from trade, and its historical monuments, such as the Great Mosque and the Husuni Kubwa palace (Chittick, 1974, p. 15).

In other related studies, Fort Jesus in Mombasa, Kenya, is a UNESCO World Heritage site and an exemplary model of Portuguese military architecture in Africa. The site was built by the Portuguese in the late 16th century to protect their trade route to India. Over the years, it has been a focal point in the history of the region, witnessing numerous battles and changes in control between the Portuguese, Omani Arabs, and British (Kirkman, 1974, p. 46). This explains why the fort is relatively well-preserved compared to other sites in the region. Specifically, the National Museums of Kenya oversees its maintenance, focusing on both structural integrity and historical education for visitors (National Museums of Kenya, 2011). Furthermore, and although not geographically part of East Africa in the narrow sense, Lalibela in Ethiopia is often included in discussions related to this phenomenon, due to its historical and cultural ties with the broader region. Lalibela is renowned for its rock-hewn churches, which are significant examples of medieval Christian architecture. Studies indicate that the rock-hewn churches of Lalibela, were created during the reign of King Lalibela in the 12th century (Phillipson, 2009 pp. 120-155),

attracting conservation efforts to maintain the site's structural and cultural integrity (UNESCO, 2010).

In the Ugandan context, the country is rich in historical and cultural heritage, boasting numerous sites of archaeological, architectural, and cultural significance. Kasubi Tombs, a UNESCO World Heritage Site, are the burial grounds for the Kabakas (kings) of Buganda and are an important cultural symbol for the Buganda Kingdom. Lwanga-Lunyiigo (1995), historicized the tombs as being established in 1882, and are a prime example of traditional Ganda architecture. They also serve as a cultural and spiritual center for the Baganda people, hence preserving the heritage of the Buganda Kingdom. Sadly, the tombs suffered significant damage from a fire in 2010. Efforts to restore and preserve the site have been led by UNESCO and the Buganda Kingdom, focusing on maintaining traditional construction techniques (UNESCO, 2011). Despite these efforts, the site continues to face challenges such as funding limitations and the need for ongoing maintenance (Kigongo & Reid, 2007).

Furthermore, related studies have identified Bigo Bya Mugenyi as an archaeological site in Western Uganda, believed to be the remains of an ancient capital of the Bachwezi dynasty. Historically, the site consists of earthworks, ditches, and mounds, indicative of a sophisticated society. Research by Robertshaw and Taylor highlights its significance in understanding the history and social organization of the Bachwezi (Robertshaw & Taylor, 2000). Although the site is relatively well-preserved. Previous studies by Robertshaw (1997 p.1), show that the site faces threats from agricultural encroachment and lack of comprehensive preservation strategies. Efforts by the Uganda Museum and local authorities aim to protect the site, though more extensive resources and support are needed. Similarly, Mparo Tombs in Western Uganda, have historically

stood as the burial grounds of Omukama Kabalega, a prominent king of Bunyoro-Kitara Kingdom who resisted British colonial rule. Over the years, the tombs have served as a significant cultural site for the Banyoro people. The site represents the resilience and cultural heritage of the Bunyoro-Kitara Kingdom (Karugire, 1971), and are maintained by the Bunyoro-Kitara Kingdom, with efforts focused on preserving the traditional structures and promoting cultural tourism. However, just like other historical sites in the country, Mparo Tombs also face challenges such as funding constraints and environmental degradation (Bunyoro-Kitara Kingdom Heritage Trust, 2010).

Like the above, Fort Patiko, also known as Baker's Fort, established by Sir Samuel Baker in the 19th century during his expedition to end the slave trade in Northern Uganda. For several years now, the fort serves as a reminder of the colonial history and efforts to combat the slave trade in the region (Kabwijamu et al., 2025). Baker's accounts provide a detailed description of the fort's construction and its role in his anti-slavery campaign (Baker, 1866). Interestingly, local authorities and historical societies are working to preserve the site, with a focus on promoting it as a historical tourist destination (Northern Uganda Tourism Development Plan, 2015).

Critically, Nyero Rock Paintings, this study's focus, located in Eastern Uganda, have been documented as a collection of ancient rock art dating back to the Later Stone Age. Earlier scholars for example, Posnansky (1967) and Cole (1963) highlight that the paintings are significant for understanding the early human settlement and cultural expressions in the region. Specifically, the symbolism and artistic techniques used in these rock paintings, link them to broader African rock art traditions. Further existing studies on this site indicate that although it is protected under Ugandan law, the site still faces challenges such as weathering, vandalism, and inadequate visitor

facilities. This has attracted conservation efforts, with a focus on raising awareness and promoting sustainable tourism to protect the paintings (Uganda National Commission for UNESCO, 2012).

Generally, the reviewed literature on this objective highlights the rich historical and cultural significance of various historical sites in different parts of the world. These sites, while vital for cultural heritage and identity of several communities especially in areas where they are found, face numerous preservation challenges. These among others include; environmental threats, funding limitations, and modern development pressures. Ongoing efforts by national and international bodies are crucial to safeguarding these sites. Further still, enhanced research, conservation strategies, and sustainable tourism initiatives are essential to address these challenges and ensure that the invaluable links to our past are preserved for future generations.

2.3 The human activities taking place around historical sites

Historical sites around the world serve as crucial touchstones for cultural heritage, providing insights into past civilizations and serving as ongoing symbols of cultural identity. Human activities at these sites, including tourism, archaeological research, and cultural practices, play a significant role in both their preservation and degradation. This literature review explores these activities at historical sites globally, with specific focus on Africa, East Africa, and Uganda, drawing on various studies to understand their impacts and challenges.

Globally, existing studies indicate that tourism is one of the most prevalent human activities at historical sites worldwide, offering substantial economic benefits while also posing significant risks to the preservation of these sites. Poria et al. (2003) argue that tourism can lead to physical wear and tear, pollution, and the commodification of cultural heritage. While tourism generates essential revenue for site maintenance and local economies, it also requires careful management

to mitigate its negative effects. For instance, Machu Picchu in Peru faces erosion and structural damage due to the high volume of tourists, underscoring the need for sustainable tourism practices (Moseley, 2001). Renfrew and Bahn (2012) emphasize that excavation and research activities can disturb the contextual integrity of sites, necessitating a balance between research and preservation.

In other areas, extensive archaeological work for example at Pompeii, Italy, provides invaluable insights into Roman life but also presents challenges in site management and conservation (Laurence, 2012). Amidst these challenges, historical sites often remain active venues for cultural practices and rituals, reflecting their enduring significance to local communities. Sullivan (1998) notes that such practices can both preserve and transform these sites, highlighting the dynamic relationship between heritage and living cultures. For example, Angkor Wat in Cambodia continues to be an active religious site, with local monks conducting rituals and ceremonies. This underscores its cultural importance but also requires careful management to prevent damage (Higham, 2001, p. 70).

In Africa, tourism at historical sites brings both opportunities and challenges. Studies on this phenomenon by Sinclair-Maragh, Gursoy, and Vieregge (2015) explore how tourism at sites like the Great Zimbabwe supports local economies but can also lead to degradation if not managed properly. This dual impact highlights the need for sustainable tourism strategies that balance economic benefits with the preservation of cultural heritage. Other studies have also indicated that Africa's rich archaeological heritage attracts significant research interest, which can influence site preservation positively and negatively. Lane (2011) discusses the dual role of archaeological research in preserving and potentially damaging historical sites, stressing the need for ethical research practices. The continent's diverse archaeological sites require careful handling to ensure

their long-term preservation and the respectful treatment of their cultural significance. Most importantly, many African historical sites continue to play crucial roles in the cultural and religious lives of local communities. Schmidt and McIntosh (1996) highlight how sites like the Timbuktu Manuscripts in Mali are integral to cultural identity but face threats from conflict and neglect. As a result, these sites need protection not only from physical threats but also from the impacts of sociopolitical instability.

For the case of East Africa, studies have shown that tourism is a significant economic activity but poses threats to the integrity of historical sites. Akama (1999) discusses the impact of tourism on sites like Lamu Old Town in Kenya, noting the need for sustainable practices to mitigate negative effects. This highlights the importance of implementing tourism policies that protect historical sites while benefiting local communities. It is on this ground that some scholars such as Reid (2002) examine how archaeological research at sites such as the Olduvai Gorge contributes to knowledge but also raises concerns about preservation. This calls for the balance between research and conservation, to maintain the historical integrity of these sites. Most importantly, the cultural importance of these sites is relevant, as explained by Mutibwa (1992) who explored how cultural rituals at sites like the Namugongo Martyrs Shrine in Uganda maintain their relevance but also necessitate careful management to prevent damage. This underscores the need for policies that respect and integrate cultural practices while ensuring site preservation.

In the wider Uganda, tourism is a growing activity at many historical sites, offering economic benefits and conservation challenges. Namono (2010) discusses the impact of tourism on sites like the Nyero Rock Paintings, highlighting the need for sustainable tourism strategies to protect these ancient artworks. The development of tourism infrastructure should prioritize the conservation of

these culturally significant sites. This is chiefly because Uganda's historical sites attract considerable archaeological research, which can influence their preservation. Robertshaw (1997, p.2) highlights how archaeological activities at sites like Bigo Bya Mugenyi contribute to historical knowledge but also raise preservation issues. Ethical research practices and collaboration with local communities are essential for balancing research and conservation needs. Similarly, cultural practices at Ugandan historical sites are vital for maintaining cultural heritage although they also in some instances pose preservation challenges. Kigongo and Reid (2007) examine how the ongoing use of the Kasubi Tombs for royal ceremonies requires balancing cultural traditions with conservation needs. This illustrates the complex interplay between maintaining cultural practices and ensuring the physical preservation of historical sites.

Specifically, Nyero Rock Paintings in Uganda, located in the Kumi District, are one of the most significant examples of rock art in East Africa. These paintings, which date back to the Later Stone Age, offer valuable insights into the cultural and spiritual lives of early human communities. This essay explores the various human activities associated with the Nyero Rock Paintings, including tourism, archaeological research, and cultural practices, highlighting their impacts on the preservation and understanding of this historical site. Tourism is a major activity at these rock paintings, providing economic benefits to the local community while also posing challenges to the site's preservation. Studies such as Namono (2018, p. 189), discuss how the influx of tourists to the Nyero Rock Paintings has increased awareness and appreciation of the site. However, the physical presence of visitors can lead to wear and tear on the rock surfaces, potentially damaging the delicate paintings.

On another note, further studies add that to mitigate the negative impacts of tourism, sustainable tourism strategies are essential. Namono (2018, p. 189) emphasizes the importance of implementing measures such as controlled access, guided tours, and educational programs to ensure that visitors understand the significance of the site and the need for its preservation. This will widen archaeological research on the site. Interestingly, researchers like Posnansky (1967) have documented African paintings, analyzing their symbolism and artistic techniques. This research has linked the Nyero Rock Paintings to broader African rock art traditions, providing insights into the cultural and spiritual beliefs of the communities that created them.

Clearly, the reviewed literature on this objective illustrated the diverse human activities at historical sites globally and within Africa, East Africa, and Uganda. While tourism, archaeological research, and cultural practices significantly contribute to the preservation and understanding of these sites, including Nyero Rock Paintings, they also pose substantial challenges. Sustainable management practices and ethical considerations are crucial for ensuring that historical sites are protected and respected for future generations.

