Sites and boundaries: policy and practice of archaeology in post-colonial Mozambique

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Abstract

In a context where the exploration of natural resources has led to large movements of soils, communities and heritage, there is an increasing recognition national and international imperatives of rescue archaeology.

This essay examines archaeological policy and practice in Mozambique. Drawing on archival research and interviews with practitioners, the essay problematizes current conventions on how and what is legally constituted into archaeological sites in Mozambique. We show that while regulations in what can be constituted, as an archaeological site needs to be updated and articulated with related policies, we argue that major challenges to archaeological practice in Mozambique are subsidiary to academic discussions on disciplinary boundaries.

Keywords: Prehistory, heritage legislation, sites, boundaries, rescue archaeology

1. Introduction

Mozambique present day territory is located in Southern East Africa, which is a region on the sub-Saharan section of the continent with rich evidences of millions of years of human use of the landscape and interaction. Oldest remains of human interaction and occupation of the landscape have been identified in our national borders over the last 3 centuries.

The colonial administration established legal framework that later the Independent country inherited as part of the legacy of 500 years of Portuguese presence. The Portuguese administration of the state stopped 40 years ago and the new independent state started building a framework and a structure to preserve these evidences of human activities in the past. However, the legal context for the protection of heritage was drafted during a troubled period of recent history of the State it now needs improvements to face the new developments part of the social, political and economical dynamics that are happening in the country with the exploration of natural resources.

These developments if are not taken into account carefully can put in danger the archaeological evidences and the major issue in this debate we starting with this paper is

the issue of the limits and boundaries of an archaeological site that are problematic in our current use of the legislation and practice of archaeology in present day Mozambique.

2. Archaeology and prehistoric past in Mozambique

Mozambican prehistoric past is largely unknown to the public inside the national borders and the knowledge of the existence of the hunter-gatherers and other groups is as well limited. The prehistory and archaeology started in the early eighteen-century in Mozambique with references to the existence of rock paintings and other artefacts (Wiese 1891, 1892; Botelho 1934). Later Stone Age artefacts (40000 to the last 100) and Rock Art (panting's and engravings) have been recognized as the main features of ancient hunter-gatherer research in Southern Africa. This paper concentrates on the policy and practice of archaeology in post-colonial Mozambique and I analyse the ways in which since the 1975 the State and the legal framework as contributed for the past and present day heritage preservation in the national borders. Since then has been an evolution on the discipline practice but new challenges have emerged regarding the preservation of heritage in this vast territory. The heritage preservation has been facing challenges resulting the dynamics of the society but also related to the development projects related to the exploration of natural resources but also construction of public and private infrastructures in the country on the last two decades.

Since the last 296 years old evidences related to anatomically modern humans are found within our boundaries and the Later Stone Age (LSA) artefacts and rock art have been recognized in hunter-gatherer research as the main material features of ancient forager communities in southern Africa. Mozambique constitutes a link between southern and east Africa, and it also forms the southern extension of the Rift Valley where the valuable and the oldest archaeological and paleoanthropological finds of the process of human evolution were discovered. There are also has evidence of the occupation by two groups of hunter-gatherer distinct by material culture and rock art motives. Ultimately the territory was also used as one of the routes of Iron Age Migrations or Early Farming Communities (Adamowicz 1984, 1987; Meneses 1988, 1999, 2004; Smith 1995; Saetersdal 2004; Muianga 2006, 2013; Macamo 2006; Huffman 2007; Zubieta 2009; Sillen 2011, 2013).

Although there are more than 200 excavated sites associated with the Stone Age in Mozambique, detailed studies regarding the hunter-gatherer period are lacking (Meneses 1988). The LSA and rock art in the two margins of the Zambezi River have distinctive characteristics that have been studied over the last sixty years of research in southern Africa. Thus, south margin of the Zambezi River, southern Africa is dominated by figurative rock art. The figurative rock art South of the Zambezi, is associated with the Wilton assemblages that are rich in small scrapers, backed microlithic (especially segments, backed points, bladelets, etc.), ornaments (ostrich eggshell beads), polished bone tools, wood and shell artefacts (Deacon 1984b). Wilton in southern Africa is present in different types of environments that vary from arid desert through semiarid, thornveld, bushveld, savanna, riverine woodland and high mountains.