2.4 The effect of various human activities on rock paintings and historical sites

Globally, the effect of human activities on rock paintings and historical sites is profound, with tourism among the most significant contributors to their degradation. Increased tourism brings benefits, including funding for conservation and raising public awareness, but it also accelerates physical deterioration. Unregulated foot traffic, littering, and the accumulation of oils from human touch can harm the surface of rock paintings, especially in heavily visited sites. According to Deacon (2006 p.30-39), South African rock art sites suffer substantial erosion and pigment fading due to tourism, while Coddington (2019) highlights similar challenges in African heritage

conservation, where increased access for tourists has caused noticeable damage over time. While tourism can raise awareness about the need to preserve cultural sites, it paradoxically risks degrading them if unaccompanied by protective measures. In other countries such as Tanzania, its Kondoa Rock Art Sites, unregulated visitor traffic has accelerated erosion, while oils from human contact have negatively impacted pigments and rock surfaces (Gwasira, 2015 pp. 63-75). Similarly, in Uganda, Bwindi's rock paintings face similar issues, where increased tourism has led to physical and chemical wear, emphasizing the need for sustainable tourism practices that prioritize both heritage preservation and visitor engagement (Nuwagaba, 2017 pp. 45-60).

Urbanization and infrastructure development further threaten the integrity of rock paintings and historical sites, particularly those located near expanding urban areas. As cities grow, land clearance and excavation alter the natural environment around these sites, leading to structural damage from pollution and vibrations from machinery. Muringaniza (2006 pp. 203-215) observes that rock art sites in Zimbabwe face an increased rate of physical and chemical weathering due to nearby construction activities. Blundell (2007) also documents that Kenyan rock art sites are experiencing accelerated deterioration because of urban expansion, which often prioritizes development over conservation. For example, the Thimlich Ohinga archaeological site suffers from nearby construction activities, leading to soil destabilization and pollutants that damage the rock surfaces (Mwangi, 2016 pp. 77-89). In Uganda, the rock art of Bweyore is similarly affected, where the proximity to urban development has introduced increased structural pressures on the rocks, emphasizing the need for strict zoning regulations around heritage sites to mitigate urban encroachment (Namono, 2018 pp. 189-202).

Agricultural encroachment is another significant issue affecting rock paintings and historical sites, especially in rural regions. As land becomes more valuable for cultivation, farmers often encroach upon protected areas, which leads to soil erosion and increased exposure of rock surfaces to sunlight, rainfall, and runoff. This exposure speeds up the natural weathering processes, degrading these sites at a faster rate. For example, Ouma (2018 pp. 115-128) reports that rock art sites in Northern and Eastern Uganda are increasingly vulnerable due to agricultural practices that leave them exposed to natural elements and runoff from pesticides and fertilizers, which introduce harmful chemicals to rock surfaces. Equally, Migisha (2020 pp. 84-98) observed that rock paintings in Kakoro have been increasingly exposed to runoff from fertilizers and pesticides, which has led to accelerated weathering and pigment loss. This suggests that conservation efforts must consider the pressures of agricultural expansion, especially in areas with high food insecurity.

Vandalism and graffiti further contribute to the degradation of these valuable cultural resources. Clearly, vandalism, whether intentional or unintentional, involves defacing or painting over rock art, which not only destroys the aesthetic and cultural significance of these sites but also introduces foreign substances that react with ancient pigments, accelerating degradation. Ndoro (2001 p. 59) highlights that heritage sites in southern Africa suffer frequent vandalism and graffiti, often due to a lack of community awareness and involvement. Smith (2018 p. 245) suggests that local engagement and education programs are crucial in reducing vandalism, as they foster a sense of ownership and responsibility among community members, leading to better preservation outcomes. For studies in Kenya indicate that the rock art in the Laikipia Plateau region is frequently defaced by both visitors and locals, compromising the artwork's cultural significance and introducing foreign substances that interact chemically with the pigments (Odede, 2016 p. 211). Similarly, Uganda's Nyero Rock Paintings face challenges from vandalism and graffiti, which

destroy the aesthetic and historical value of these sites. Research indicates that community-based initiatives and educational programs are essential in preventing these acts by fostering a sense of stewardship among local communities and promoting responsible tourism (Nuwagaba, 2017 p. 45).

Equally, much as archaeological research is crucial for uncovering and understanding historical sites, this can also result in unintended damage. For example, Excavations and other research activities can disturb the site's context and integrity if not conducted responsibly. At Pompeii, for example, extensive archaeological work has provided great insights but also posed challenges for site management and conservation (Laurence, 2012). This however co-exists with the positive impact of research on these sites, which contributes to the documentation and preservation of historical sites, providing invaluable information about past cultures and civilizations. It can also help develop more effective conservation strategies (Renfrew & Bahn, 2012).

Similarly, cultural practices at historical sites highlight their ongoing relevance, in maintaining the living heritage of historical sites, ensuring that they remain relevant to contemporary communities. These practices can foster a sense of ownership and responsibility for site preservation (Sullivan, 1998). However, other studies indicate that these cultural practices can also pose preservation challenges. For example, they can physically damage sites, particularly when involving fire, cutting vegetation, or other disruptive activities. Balancing preservation with cultural use is often challenging, as seen at Angkor Wat in Cambodia, where religious rituals continue to play a vital role (Higham, 2001, p. 70).

Furthermore, climate change exacerbates the impacts of human activity on rock paintings and historical sites by increasing the rate of natural weathering. While climate change is not a direct

human activity, its anthropogenic origins link it to increased human impact on these sites. Changes in temperature, humidity, and rainfall patterns increase erosion and biological growth on rock surfaces, which negatively affects pigments and structural stability. Gamble, Davis, and Simms (2013) note that African rock art sites are especially vulnerable to climate-induced weathering, with shifts in climate leading to higher levels of chemical and biological deterioration. This underscores the need for adaptive conservation approaches that account for both human and environmental pressures, protecting these sites from multiple, interconnected threats. Even in Tanzania, the Kondoa Rock Art Sites have experienced intensified erosion and biological growth due to fluctuating weather patterns, which impact the rock surfaces and pigment stability (Gwasira, 2015, p. 123). Similar effects have been observed in Uganda's rock art sites, where increased rainfall and humidity contribute to pigment flaking and rock erosion (Namono & Atukunda, 2019 p. 167). These findings underscore the need for adaptive and integrated conservation approaches that address both direct human activities and broader environmental impacts, ensuring that these cultural resources remain preserved for future generations.

Conclusively, much as the existing studies on this phenomenon have labored to reveal the various human activities threatening rock paintings and historical sites, my study contends that several research gaps emerge from the above literature. First, there is limited empirical data on the specific types and rates of chemical reactions that occur due to repeated human contact with rock surfaces, such as from oils and pollutants transferred through touch. Detailed studies quantifying these effects could offer a clearer basis for conservation strategies. Secondly, although urbanization's impact on rock sites is acknowledged, there is a need for research on long-term urban development effects on subsurface stability and the consequent structural damage to rock paintings. Third, existing studies on agricultural encroachment mostly focused on rural sites but lack an in-depth

exploration of how seasonal farming practices, particularly those involving agrochemicals, affect nearby rock paintings and their long-term preservation. Finally, there is a need for more region-specific studies on the impact of climate change, such as fluctuations in humidity and rainfall intensity, on rock paintings, which my study intends to bridge.

2.5 Gaps in the literature

Overall, available literature on historical sites is abundant, and attempts to elaborate on the various historical sites globally, in Asia, America, Africa, East African and Uganda in particular. Much as these studies explored the various human activities carried out around these sites and the extent of their impact, these studies have been generalized from the archaeological point of view. Similarly, little attention has been paid to the oral narratives of the people living within and around these sites, specifically Nyero Rock Painting. Lastly, the literature reveals various human activities affecting historical sites and rock paintings, including tourism, urbanization, agriculture, vandalism, and cultural practices. However, gaps remain, such as limited data on the chemical effects of human contact on rock surfaces, the long-term impact of urbanization on subsurface stability, and the role of seasonal farming practices involving agrochemicals in site degradation. From an ethnographic historical approach, this study therefore intends to bridge the above emerging knowledge and methodological gaps, with a focus on Nyero Rock Painting in order to develop effective conservation strategies.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter presented the research approach, design, and methods that the researcher adopted in this study. It covered the research design, research study area, research population, research sample, data collection methods and instruments, validity and reliability of data collection instruments, and ethical considerations.

3.1 Research Paradigm

The study used the Interpretivist Paradigm, which focuses on understanding historical events through the perspective of those who lived through them. This paradigm was particularly well-suited for exploring the socio-cultural, historical, and spiritual meanings attached to Nyero Rock Paintings, allowing for an in-depth examination of community experiences and their interactions with the site. Following Schwartz-Shea and Yanow (2012), this approach facilitated an understanding of how individuals and communities perceive and make sense of their world. Given the aims of this study, the interpretivist framework enabled a nuanced qualitative data collection methods such as interviews, focus groups, and archival research, providing rich insights into the evolving significance of Nyero Rock Paintings over the period from 1950 to 2024 (Creswell, 2013). This approach enabled an ethnographic exploration of the symbolic and spiritual value that the Iteso people place on the rock paintings, as well as their lived experiences concerning preservation and degradation.

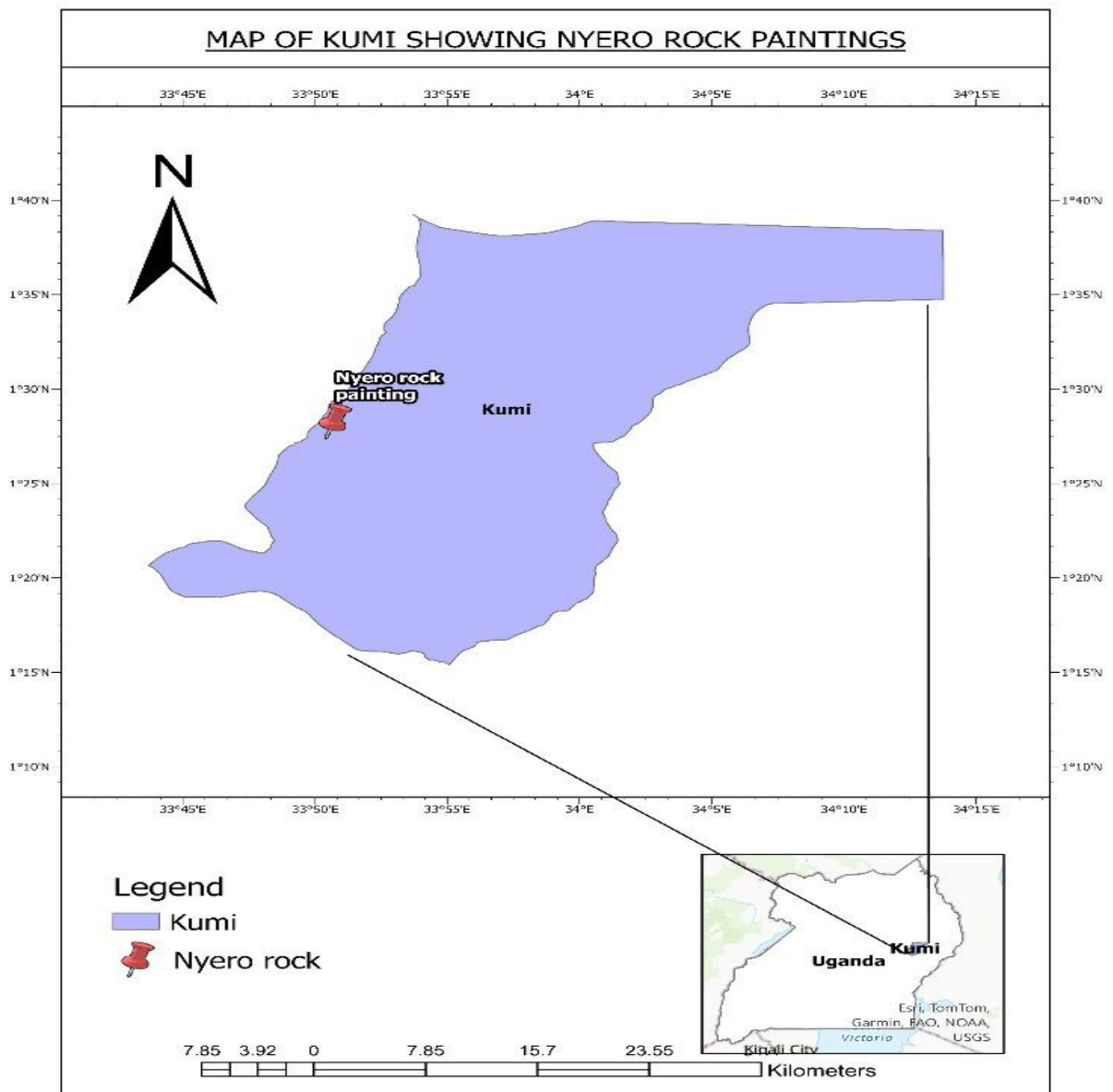
3.2 Research Approach and Design

This study adopted a qualitative approach, underpinned by a historical-ethnographic research design to investigate the research questions of this study. A qualitative approach was selected for its ability to provide an in-depth understanding of the cultural, historical, and social factors influencing the Nyero Rock Paintings from 1950 to 2024. It also facilitated the collection of rich, contextual data through interviews, observations, and historical surveys/archival research, capturing the experiences and meanings local communities and stakeholders attribute to the site. Clearly, the qualitative approach aligned with the study's objectives, as it emphasizes the exploration of socially constructed realities, focusing on people's opinions, attitudes, and beliefs regarding heritage conservation. According to Malunda & Atwebembeire (2021), qualitative methods are essential in capturing nuanced experiences, opinions, attitudes and beliefs of individuals, making them particularly suitable for historical and cultural studies.

The historical-ethnographic research design enabled the tracing of multiple human activities and their effects on Nyero Rock Painting over the last seven decades. This design further facilitated a comprehensive exploration of the reciprocal relationship between community practices and the preservation of the site. By incorporating historical elements, the study not only examined current interactions but also situated them within a broader temporal context, allowing for a more nuanced understanding of how past events shape present realities. The historical-ethnographic design was chosen because it allows for the integration of multiple data sources (oral histories, archival documents, ethnographic observations) to construct a comprehensive historical narrative, which is essential for addressing the study's objectives of historicising human activities and their effects.

3.3 Study Area

The study was conducted at Nyero Rock Paintings, found in Rock Painting Cell, Kees Ward, Nyero Town Council, around 8km West of Kumi Town, Kumi District, Eastern Uganda. Kumi District is about 250 km East of Kampala City. This study area was selected because it is a historical heritage site which is under the threat of numerous human activities and their impacts. Most importantly, the area was selected because it is a tourist attraction site that dates back to 1250 CE, with six unique shelters (Namono, 2010).



3.4 Sample Population

The study focused on people above 50 years of age, who were purposively selected during the field scouting phase. This was done with the main objective of selecting people whom the researcher considers important to the research phenomenon and are easily accessible, and depending on the researcher's judgment as to who would provide the best information to achieve

the study objective as reasoned by Etikan & Bala (2017). Most importantly, people who are born in the period of the study and have grown up in the study area were highly considered. This was because the study believed such people could have practiced various human activities in the area and seen various changes before and after the study periods. These therefore enriched the study because they have witnessed and experienced the extent of such human activities during the stipulated period under study. In particular, Local community members, Local Council leaders, clan leaders or elderly, were selected as key informants because they had experienced and witnessed the extent of human activities at the site, while the site managers/guides were involved as major key informants because they are familiar with the rock painting.

3.5 Sample size and Sampling Techniques

A sample size of 52 participants reached at a saturation point involved the local community members, aged 50 years and above was engaged in this study. They were purposefully selected using the snow ball and networking methods based on their knowledge of the problem under study and have witnessed the key changes over the historical period (Bhardwaj, 2019; Creswell, 2003). The participants included: 15 clan leaders, 20 elderly persons (both men and women) who had knowledge about the rock painting and the time scope, as well as their geographical location, five tour guides, and five Local Council One leaders in cells and wards around Nyero Rock Painting. These were also purposively selected due to their knowledge of the rock painting site and location near the site respectively. The two district officials interviewed included: The Tourism officer, and environmental officer of Kumi District. A total of five cultural leaders in the area were also interviewed.

Precisely, the sample size of 52 was reached at a saturation level determined by the absence of any new data or information being given or collected from the participants (Saunders, 2018 and Gugiu et al. 2020).

3.6 Data collection methods and procedure

The study used historical-ethnographic approaches, which Merriam & Tisdell (2016) believe is appropriate for studying the attitudes, or behavior, beliefs, opinions, experiences and priorities of people. The key methods of inquiry in this study were participatory ethnographic observations, semi-structured oral interviews (including one-on-one interviews and key informant interviews), and historical surveys. These were used in the following procedure;

a) Ethnographic/participatory observations

Ethnographic observational data was enriched by observation of the human activities at the site, and the extent of their effect on Nyero Rock Painting. This information was recorded in field diaries and observation protocols, which formed the basis of the later analytical process. Photographs and video recordings were only made with the consent of the participants, allowing the researcher to capture real-time data.

b) Semi structured oral interviews

Individual one-on-one and key informant interviews were conducted with the clan leaders and the elderly persons at the site, which was the common meeting point. These required the informed consent of the study participants and were conducted in a language preferred to them, involving a translator (in Ateso) where necessary. Each interview lasted for a maximum of 30 minutes and was semi-structured, meaning that, on the one hand, the respondents got the opportunity to speak freely, but, on the other hand, the researcher also had a set of prepared questions that were asked to ensure

comparability of the data sets. If the respondents agree, the interviews were audio-recorded. However, in situations a respondent felt uncomfortable with recording, the researcher made notes and write a memory log immediately after the interview is concluded. This was the same case with the key informant interviews. This method enabled the gathering of oral histories based on individual perspectives, historical events and shifts in community attitudes towards preservation efforts of the site.

c) Historical surveys and archival records

This involved the use of existing historical records from both primary (archival materials) and secondary data retrieved from archives. This deeply involved analysis of images, statistical records of visitors at the site, records of official proceedings (committee meetings) at the site, as supported by Wilson (2020). Consequently, diaries and manuscripts were used to historicize the rock painting, journals that talk about human activities and the extent of their effects on historical sites, including Nyero Rock Paintings. This method provided contextual background of the nature and extent of the changes over time at Nyero historical site. Archival sources consulted included: Kumi District Local Government records, Uganda National Commission for UNESCO documentation, Iteso Cultural Union archives, colonial administrative reports (Lawrance, 1955), and historical photographs held by the Uganda Museum.

3.7 Data analysis

Data analysis under this study involved translation and transcribing of the data, followed by the editing process, correction and coding of the data, finalizing of the data base and lastly creating data files from the data bases. These were analyzed using the thematic procedure of qualitative analysis. This enabled the grouping of responses into themes and subthemes based on the study objectives. The findings were then reported qualitatively basing on the specific objectives.

3.8 Data Quality Control

The validity and reliability of instruments was considered a priority in this research:

3.8.1 Validity of Instruments and Data

Triangulation was done involving the use of different types of sources or methods including combining written records, interviews, oral tradition and histories, photographs and material artifacts to support the research findings. This strengthened the validity by providing a more comprehensive view of the past.

Validity was further ensured by relying on primary sources such as official records, photographs, and newspapers from the District and Ministry of Tourism. They provided direct evidence from the time period being studied. These sources were further analyzed in their historical context to ensure their interpretation remains accurate.

The interview guide was pilot-tested with 5 participants who were not part of the main study sample but shared similar characteristics (elders from nearby communities). This pilot testing helped refine questions for clarity, cultural appropriateness, and relevance to the study objectives. Feedback from the pilot test was used to revise ambiguous questions and ensure that the tools captured the intended information.

3.8.2 Reliability of Instruments

Reliability was ensured by use of multiple methods or sources to reduce the likelihood of misinformation, error or bias influencing the results, therefore supporting reliable outcomes. The researcher also ensured working with primary sources, verify the authenticity and origin of the documents to ensure they have not been tampered with or misinterpreted.

3.9 Research Procedure

The study commenced with a research proposal that was vetted by the Department of History at Gulu University. The process of pretesting the research instrument was then carried out for purposes of reliability and validity control. An introductory letter was obtained from the Faculty of Education and Humanities to be presented to authorities and participants for ethical clearances, before data collection.

3.10 Limitations and delimitations to the study

As qualitative research, my study was characterized using qualitative methods like interviews and ethnographic observation. These methods, however, come along with challenges, especially regarding interviews with historical content, whereby the researcher relies on oral history accounts of participants (Kapoulas and Mitic, 2012). Oral historical knowledge is mainly shared and transmitted by elders and other informed persons from one generation to another (Shopes, 2002). This made it subject not only to falsification and bias, but also to total loss - either by natural tragedies such as famine, drought, floods, or by man-made disasters such as wars, raids, and slavery (Kirby, 2008). This in the end restricted the researcher's access to the key informed participants. In the same line, oral tradition does not go very far in the distant past, as the transmission heavily relies on the power of memories of successive generations (Shopes, 2002). To counterbalance these problematic factors, data obtained was verified through triangulation and corroboration, to avoid occurrences of contradiction.

3.11 Ethical considerations

The researcher collected an introductory letter from the Faculty of Education and Humanities to allow him access study participants in the field. Specific ethical considerations included:

- **Informed Consent:** All participants were fully informed about the purpose of the study, the procedures involved, and their right to withdraw at any time without penalty. Consent was obtained verbally or in writing.
- **Confidentiality and Anonymity:** Participants' identities were protected through the use of pseudonyms where requested. Personal information was stored securely and not shared with unauthorized persons.
- **Cultural Sensitivity:** The researcher respected local cultural norms, values, and practices. This included dressing appropriately, using respectful language, and acknowledging the cultural significance of the site to the local community.
- **Permission from Local Authorities:** Permission was obtained from the Kumi District Local Government, the site management committee, and traditional leaders before data collection commenced.
- **Protection of Vulnerable Participants:** Special care was taken when interacting with elderly participants, ensuring that interviews were conducted at times and places convenient for them, and that they were not subjected to any form of distress.
- **Dissemination of Findings:** The findings of this study will be disseminated to the Faculty of Education and Humanities, the University Library, and the Directorate of Research and Graduate Studies at Gulu University. A summary of findings will also be shared with the Kumi District Local Government and the site management committee to inform conservation efforts.

CHAPTER FOUR

THE STATUS OF NYERO ROCK PAINTING HISTORICAL SITE BY 1950

4.0 Introduction

This chapter presents findings on the status of the Nyero Rock Painting historical site before 1950. The findings reveal a rich tapestry of human activity, cultural practices, and historical significance that emphasize the site's importance in the cultural and historical landscape of Eastern region and Uganda as a whole. These findings provide critical insights into the ways in which the site has been used, perceived, and preserved over time. The chapter draws on oral histories, ethnographic observations, and archival records to reconstruct the pre-1950 status of the site.