On the other side, the area north of the Zambezi is characterized by geometric tradition rock art (Clark 1959a,b; Phillipson 1972 a & b, 1977; Juwayeyi & Phiri 1992; Smith 1997) and is dominated by geometric forms. For the Central Africa rock art, Smith (1997,

2006) distinguishes between Red Animal (male associated) and Red Geometric (female associated) Traditions. So far all of the rock art north of the Zambezi found in Mozambique conforms to the geometric and red animal rock-art style. Northern Mozambique (Tete, Nampula and Niassa provinces) and also Malawi and Zambia all fall into the Red Geometric and Red Animal Tradition rock-art tradition.

The dominant material culture north of the Zambezi River for the hunter-gatherer groups is the Nachikufan technological Complex, representative for south central Africa in general and especially in Zambia and Malawi. The Zambian sequence of the microlithic industry is one of the best known in sub-Saharan Africa (Sampson 1974; Phillipson 1977). In terms of settlement type the majority of Nachikufan sites are located in rock shelters in Zambia and Malawi. The area is characterized by Miombo woodland (dominated by *Julbernadia* and *Brachystegia*). In terms of characteristics of the Nachikufan, the large quantities of tools such as heavy and hollow scrapers, weighted digging-sticks, grindstones, pestles and spokeshaves (possibly made from polished adzes), may suggest extensive woodworking in northern and eastern Zambia (Clark 1950; Miller 1969a; Juwayeyi 1981; Musonda 1983; Fletcher 2010). The majority of the Nachikufan sites in Zambia were the industry was initially located within the woodlands of the Muchinga Escarpment suggesting dependence on hunting of small animals and gathering wild fruits, roots and nuts. Residents of the Nachikufan sites used bow and arrow technology with transverse heads of stone and points of bone, stone headed knobkerries and later introduced polished stone axes as weapons (Clark 1959: 198, 1970: 175-178; Fletcher 2010:12).

The San and the BaTwa people most probably interacted with the early farming communities, which were related to the location of important shrines and mountains (Schoffeleers 1973; 1992). This is similar to the San Shamans in the Drakensberg (South Africa), who were known for the healing tradition amongst the Bantu (Zulus) speakers (Dowson 1998), the BaTwa for some farmer groups in south-central Africa according to Schoffeleers (1992: 262) were connected with the spirits and had names such as Zinzimu and Zinyau (powerful spirits).

Mozambique is characterized by a mosaic of ethnic groups that emerged in the context of various physiographic, ecological and climatic conditions. The origins of these groups are considered part of the Niger-Congo family of African languages and also by Bantu-speaking populations, which travelled from the forest regions in the direction of east and southern Africa (Madiquida 2007: 48). These groups were metal-using mixed agriculturalists that spoke Bantu languages and they dominated the Cushitic hunter's herders and the cultivators who were living in these areas at least as early as 1000-1500 BC (Nurse 1982: 199-222).

The Bantu speakers that occupied Mozambique migrated gradually from the equatorial regions of eastern Africa during the second century AD to southern Africa. After the arrival of these groups, apart from the Bantu languages it was introduced in this area, agriculture, iron smelting, cattle, ceramics and sedentary habits become the main characteristic of the new groups in the landscape.

In terms of material culture these linguistic groups are associated with the Kwale Tradition which progressively lost decorative elements in the pottery design over the time especially with the development of the later iron-using communities associated with the emergency of modern Bantu language of east Africa (Soper 1982: 235). In the

Mozambique evidences of the early farming communities are associated with the Matola pottery tradition (identified in Matola city) and also the Chifumbazi ceramics (found in Tete province in the 1890's by Carl Wiese). Both pottery traditions are the oldest materials associated to other artefacts (iron objects, dagga structures, Shell middens) that can be associated to the first Bantu communities in our territory.

After the arrival of the early farming communities gradual transformations, which include migration and movements of different groups, in the economic and social organization in the Central Mozambique and more specifically in the Zambezi Valley might have contributed to the emergence of the Late Farming Communities connected to trade, urbanism and the state formation process (Macamo 2006). These later developments are related to the dynamics that were verified in the confluence of the Shashi and Limpopo rivers between South Africa, Zimbabwe and Botswana that contributed to the emergence of stratified societies in the region.

The Shashi-Limpopo Basin (SLB) in South Africa was the primary place in Southern Africa to assist the rise of the first complex social and political systems. This complex society is best known from the sites of Schroda (AD 900-1000), then K2 (AD 1000-1220), Mapela (11th century AD) and Mapungubwe (AD 1220 to 1290) (Huffman 2000, 2005, Meyer 2000; Shirikure et al 2014).