4.1 Evidence of human settlement and early activities

Although no archival documents or preserved material records were retrieved during this study, the inference that Nyero was a hub of human settlement and activity before 1950 is supported by comparative anthropological evidence. The presence of preserved animal and human bones, pottery shards, hunting tools, and grinding stones, though not formally excavated aligns with known indicators of prolonged human occupation. These types of artifacts are typically associated with subsistence activities such as hunting, food preparation, and storage, all of which are central to settled life. This finding corroborates similar broader findings in Africa by Bleek and Lloyd (1911), who observed that most historical sites depict the artwork of early hunter-gatherer communities, who lived in such areas.

Indeed, Opio William, the tour guide at the site, asserted in an interview that; *“The oral stories by our ancestors about hunting and old stone age activities of early inhabitants of this site is a testament of early human survival strategies here.”* This oral traditional evidence positions Nyero

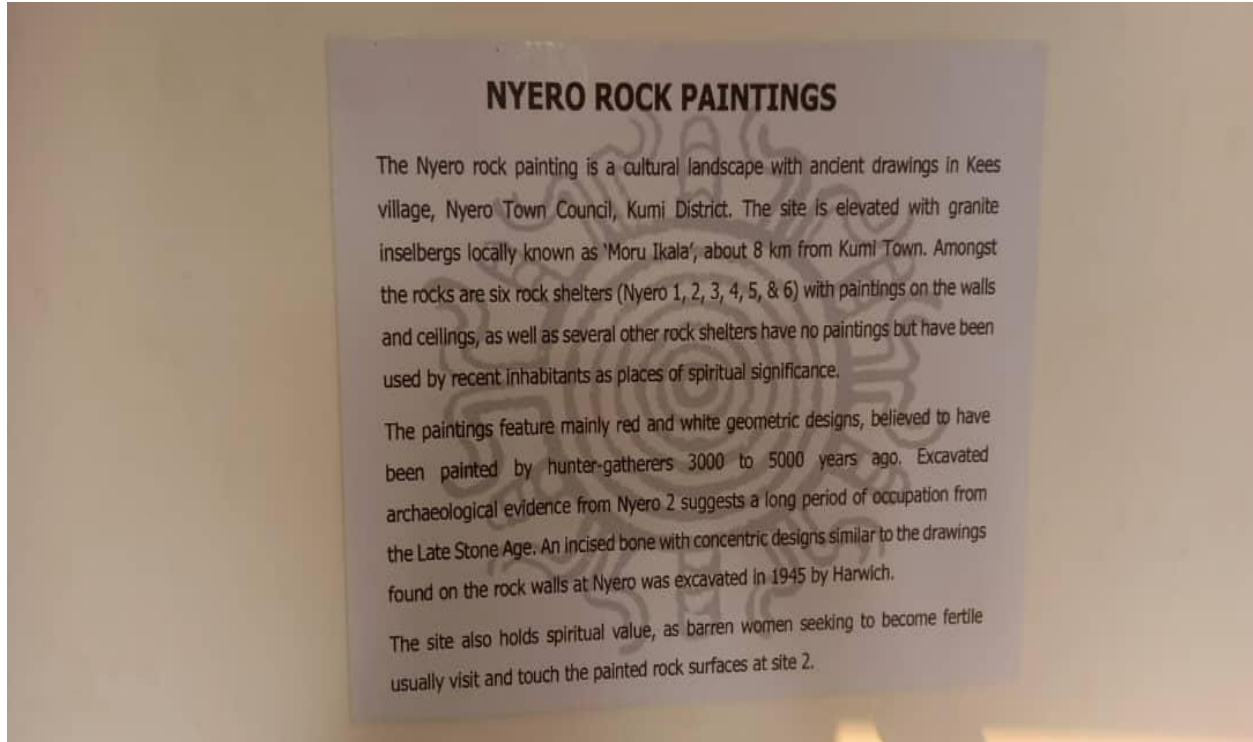
as an essential locus of human activity, a significant archaeological and anthropological site that sheds light on the livelihoods and ingenuity of its early occupants.

In a similar narration by Opio William, he added that:

For years, the cultural importance of Magoro (in Katakwi District) and the ancient rock art of Kakoro (in Butebo District formally Palisa District), both within the Iteso region of Eastern Uganda, strongly suggest that Nyero was a significant heart of human settlement and activity long before 1950. These places define our true history as custodians of our ancestors' land, who lived here. That is why you will notice that most local people gather here to worship and perform other rituals related to cleansing and healing, because our ancestors' spirits are believed to revolve around these rocks.

Clearly, the study agrees that these oral histories from local Iteso elders about Nyero Rock Paintings support the interpretation of it as a long-standing center of human activity. While the lack of formal excavation limits definitive dating, the convergence of material indicators and local narratives offers a reasonable and compelling basis for this finding.

Figure 1: Archival documented background of the site



Source: Archival research by the Researcher, December 2024

4.2 Cultural and religious significance

The site served as a spiritual and cultural center, as evidenced by its use for maiming, cultural treatments, and prayers. The rituals involving the slaughter of cows, goats, and chickens for barren women and ill individuals reveal the site's role in traditional healing practices and fertility rites. Mr. Okune Stanislaus Okurut (aged 66 years), the son of the first caretaker at the site (Ikara Erimano), and also Secretary to the Management Committee, narrated that right from the 1950s and 1960s, and his father would encounter several groups of people from within and outside the area, performing numerous rituals, as they believed the site had some cleansing powers. These would, in most cases, slaughter hens and goats, and the blood would be offered to the spirits, while the meat would be roasted and/or cooked for sharing at the site. This observation aligns with a

related study on this site by Nelson (1990), who stated that among the Iteso, these rock paintings were integrated into spiritual and social practices.

In another interview with the tour guide (Opio William), it was revealed that several groups of people from Kumi, Palisa, and Mbale districts tend to visit the site for cleansing and claim to be sent by their gods, or other powers like Moru Suswa led by Akwero prayer group. This finding is in agreement with related studies by Bleek and Lloyd (1911), who stated argued that most historical sites in Africa predate recorded history and offer insights into ancient societies' spiritual, social, and environmental interactions. Specifically, it aligns with findings by Ssemenda and Ddamulira (2019), who attributed Nyero Rocks to the Twa people, who likely used them for ritualistic purposes. These practices in Nyero Rock Painting, underscore the deep connection between the physical site and the intangible cultural heritage of the local communities within Teso region. This study contends that such rituals highlight the intersection of belief systems for sacred places, cultural identity of the Iteso, and the environment, making Nyero not only a physical location but also a spiritual and cultural significant site.

4.3 Clarity of paintings and evolving perceptions

In other findings, the study confirmed the clarity of the paintings and inscriptions at Nyero before 1950. Mr. Eperu Bosco Opio (Chairperson, Management Committee) asserted that clarity of these paintings reflects the site's original condition at the time, which has unfortunately been compromised in recent years due to fading.

Figure 2: Some of the fading drawings at the site versus the initial drawings



Source: Ethnographic observation and archival research by the Researcher, December 2024

Clearly, this degradation emphasizes the need for preservation efforts to protect these invaluable artistic and historical records. Most of the elders interviewed during the study confirmed that these paintings served as a means of communication, storytelling, or ritualistic expression. Certainly, these provide a visual narrative of the site's historical occupants and their interactions with their environment. Furthermore, this study agrees that the artworks not only hold artistic value but also serve as an essential link to understanding the thoughts and lives of early inhabitants at the site. Also, the symbolic and practical importance of these paintings cannot be overstated, as they are both a testament to human creativity and a key to unlocking historical narratives. This observation aligns with previous studies by Ssemanda and Ddamulira (2019), who used the example of North

Africa's rock art, which depicts large fauna, human activities, and symbolic motifs, as well as other evolving perceptions of lost civilization.

4.4 Oral histories, myths, and legends

The oral histories, myths, and legends associated with Nyero further enrich its historical narrative. For instance, the majority of the study participants repeatedly mentioned the account of the Batwa as the initial settlers who created the inscriptions, and their subsequent dispersal by dangerous animals such as snakes and crocodiles. However, by the time of this study, the area reported to harbor the snakes and crocodiles was cleared due to early grazing activities around the site, and such reptiles are no longer at the site. Clearly, this finding supports earlier studies by Ssemanda and Ddamulira (2019) on Nyero Rock Paintings, with the argument that local oral traditions kept the history of these sites alive, but formal documentation only began with colonial explorers and missionaries. Similarly, the Iteso clan narratives, such as those about Atekok Imukura, tie the site to the broader cultural heritage of the surrounding communities in Teso. These stories not only preserve historical memories but also reflect the evolving relationship between humans and the site, blending history with folklore to create a shared cultural identity for various groups.

4.5 Role as a hunting ground

Further findings indicate that before 1950, Nyero was also used as a hunting ground for small animals and birds, further highlighting its functional value to the communities that lived nearby. Undeniably, this finding illustrates how early inhabitants skillfully utilized their environment. In an interview with Muzei Okerenyang Francis (aged 86 years) from Moru Ikara Cell, a retired Parish Chief and former tour guide from 1989 – 1999, he confirmed that communities around the site in 1950s were predominantly hunters. Hence, the site's then thick bushes and caves inhabited

most wild edible animals like wild rats and pigs, squirrels as well as birds. In comparison with the contemporary situation around the site, the current tour guide confirmed that the local community still hunts around but not within the premises of the site. This role stresses the site's versatility, serving both as a center for sustenance and a locus of cultural significance. The use of the site for hunting reflects a deep understanding of and interaction with the natural environment, demonstrating the resourcefulness of its early inhabitants.

4.6 Conclusion

Clearly, the above findings on the status of the Nyero Rock Painting site before 1950 illustrate its multilayered significance as an archaeological, cultural, and historical landmark. The site was not only a place of settlement and survival but also a spiritual hub and a painting for human expression. This illustrates the early life, beliefs and creativity of the early inhabitants at the site. However, the fading of the paintings and the gradual erosion of oral histories pose challenges to its preservation. These findings underscore the urgency of safeguarding Nyero as a repository of Uganda's rich cultural heritage and a testament to the ingenuity and resilience of its early inhabitants.

CHAPTER FIVE

THE CURRENT STATUS OF NYERO ROCK PAINTING HISTORICAL SITE

5.0 Introduction

The findings on the current status of the Nyero Rock Painting historical site provide a comprehensive picture of its present condition, management, and persistent challenges that threaten its preservation. While there have been commendable efforts to preserve and enhance the site's value for visitors and local communities, various factors threaten its long-term sustainability and integrity as portrayed in the analysis and discussion below:

5.1 Physical condition of the rock paintings

The deteriorating physical condition of the Nyero Rock Paintings, including fading and damage to surrounding vegetation, is a significant concern that this study unearthed. The fading paintings underscore the vulnerability of this cultural heritage to natural weathering, environmental changes, and possibly human interference. Damaged vegetation, likely a result of encroachment and grazing, further indicates a loss of the natural setting that is integral to the site's cultural and artistic value. The tour guide lamented that; *“The faded clarity of the paintings has reduced their visual impact and diminished their value as a tool for storytelling and historical interpretation.”* This deterioration not only compromises the visual appeal of the site but also diminishes its historical and cultural significance, necessitating urgent preservation efforts, such as protective coatings for the paintings, similar to the suggestion by UNESCO (2010), in attempts to conserve the rock-hewn churches of Lalibela, in Ethiopia.

Figure 3: The Researcher with the Tour Guide at an area physically damaged at the site due to weathering



Source: Ethnographic field observation by the Researcher, December 2024

5.2 Infrastructure development and visitor facilities

Findings from the observations of the site further revealed the availability of infrastructure such as pathways, shelters, reception offices, and visitor facilities like toilets at the site. Clearly, this finding reflects a positive step towards enhancing the visitor experience. Additionally, these amenities show a conscious effort to make the site accessible, comfortable, and informative for tourists. Information boards and visitor receiver books serve an educational purpose, ensuring that visitors learn about the site's historical importance and encounter interactive and informed experience. Such infrastructure also underscores the potential of Nyero as a cultural tourism

destination, which, if properly managed, could contribute to local and national economic development. However, the Chairperson of the site's management committee Mr. Eperu Bosco Opio, lamented that:

Over the years, maintaining these facilities in good condition has been a challenge. It requires consistent funding, proper management, and regular assessments to ensure they meet the needs of visitors without compromising the site's cultural and natural environment.

The above lamentation by Mr. Eperu Bosco highlights that preserving valuable public spaces or heritage sites is not a passive duty but an active, commitment involving money, management, and constant vigilance, while honoring both human engagement and environmental integrity.

Figure 4: a) Infrastructure development (roads) around the site



Source: Ethnographic field observation by the Researcher, December 2024

Figure 4: b (i) The Researcher at a visitor facility (reception) at the site



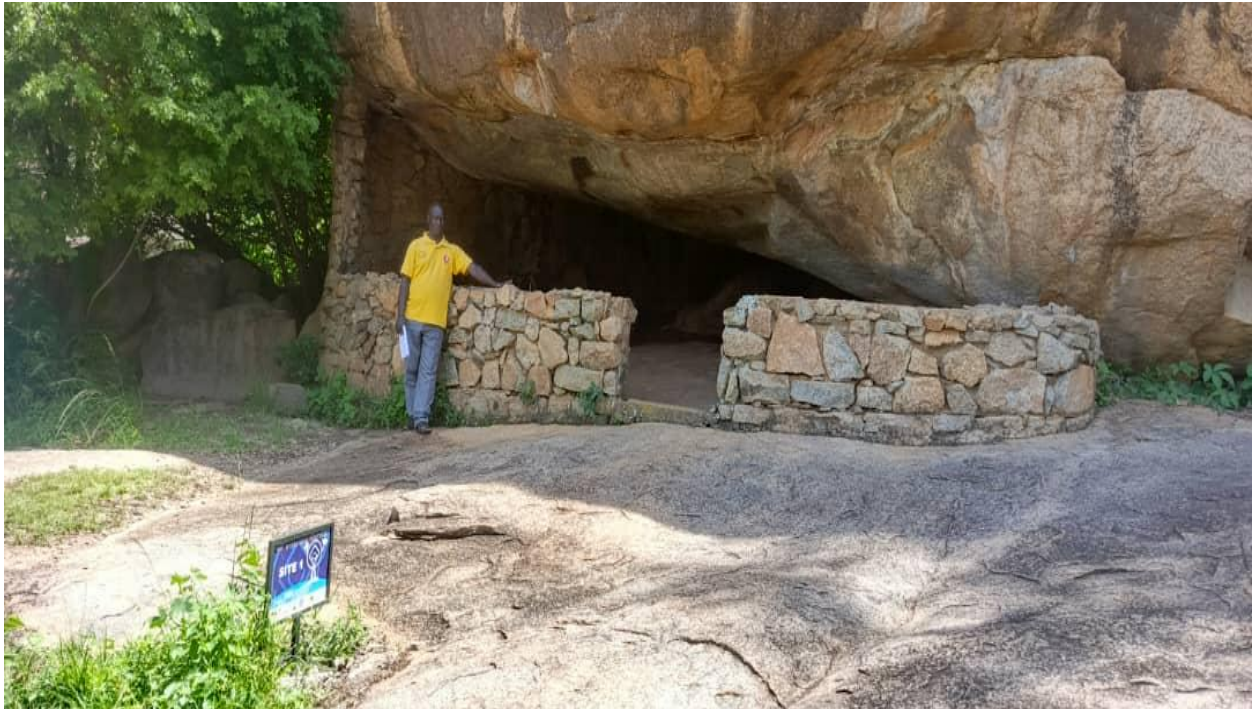
Source: Ethnographic field observation by the Researcher, December 2024

Figure 4: b (ii) The Researcher at a visitor facility (reception) at the site



Source: Ethnographic field observation by the Researcher, December 2024

Figure 4: b (iii) The Researcher at a visitor facility (relaxation point) at the site



Source: Ethnographic field observation by the Researcher, December 2024

5.3 Security measures

The presence of fencing, guards, and surveillance systems seen during the observation phases highlights efforts to protect the site from vandalism and unauthorized access. The site's management committee members reaffirmed that these measures are critical in preserving the integrity of the rock paintings and preventing further physical deterioration. However, this study challenges and questions the effectiveness of these security measures, given that reports of encroachment and grazing at night were equally reported. In other words, this finding indicates that these measures are either insufficient or poorly enforced. Strengthening security measures, including increasing guard patrols and involving community members as stewards of the site,

could improve compliance and reduce unauthorized activities. Equally, enhanced security infrastructure, in the form of motion-sensitive lighting or cameras, which are critically a key requirement at the site could also deter illegal activities while preserving the natural ambiance.

Figure 5: Security measures at the site (both security personnel and fencing)



Source: Ethnographic field observation by the Researcher, December 2024

5.4 Stakeholder involvement

In other findings, the involvement of multiple stakeholders, including the local community, Teso cultural institution, government, and non-governmental organizations (NGOs), reflects a collaborative approach to the management of the site. In an interview with one of the elders around the site, Muzei Aeku Gusuberito, Treasurer to the management committee, confirmed stakeholder involvement at the site. Specifically, he stated that some NGOs like Good Samaritan, did some sensitization on effective management of the site, but their work was interrupted by Covid-19. Equally, Cite for Heritage, and African Youth Alliance Development Organisation (AYADO) planted trees at the site, but due to poor timing, these were destroyed by bad weather and animals (cows) that tend to roam at the site, especially at night. In most cases, the local community voluntarily formed a management committee to help preserve the site.

On the other hand, the government is reported to provide technical expertise, funding, and security for the site's preservation. Evidently, this partnership is crucial in ensuring that the site's preservation aligns with both heritage conservation and community development goals as advocated in a report by UNESCO 2012, which called for collective efforts in raising awareness and promoting sustainable tourism to protect rock art paintings in Africa. However, the encroachment and misuse of the site by some locals as reported by the site's tour guide, suggest gaps in community awareness, engagement, or enforcement of regulations. This study believes that more robust efforts to involve and educate the local community on the value and preservation of the site could bridge this gap and foster a sense of shared responsibility. The archival finding below justifies the above finding:

Figure 6: a Minutes of stakeholders' meeting (executive committee) at the site on 03/12/2024

THE EXECUTIVE MANAGEMENT COMMITTEE

CHAIRPERSON - ASIO JESCA

VICE CHAIRPERSON - OLUPOI MOSES

SECRETARY - OKUNESTIANSHANS OKURUT

MOBILIZE - OMODING MOSES (AUKU)

LCL - EPERY BASCO OPIO

TIME 02:00 PM

THE SITE EXECUTIVE MANAGEMENT COMMITTEE
MEETING NHERO ROCK PAINTINGS
HELD ON 25TH DECEMBER 2024
VENUE: NHERO ROCK PAINTINGS.

AGENDA:

- 1 - PRAYER
- 2 - INTRODUCTION
- 3 - COMMUNICATION FROM CHAIR PERSON / WELCOME REMARKS
- 4 - RESOLUTIONS
- 5 - WAY FORWARD
- 6 - CLOSURE

MINUTE 01
A short prayer was conducted by the Chairperson ASIO JESCA who thanked God for letting the members again to converge for another important meeting as this. She pledged to God to lead spiritually this meeting as people have flesh and blood who are vulnerable to sin.

MINUTE 02
A self introduction was given by the members mentioning their name, locality where he or she comes from, and past position in the Management.

MINUTE 03
The chairperson thanked members for their prompt turn up. Also apologized to the members for delaying to call up the meeting and of the year. Nevertheless, she encouraged all the committee to be and know their roles in the Management.

She said: We are ending up the year, but in early January or the month to follow, we are going to have a meeting discussing on how we are going to take challenges ahead of us, as Managers of the Site.

01 - Respect of the buffer zone
02 - Tree felling inside the Site

03 - Fighting Vandalism / conserve the rock art.

04 - Poisoners need to other plants and trees

Chairperson was happy of challenges 01, 02, 03, but the fourth (04) one was taken as a priority.

Question: What can we do to this unpleasant weed as we don't know its name? It is destroying the pleasant to look at, and it is poisonous as it dries up / Kills other trees.

She continued saying it spreads/grows rapidly. Chairperson continued telling people to spread the message of educating children as it is a key to future safe life. So that they become productive persons for their loved (Singing Uganda (The Uganda Logo Says) Foundation AND MY COUNTRY - Uganda.)

In this way, we can identify dangers affecting our Site and plan for resolutions.

She came up with a proposed Work Plans. Here it is:

Work	PLAN JANUARY TO DECEMBER 2025			
ACTIVITY	WHO	WHEN	Time Frame	Remarks
Moving around the gazetted site	Chairperson, Vice	2025	December	
"	Chairperson, Vice, Mobilize	Jan 2025	January 2025	
Removing the weed	All Executive	April	April	

MINUTE 04
All the members thanked unanimously the chairperson for organizing the meeting, but raised different issues: (i) Delay of meeting
(ii) At least the Manager Site, or the head office to at least understand what we are doing down here.

They all adopted understandingly the work Plan saying they are ready to implement it.

MINUTE 05
They are/we are ready to fulfill the work Plan

MINUTE 06
The meeting was declared closed at the end of praising prayer by the chairperson at 03:30 PM

Secretary
Okunestianshans Okurut
0780454041

Chairperson

Source: Archival research by the Researcher, December 2024

Figure 6: b A stakeholders' meeting with the Emorimor (Iteso Cultural Leader) and other cultural leaders at the site on 04/12/2024



Source: Archival research by the Researcher, December 2024

Figure 6: c Stakeholder (NGO) involvement at the site



Source: Ethnographic field observation by the Researcher, December 2024

5.5 Human activities and environmental challenges

The variety of human activities at the site, such as camping, cultural rituals, and prayers, was another interesting finding of the study. Evidently, this reflects the site's continued relevance as a spiritual and communal space in the contemporary society. However, the study observed that much as these activities are important to the site and its visitors, these however present challenges, including littering and environmental degradation. The presence of waste not only detracts from the site's aesthetic value but also poses risks to its ecological health. While efforts to plant trees around the site demonstrate environmental stewardship, the destruction of trees by grazing animals and bad weather highlights the difficulties of maintaining the site's natural environment. This study argues that these challenges call for stronger protective measures and sustainable practices to mitigate the impact of human activities.

Figure 7: The Researcher with the Tour Guide at one of the camping spots



Source: Ethnographic field observation by the Researcher

5.6 Encroachment and misuse

Encroachment by locals who graze animals at night and sometimes in the day (zero grazing) is a significant threat to the preservation of the site. Most of the members of the site's management committee stated that his practice not only damages newly planted trees but also disrupts the cultural and ecological integrity of the site. Encroachment reflects a broader issue of balancing heritage conservation with the livelihoods of surrounding communities. This is close with

Robertshaw (1997) observed for the case of Bogo Bya Mugenyi, which has over the years faced threats from agricultural encroachment and lack of comprehensive preservation strategies. For the specific context of this study, addressing this issue requires innovative solutions, such as community education, the development of alternative grazing spaces, and stricter enforcement of site boundaries to create mutual benefit for both the site's conservation team and the surrounding community.

Figure 8: Encroachment (grazing) activities at the site that have disrupted the site's vegetation



Source: Ethnographic field observation by the Researcher, December 2024

5.7 Conclusion

Conclusively, the current status of Nyero Rock Painting historical site reveals a delicate balance between progress and preservation. While infrastructure development and stakeholder

involvement have improved the site's accessibility and protection, challenges such as physical deterioration, encroachment, and environmental damage threaten its integrity. Addressing these issues requires a holistic approach that combines preservation efforts, community engagement, and sustainable tourism practices. By prioritizing both cultural heritage and community welfare, Nyero can continue to serve as a vital link to Uganda's past while contributing to its future.

CHAPTER SIX

THE HUMAN ACTIVITIES TAKING PLACE AROUND NYERO ROCK PAINTING HISTORICAL SITE

6.0 Introduction

The Nyero Rock Paintings, a significant historical and cultural site in Uganda, have witnessed various human activities that influence its preservation, significance, and impact on the local community. These activities can be categorized into academic, tourism, cultural and spiritual practices, recreational pursuits, and agricultural uses, each contributing in different ways to the site's ongoing use and potential challenges. This discussion and analysis therefore explore their positive and negative implications on the site's preservation. The activities are examined with reference to their occurrence during the colonial period (pre-1962) and the post-colonial period (1962-2023).

6.1 Academic study tours

One of the prominent activities at Nyero Rock Paintings is academic study tours, which are conducted by primary and secondary schools, university students, and researchers. These tours provide educational opportunities for learners to explore Uganda's rich cultural heritage, particularly through the lens of archaeology, history, and anthropology. Researchers visit the site to conduct studies on the rock art, its historical significance, and the indigenous communities that created these paintings. In fact, Mr. Opio William, the tour guide and Mr. Okune Stanislaus Okurut, the Secretary of the Management Committee, confirmed that the site receives over 100 visitors weekly, who come on academic related tour activities, especially when most learning institutions are open. The educational visits play a crucial role in promoting awareness about the site's cultural importance, though the increased foot traffic and interaction with the site could raise concerns

about its preservation. Academic institutions also use the site as a practical learning ground, contributing to the site's value as a cultural resource.

6.2 Tourism activities

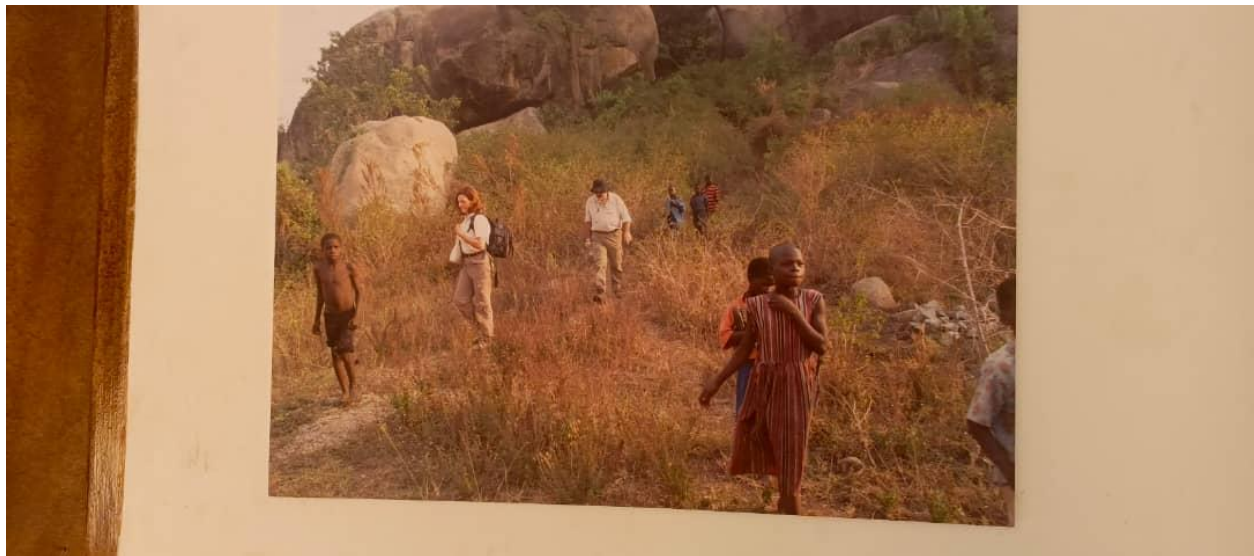
Tourism at Nyero Rock Paintings is another key activity that draws both local and international visitors. Local tourists, often from different regions within Uganda, are drawn to the site for cultural exploration, while international tourists are attracted to its historical and archaeological significance. Records from the visitors' book indicated that European tourists outnumbered the Ugandan tourists. This could be attributed to the laxity of the Ugandan populace to tourism related activities, even those at their close proximity. Even Mr. Opio William, the tour guide at the site, lamented that:

I do not know what is wrong with Ugandans, we have such sites to tour for free and sometimes at a subsidized cost, but we still do not utilize such opportunities. Do you know that even within this Sub-County and District, there are old people who have never taken time to visit and tour this site? If you took time to ask them why, they have no valid reason to give. In fact, most of them will tell you tourism is only meant for the outsiders and Europeans. Even the few locals who come around, only do so to celebrate birthdays and sometimes picnics, not necessarily actual tourism of the site.

The above quote is in agreement with what Toto Amujal Philomena, one of the elders around the area, mentioned, stating that even during their days, most of the tourists at the site were Europeans, with few locals and Ugandans in particular visiting the site. Clearly, the above assertions demonstrate the challenge of limited awareness about the need to tour such historical places in Uganda.

Also, throughout the observation phase, it was also evident that local guides, hospitality businesses, and souvenir vendors all benefit from the tourism activities at the site. Hence, the site serves as a focal point for promoting Uganda's tourism and is frequently included in heritage tours. While tourism can bring much-needed attention and funding for conservation efforts, it also presents challenges in terms of managing the impact of large numbers of visitors on the physical state of the paintings. Additionally, tourism-related infrastructure, such as roads and visitor facilities, could further encroach on the surrounding ecosystem, which is in total agreement with the observation by Moseley (2010) in the context of Machu Picchu in Peru, Akama (1999) in the context of Lamu Old Town in Kenya, and Namono (2010) in the context of Nyero Rock Paintings. Therefore, there is a fine balance between preserving the site's integrity and capitalizing on tourism as a source of revenue for local communities.

Figure 9: Archival evidence of some of the first tourists at the site



Source: Archival research by the Researcher

6.3 Cultural and spiritual practices

Cultural and spiritual practices are deeply intertwined with the Nyero Rock Paintings. Local communities, particularly those of the Iteso ethnic group, have a long-standing connection to the site, often using it for rituals, ceremonies, and spiritual activities. The rock paintings are believed to hold ancestral significance and are considered sacred by some community members. Practices such as prayers, offerings, and traditional ceremonies have been part of the site's ongoing cultural use. Specifically, the study observed site 2 seen in, which is a famous spot for cultural and spiritual practices meant to heal barrenness. This study argues that such practices help sustain the cultural traditions and beliefs associated with the rock art and ensure its continued relevance in modern times. This finding supports related findings by Sullivan (1998), who argued that such practices can both preserve and transform such historical sites, highlighting the dynamic relationship between heritage and living cultures.

In the context of Nyero Rock Painting, these activities reinforce the social fabric of the community and contribute to the perpetuation of cultural knowledge. However, these practices, while fostering a sense of community and continuity of tradition, also pose potential risks to the conservation of the site. The interaction of physical elements such as fire or ritual substances with the rocks could lead to deterioration if not carefully managed. Furthermore, such activities could increase the frequency of human presence around the site, which, without proper management, could negatively affect its long-term conservation.

Figure 10: Site two, a treasured cultural spot believed to be a healing ground at the site



Source: Ethnographic observation by the Researcher

6.4 Recreational activities

Recreational activities, such as camping, picnics, hiking, holiday outings, and birthday celebrations, are popular at Nyero Rock Paintings, especially among local families and tourists. These activities contribute to the site's role as a social gathering place, where people engage in leisure and bonding experiences while enjoying the scenic landscape, which adds a layer of enjoyment to its cultural value. However, these recreational pursuits can sometimes lead to unintended environmental degradation. For example, littering, disturbances to wildlife, or overuse

of certain areas of the site can negatively affect both the natural and cultural heritage of the location. Managing these activities requires clear guidelines to ensure that the site remains a safe, enjoyable, and sustainable place for both locals and visitors. Also, designated zones for such activities, as well as enforcing regulations on waste management, could help in maintaining the site's pristine condition.

6.5 Grazing activities especially at night

Another human activity taking place around the Nyero Rock Paintings is grazing, particularly during the night. Toto Ahija Yosephina lamented that this is due to laxity of some community members, who leave their livestock, such as cattle and goats, to graze around the site, which poses a dual challenge of overgrazing and damaging the fragile ecosystem surrounding the site, as well as increasing the likelihood of physical damage to the rock paintings themselves. Night-time grazing, in particular, is concerning because it may not be monitored as closely, leading to increased risks of unintended damage, such as trampling or exposure to elements that could affect the site's preservation. Specifically, these two resulting effects are further associated with soil erosion unintended external marks that over time affect the original artwork or paintings at the site. This highlights the need for greater control and management of the surrounding land to protect the rock paintings from both direct and indirect threats posed by grazing activities.

6.6 Farming near the site

Farming is also prevalent near Nyero Rock Paintings, with agricultural activities taking place in the vicinity of the site. However, much of this farming is conducted without proper demarcation, leading to encroachment on land that is historically and culturally significant. The lack of clear boundaries between farming areas and the rock painting site is a significant issue, as it increases

the risk of damage to the site from activities such as plowing, use of chemicals, and land clearing. Furthermore, the expansion of agricultural activities can result in erosion and other environmental impacts that further threaten the integrity of the rock paintings and their surroundings. Additionally, the encroachment of farming land onto areas with cultural and historical significance may lead to conflicts between agricultural expansion and heritage conservation efforts. Addressing the issue of land demarcation and enforcing regulations that protect the site from encroachment is essential for preserving the historical value of the site for future generations.

6.7 Conclusion

In conclusion, the diverse human activities around Nyero Rock Paintings reflect the site's importance to the local community and the broader public, as a source of education, cultural practice, recreation, and economic benefit. However, each activity also introduces challenges to the preservation of the site. Balancing the site's cultural, educational, and economic value with the need for conservation is a complex task that requires integrated management strategies. These strategies should focus on sustainable tourism, responsible cultural practices, and effective land-use policies to protect the integrity of the Nyero Rock Paintings while allowing the community and visitors to continue to benefit from its rich cultural heritage.

CHAPTER SEVEN

THE EFFECTS OF THE VARIOUS HUMAN ACTIVITIES ON NYERO ROCK PAINTING HISTORICAL SITE

7.0 Introduction

The Nyero Rock Paintings are not only a symbol of Uganda's rich cultural heritage but also an important archaeological site that attracts various human activities, both positive and negative. These activities have had profound effects on the preservation of the site, contributing to its degradation in some instances while encouraging conservation efforts in others. A detailed analysis and discussion of these findings reveals the complex interplay between human involvement and the sustainability of the site. This chapter examines these effects through the lens of the Cultural Landscape Theory, which frames the site as a dynamic entity shaped by the interaction of natural processes and human cultural practices over time.

7.1 Vandalism on the carvings

Vandalism was constantly emphasized as one of the most significant threats to the Nyero Rock Paintings. Despite their historical and cultural value, the site has been subjected to acts of defacement, including the carving of names and symbols onto the rock surfaces. Majority of the study participants reported that these actions degrade the visual integrity of the paintings, irreparably altering the authenticity of the artwork. This finding is in agreement with related studies by Ndoro (2001), who lamented that over the years, heritage sites in southern Africa suffer frequent vandalism and graffiti, often due to a lack of community awareness and involvement. Interactions with most of the key informants especially the elders who have lived around the site, revealed that vandalism not only destroys the aesthetic appeal of the site but also diminishes its archaeological

and cultural value, making it harder for researchers to study the original forms of the rock art. These acts are often a result of a lack of awareness about the cultural significance of the site, highlighting the need for educational campaigns and stricter enforcement of protection laws to deter such behavior.

The study also observed that while local authorities and the community have made some efforts to protect the site, such as increasing surveillance and establishing a management committee, these acts of vandalism continue to pose a significant challenge. This highlights the critical need for a more robust system of enforcement, increased public education, and perhaps stronger penalties to deter defacement of the rock paintings.

Figure 11: A vandalized section at the site



Source: Ethnographic field observation by the Researcher

7.2 Natural habitat disruption

The human activities around Nyero Rock Paintings have also led to the disruption of the natural habitat in the surrounding area. Activities such as grazing, farming, and the construction of infrastructure to support tourism have encroached on the site's ecosystem. These activities have resulted in the degradation of the local flora and fauna, which are integral to the overall health of the environment. The removal of vegetation due to farming or grazing around the site, for instance, can lead to soil erosion, affecting the stability of the landscape and the site's overall outlook. For instance, Rev. Ikara Gilbert and Muzei Okerenyang Francis who are respected elders around the area, confirmed that the loss of vegetation that previously protected the rock surfaces from wind and water erosion have over the years exposed the site to greater wear from the elements. Additionally, the construction of visitor facilities or roads may disturb local wildlife, potentially leading to the displacement of species that once thrived in the area. The loss of biodiversity surrounding the site can diminish its ecological value, further compromising its role as a heritage site. Clearly, integrating environmental management into the site's preservation efforts is critical to maintaining a balance between human activity and ecological health.

Figure 12: Habitat disruption at the caves for visitor facilities



Source: Ethnographic field observation by the Researcher

7.3 Deforestation/disruption of the site's natural environment

Deforestation around the Nyero Rock Paintings has led to further degradation of the site's natural environment, as it is evident that Nyero Rock Paintings are located in an area that once boasted a rich, diverse ecosystem. However, human activities, particularly farming and grazing, have led to deforestation and the degradation of the natural environment as discussed and evidenced in the previous section 5.6. Equally, littering at the site by visitors and tourists is disrupting the site's compound and appearance. These continued activities threaten the preservation of the rock art itself. Trees play a role in shielding the rocks from the elements, such as wind and rain, and their removal exposes the site to environmental degradation. Furthermore, the increased human presence around the site leads to higher pollution levels, further compounding the ecological pressures on the site. These finding indicates that addressing deforestation for example through

sustainable land-use practices and conservation efforts is crucial to mitigating the long-term effects on the rock paintings and their surrounding environment.

Figure 13: Evidence of littering and poor disposal at the site



Source: Ethnographic field observation by the Researcher

7.4 Encouraged conservation efforts

In response to the growing pressures on Nyero Rock Paintings, several conservation efforts have been initiated to safeguard the site. These efforts include practical measures such as cementing the area to divert rainwater, regular cleaning campaigns to remove plastics and other waste, and the establishment of a live fence to protect the site from encroachment. Cementing the area to manage rainwater runoff helps prevent erosion and physical damage to the rock paintings caused by water flow. Equally, the regular cleaning initiatives help to maintain the site's cleanliness, especially by removing non-biodegradable waste, which can harm the environment and deter visitors.

Additionally, the planting of the live fence with indigenous tree species around the site plays a vital role in reducing soil erosion and providing natural protection against the elements. Similar to this, it was observed that African Youth Alliance Development Organisation (AYADO), an NGO that partnered to conserve the site, took efforts to plant trees around the site. However, Mr. Opio William reported that although some trees thrived, the poor timing and bad weather at the time (in December 2024), most of these trees dried and died off, and some destroyed by animals which broke into the site at night to graze. This study believes that these conservation efforts, though positive, require ongoing commitment from all stakeholders, as the site continues to face pressures from human activity. Indeed, the combination of physical protection measures and community involvement is essential to ensuring the long-term preservation of Nyero Rock Paintings.

Figure 14: Conservation efforts (planting of trees and flowers) by AYADO at the site



Source: Ethnographic field observation by the Researcher

7.5 Involvement of the community, government, and NGOs

One of the most encouraging developments surrounding the Nyero Rock Paintings is the active involvement of various stakeholders, including the local community, government agencies, and non-governmental organizations (NGOs). Notably, Good Samaritan Organisation did some sensitization on the need to preserve the site, but were interrupted by Covid-19 in 2021. Equally,

Cite for Heritage and AYADO planted trees meant to enhance the greening and beauty of the site, but their efforts did not yield much, as the trees were destroyed by bad weather due to bad timing, as well as uncontrolled grazing at night. Most importantly, the establishment of a management committee consisting of local community members has been instrumental in mobilizing efforts to protect and preserve the site. The committee is chaired by Eperu Bosco, with other members such as Aeku Gusuberito (Treasurer Management committee) and Okune Stanislaus Okurut (Secretary Management committee). This community-led approach ensures that the local population has a vested interest in the site's conservation, as they directly benefit from its cultural and economic value.

Similarly, the government, through its line ministry of tourism and the police, has also played a critical role in supporting conservation initiatives by providing legal frameworks, funding, and enforcement mechanisms. The involvement of NGOs has further strengthened these efforts by bringing in expertise, additional resources, and advocacy for sustainable practices. This collaboration among local, governmental, and non-governmental entities is crucial for the successful management of the site and ensures that the conservation of Nyero Rock Paintings is not left to any one group alone. The study further argues that this collaboration continues to evolve, it will be essential to ensure that all parties remain engaged and committed to the long-term protection of Nyero Rock Paintings.

Figure 15: The site's modernized entry point by government



Source: Ethnographic field observation by the Researcher

Figure 16: A local elders' meeting held on 25/10/2024 at the site for preservation strategies



Source: Archival research by the Researcher

7.6 Attraction of academic researchers and documentation efforts

Nyero Rock Paintings have attracted the interest of academic researchers who are dedicated to documenting the history and significance of the site. Scholars from various fields, including

archaeology, anthropology, and art history, have used the site as a primary source for understanding Uganda's pre-colonial past. The documentation efforts by these researchers not only contribute to the academic value of the site but also serve to raise awareness of its importance to a broader audience. Popularizing the site through academic publications and media coverage has brought attention to the need for intervention efforts aimed at safeguarding the rock paintings. As research continues, it is hoped that further discoveries and documentation will attract additional resources and support for conservation initiatives. In this way, academic engagement with the site helps to create a framework for its protection, ensuring that it remains a valuable cultural resource for future generations. This study also adds that the history of the site can help to foster national and international interest in this historical site, further motivating stakeholders to take action to safeguard it.

7.7 Conclusion

In a nutshell, the study agrees that the human activities surrounding the Nyero Rock Paintings have had a profound impact on the site's preservation and the surrounding environment. While vandalism, habitat disruption, and deforestation present significant challenges, the ongoing conservation efforts, the involvement of local communities, and the engagement of academic researchers are all contributing to the protection and sustainability of the site. The success of these initiatives highlights the importance of collaborative efforts among stakeholders, including local communities, governmental agencies, and NGOs, in ensuring that cultural heritage sites like Nyero Rock Paintings are preserved for future generations. With continued support and commitment to conservation, it is possible to strike a balance between human interaction with the site and the preservation of its cultural and natural integrity.

CHAPTER EIGHT

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

8.1 Summary

This section presents the summary of the major findings according to the respective specific objectives of the study.

8.1.1 Objective One

The study findings on the status of Nyero Rock Painting before 1950 reveal that the site was a hub of human settlement and activity, with evidence of narratives of preserved animal and human bones, pottery works, hunting tools, and grinding stones. The site served as a spiritual and cultural center, with rituals and traditional healing activities. The paintings at the site were clear and served as a means of communication and storytelling.

8.1.2 Objective Two

Regarding the current status of the site, the study revealed that the site's physical condition is deteriorating, with fading paintings and damaged vegetation. Infrastructure development and visitor facilities have improved, but with security measures and are insufficient. Stakeholder involvement, including local communities, government, and NGOs, is crucial for the site's preservation.

8.1.3 Objective Three

Concerning the various human activities around Nyero Rock paintings, notable activities were discovered, including academic study tours, tourism, cultural and spiritual practices, recreational activities, grazing and farming. These activities have both positive and negative impacts on the site.

8.1.4 Objective Four

Lastly, findings on the impact of the various human activities at the site involved vandalism, natural habitat disruption, deforestation, and encroachment that pose significant threats to the site's preservation. However, conservation efforts, community involvement, and academic research are contributing to the site's protection and sustainability. Collaborative efforts among stakeholders are essential for ensuring the site's preservation for future generations.

8.2 Conclusions

8.2.1 Objective One

The study concludes that Nyero Rock Paintings was a hub of human settlement and activity before 1950, with evidence of preserved animal and human bones, pottery works, hunting tools, and grinding stones. Equally, the site served as a spiritual and cultural center, with rituals involving the slaughter of animals for barren women and ill individuals. The site's paintings and inscriptions were clear and served as a means of communication, storytelling, or ritualistic expression. Similarly, oral histories, myths and legends associated with the site further enrich its historical narrative.

8.2.2 Objective Two

The site's physical condition is deteriorating, with fading and damage to surrounding vegetation. Infrastructure development and visitor facilities have improved the site's accessibility, but pose challenges to its preservation. Also, security measures, such as fencing and guards, are in place, but their effectiveness is questionable. More so, stakeholder involvement, including local communities, government, and NGOs, is crucial for the site's preservation.

8.2.3 Objective Three

Various human activities including academic study tours, tourism, cultural and spiritual practices, recreational pursuits, and agricultural uses, take place around the site. These activities have both positive and negative impacts on the site's preservation. Balancing the site's cultural, educational, and economic value with the need for conservation is a complex task for the site's concerned bodies.

8.2.4 Objective Four

Most of the human activities at the site have led to vandalism, habitat disruption, deforestation, and degradation of the site's natural environment. Conservation efforts including cementing the areas with cracks at the site, regular cleaning campaigns, and establishment of a live fence, have been initiated. The involvement of local communities, government, and NGOs is crucial for the site's preservation. Lastly, the site's preservation requires a collaborative effort among stakeholders to balance human interaction with the site and its preservation.

8.3 Recommendations

The study recommends the following:

1. Balanced strategies should be enforced on sustainable tourism, responsible cultural practices, and effective land-use policies to protect the integrity of the Nyero Rock Paintings while allowing the community and visitors to continue to benefit from its rich cultural heritage.
2. Prioritizing both cultural heritage and community welfare, Nyero can continue to serve as a vital link to Uganda's past while contributing to its future.
3. Continued support and commitment to conservation by all stakeholders, to strike a balance between human interaction with the site and the preservation of its cultural and natural integrity.
4. Increase community engagement and education to boost the site's relevance to both the local and outside communities.
5. Encourage research and documentation of the site's rich history, available opportunities to tourists as well as economic potential to the government.

8.4 Areas of further study

1. Investigate the effects of climate change on the site's preservation and develop strategies to mitigate its effects.
2. Conduct further research on the site's history and cultural significance, to enhance its value and promote conservation efforts.
3. Explore innovative and sustainable solutions for managing tourism and human activities around the historical site.
4. Develop effective community engagement and education strategies to promote the site's preservation and cultural significance.

5. Investigate the economic benefits of preserving the site and develop strategies to promote sustainable economic development in the surrounding area.

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APPENDICES

Appendix 1: Introductory letter



Appendix 2: Interview Guide

Opening Questions

1. Can you tell me about your connection to or knowledge of the Nyero Rock Paintings?
2. How long have you lived near or been associated with the site?

Objective 1: To explore the status of Nyero Rock Painting historical site before 1950

1. What do you know about the history of Nyero Rock Paintings before 1950?
2. Are there any oral histories, legends, or myths passed down about the site from earlier times?
3. How was the site used or regarded by the community before 1950?
4. Were there any notable individuals or events associated with the site during that period?
5. Do you have any knowledge of how the rock paintings looked or were maintained before 1950?

Objective 2: To establish the current status of Nyero Rock Painting historical site

1. How would you describe the current condition of the Nyero Rock Paintings?
2. What are the major changes you have observed at the site over time?
3. How is the site currently managed or maintained?
4. Who is responsible for its upkeep?
5. Are there any facilities available for visitors at the site?
6. What challenges, if any, are faced in maintaining the site today?

Objective 3: To investigate the human activities taking place around Nyero Rock Painting historical site

1. What types of activities take place around the site?
 - Cultural or spiritual practices
 - Tourism
 - Farming or grazing
2. How often do people visit the site, and for what purposes?
3. Are there any businesses or commercial activities operating near the site?
4. What role does the local community play in activities at or around the site?
5. Have there been any disputes or issues regarding how the site is used?

Objective 4: To examine the impact of the various human activities on Nyero Rock Painting historical site

1. In what ways do you think human activities have affected the Nyero Rock Paintings?
2. Have you noticed any damage to the paintings or the surrounding area caused by people?
3. Are there specific activities that seem to harm the site more than others?
4. What efforts, if any, are being made to reduce negative impacts from human activities?
5. How does the local community feel about conserving the site?

Concluding Questions

1. In your opinion, what can be done to preserve the Nyero Rock Paintings better?
2. Are there any additional stories or insights you'd like to share about the site?
3. Do you have suggestions for who else might provide valuable information about the site?

Appendix 3: Observation checklist

Objective 1: To explore the status of Nyero Rock Painting historical site before 1950

- ✓ Evidence of documentation or inscriptions about the site pre-1950.
- ✓ Presence of historical artifacts or relics linked to the site before 1950.
- ✓ Observations of any remaining features from early site management or preservation efforts.
- ✓ Condition of the rock paintings as described in historical records (if available).
- ✓ Comparison of historical photographs (if accessible) with current features of the site.

Objective 2: To establish the current status of Nyero Rock Painting historical site

- ✓ Physical condition of the rock paintings (e.g., visibility, fading, damage).
- ✓ Presence of natural deterioration (e.g., erosion, weathering, vegetation growth).
- ✓ Availability and condition of infrastructure (e.g., pathways, signage, visitor facilities).
- ✓ Level of cleanliness and maintenance at the site.
- ✓ Presence of security measures (e.g., fencing, guards, surveillance).

Objective 3: To investigate the human activities taking place around Nyero Rock Painting historical site

- ✓ Types of human activities observed (e.g., tourism, grazing, farming, settlements, ceremonies).
- ✓ Evidence of recreational use (e.g., picnics, climbing, graffiti).
- ✓ Commercial activities (e.g., vending, nearby markets).
- ✓ Local community interactions with the site (e.g., cultural or spiritual practices).

- ✓ Observed frequency of visitors (e.g., tourists, researchers, locals).

Objective 4: To examine the impact of the various human activities on Nyero Rock Painting historical site

- ✓ Presence of vandalism (e.g., graffiti, scratches, carvings).
- ✓ Damage to the site caused by human activities (e.g., litter, broken structures).
- ✓ Disruption of the site's natural environment (e.g., habitat destruction, deforestation).
- ✓ Impact on the rock paintings (e.g., fading, staining, physical damage).
- ✓ Evidence of conservation efforts or lack thereof related to human impacts.

Appendix 4: Historical Survey Guide

Objective 1: To explore the status of Nyero Rock Painting historical site before 1950

1. Archival Research

- ✓ Search for historical documents, publications, or records mentioning the Nyero Rock Paintings before 1950.
- ✓ Collect old photographs, maps, or sketches of the site.
- ✓ Identify key individuals or groups associated with the site's discovery or documentation during this period.

2. Interviews

- ✓ Engage with elders in the community who may have oral histories about the site before 1950.
- ✓ Ask about changes in the site's use or significance over time.
- ✓ Inquire about myths, legends, or traditions associated with the site pre-1950.

3. Physical Observation

- ✓ Examine features at the site for evidence of historical practices or natural conditions mentioned in early descriptions.
- ✓ Compare findings with any documented descriptions or images from the pre-1950 era.

Objective 2: To establish the current status of Nyero Rock Painting historical site

1. Site Documentation

- ✓ Record the physical condition of the rock paintings, noting any signs of fading, damage, or restoration.
- ✓ Assess the state of infrastructure, such as paths, information boards, and visitor facilities.
- ✓ Take photographs to create a current visual record of the site.

2. Environmental Survey

- ✓ Note environmental factors affecting the site, such as vegetation overgrowth, weathering, or animal activity.
- ✓ Observe any natural features around the site that may have historical or cultural relevance.

3. Engagement with Authorities

- ✓ Consult with site managers or local authorities about current preservation efforts and challenges.
- ✓ Gather data on visitor numbers, site funding, and community involvement.

Objective 3: To investigate the human activities taking place around Nyero Rock Painting historical site

1. Community Interaction Survey

- ✓ Observe and document local community activities near the site, such as farming, grazing, or ceremonies.

- ✓ Engage with community members to understand their use of the site and its significance to them.
- ✓ Identify commercial activities, such as vending or tour guiding.

2. Tourism Activity Analysis

- ✓ Monitor the number and type of visitors to the site.
- ✓ Observe tourist behaviors, including guided tours, photography, or recreational use.
- ✓ Note the presence of guides or information provided to tourists.

3. Cultural Practices

- ✓ Investigate any ongoing cultural or spiritual practices conducted at the site.
- ✓ Assess whether these activities align with the historical significance of the paintings.

Objective 4: To examine the impact of the various human activities on Nyero Rock Painting historical site

1. Damage Assessment

- ✓ Document any visible damage caused by human activities, such as graffiti, litter, or physical wear on the paintings or site features.
- ✓ Identify areas of vegetation clearance, soil erosion, or habitat disruption linked to human activity.

2. Impact on Paintings

- ✓ Evaluate the extent of damage to the rock paintings, including signs of fading, scratching, or chemical deterioration.
- ✓ Investigate whether human actions (e.g., touching, climbing) contribute to the damage.

3. Community and Conservation Balance

- ✓ Assess the level of community involvement in conservation efforts.
- ✓ Explore conflicts or synergies between human activities and site preservation.
- ✓ Document any measures taken to mitigate the impacts of human activity on the site.

Appendix 5: List of Interviewees

NO	NAME	TITLE	DATE/ MONTH	YEAR	CELL/WARD
1	Eperu Bosco	L.C 1 Nyero Cell	15 December	2024	Kees
2	Asio Jesca	C/P Executive Committee	17 December	2024	Kees
3	Olupo Moses	Vice Chairperson	16 December	2024	Ogooma
4	Okune Stanislaus. O	Secretary, Cultural Leader	16 December	2024	Olilim
5	Aeku Gusberito	Treasurer, Cultural Leader	16 December	2024	Agurut
6	Omoding Moses	Mobiliser, Cultural Leader	16 December	2024	Moru Ikara
7	Opio William	Tour Guide	15 December	2024	Kees
8	Okerenyang. Francis	Elder	17 December	2024	Kees
9	Ikara Gilbert	Elder	16 December	2024	Moru Ikara
10	Toto Amujal Filomena	Elder	16 December	2024	Agurut
11	Toto Aluja Yosephina	Elder	16 December	2024	Olilim
12	Agoro Winfred	Elder	17 December	2024	Kees
13	Esogu Daniel	Elder	17 December	2024	Kees
14	Ewaku Mark Edrine	Local Council Leader	18 December	2024	Ogooma
15	Opila Joel	Clan Leader	18 December	2024	Ogooma
16	Okiror Mark	Clan Leader	19 December	2024	Agurut
17	Ekoju Tom	Tour guide (assistant)	19 December	2024	Agurut
18	Ademun Hellen	Elder	19 December	2024	Agurut
19	Atai Becky	Elder	19 December	2024	Agurut
20	Amoding Betty	Clan Leader	19 December	2024	Agurut

21	Apio Rose	Clan Leader	19 December	2024	Agurut
22	Aguti Betty Salume	Clan Leader	19 December	2024	Agurut
23	Iyado Perepetua	Local Council Leader	19 December	2024	Agurut
24	Aanyu Malisa	Tour guide (assistant)	20 December	2024	Kees
25	Itolot Rose	Tour guide (assistant)	20 December	2024	Kees
26	Kwapu Zifera	Elder	20 December	2024	Kees
27	Awadu Thursday	District Official	20 December	2024	Kees
28	Ojilong Evra	District Official	20 December	2024	Kees
29	Apio Loyce	Tour guide (assistant)	20 December	2024	Kees
30	Akiteng Joy	Local council leader	20 December	2024	Kees
31	Ibere Ann Lucy	Clan Leader	20 December	2024	Kees
32	Isukuta Jessica	Clan Leader	20 December	2024	Kees
33	Awaido Jenifa	Clan Leader	20 December	2024	Kees
34	Ajelo Patricia Eva	Elder	21 December	2024	Olilim
35	Akello Betty	Elder	21 December	2024	Olilim
36	Akol Vicky Lea	Elder	21 December	2024	Olilim
37	Eropu Benon	Elder	21 December	2024	Olilim
38	Odokotum Ben	Elder	21 December	2024	Olilim
39	Ogwapit Jonathan	Clan Leader	21 December	2024	Olilim
40	Oduli Jonathan	Clan Leader	21 December	2024	Olilim
41	Adokola Jade	Clan Leader	21 December	2024	Olilim
42	Ongurapus John	Clan Leader	21 December	2024	Olilim
43	Ikala Joseph	Clan Leader	21 December	2024	Olilim

44	Obuin Jonathan	Clan Leader	16 December	2024	Agurut
45	Aumo Mercy	Elder	28 December	2024	Moru Ikara
46	Anyait Rebecca	Elder	28 December		Moru Ikara
47	Okwii Eric	Elder	28 December		Moru Ikara
48	Abago Joan	Elder	28 December		Moru Ikara
49	Okit Noah	Elder	28 December		Moru Ikara
50	Okello Moses	Elder	28 December		Moru Ikara
51	Okwako Fred	Local Council Leader	28 December		Moru Ikara
52	Inyaku Nancy	Local Council Leader	28 December		Ogooma