With the decline of Mapungubwe, Great Zimbabwe (Late Iron Age) emerged as the regional center of power. At AD 1400-1450, Shona-speaking chiefdoms (linked with Khami pottery and stone walled settlements), moved south of the Limpopo and occupied the edges of the cultivable floodplains in the SLB (Huffman 2005). This culture is associated with elite stone buildings that come in a variety o types and styles, spatial layout that separated the elites based on the lavish use of graphite burnishing, external trade and an economy based on intensive herding of cattle (Huffman 2000).

The Shashi Limpopo Basin as a unique archaeological record of the development of pre-colonial complex societies that were connected to east coast trade and adopted a new social system in southern Africa.

Mozambique has an extensive coastline with reported evidence of coastal trade and navigation since the first century AD (Duarte 2012). Even before the Europeans (Portuguese) started sailing in the region, there was Swahili, Arab and Indian ships along the coast connecting Asia and Africa (Duarte 1993, 2012).

Maritime history of Mozambique is linked to Indian Ocean ancient trade networks and in this context existing submerged archaeological remains are of crucial relevance for the reconstruction of all the dynamics developed by the different peoples inhabiting this vast area of the world. Archaeological research can contribute to the restoration of the history of the ancient trade and navigation related to socio-economic activities in the Indian Ocean that involved the Mozambican coast (Duarte 1993; Wood 2011).

The Swahili and other endogenous social entities in East Africa had farming and fishing as sustainable activities but also gradually engaged with a maritime lifestyle that allowed trade connection with different regions in Africa and Asia in the Indian Ocean (Duarte 1993; Chami 1994).

Arabic and other Asiatic sources provided some information on the ancient maritime history of Mozambican coast. From AD 900 -1000, the geographer Al Masudi referred to Sufala in Mozambique. Around 1154, Al-Idrisi's map illustrated Sofala and Zanj as one of the regions of east Africa, which included Barbara (up to Mogadiscio in Somalia),

places were the Muslim presence was known (Juma 2004; Trimingham 1975; Horton 1984; Chittick 1990). Sofala referred by the Arabic sources in the present Mozambique apparently represents the area from Cabo Delgado (north Mozambique) to south Vilanculos Bay (Inhambane Province) where trade activities linking the Indian Ocean took place (Trimingham 1975; Ekblom 2004; Madiquida 2007). Although, the Arabs and Swahili established trade activities along the Mozambican coast, only in the 12th century did the geographer Al-Idrisi refer to Sena (Tete Province) in the Zambezi as part of the inland penetration of these groups and also gave information about trade links in East Africa (Trimingham 1975; Serra 1986; Muianga 2013).

After the 14th century with Portuguese discoveries Mozambique coast began to play a major role in European involvement in western Indian Ocean trade, namely slave trade to the Atlantic. Mozambique Island was one of the most important ancient harbours in this context.

Archaeological surveys in Mozambique have reported the existence of several important places with evidence of underwater archaeological remains especially in the northern part of the country, but it is in the vicinity of Mozambique Island that the most important underwater archaeological sites have been reported (Duarte 2012).

Albeit some preliminary survey work done namely by Eduardo Mondlane University teams, there was never a well-structured archaeological research intervention directed to archaeological heritage. On the last two decades, activities of salvage and recuperation with commercial objectives have taken place in several parts of the coast and their real impact on underwater heritage has not yet been determined.

The extent of Mozambique coast and the scarcity of state resources make an effective protection of underwater heritage difficult in Mozambique. In the country, there is only one archaeologist with experience in underwater heritage who is working in the Archaeology and Anthropology Department at Eduardo Mondlane University. The Mozambique coastline has not yet been extensively surveyed, but considering the existing bays (like Inhambane) and archipelagos (like Bazaruto and Quirimbas) and evidence of old trade settlements along the coast, there are several areas of concern, but the area around Mozambique Island, and its vicinity is of withstanding international importance (Adamowicz 1987; Botelho 1934; Duarte 1983; Sinclair *et al* 1993; Duarte & Meneses 1996; Nguirazi 2008).

Surveys made by Eduardo Mondlane University have shown a great variety of extensive deposits from several centuries representing pre-colonial and colonial history in this important site with unique remains of the 16th century Portuguese galleons from the time of the great ocean discoveries. These remains are a rarity in world heritage site such as the Mozambican Island and other sections of northern Mozambique (Duarte 1983, 1987, 1993, 2012).

Not less important are the monuments and sites related to the Arabs/Swahili and later by the Portuguese presence in Mozambique over the last 900 years. Recently new emphasis has been given to the protection of the Liberation War (1964 to 1975) sites and individual monuments associated to the struggle for Independence. Thu, it's found in the national territory rich material evidences of a very dynamic process during prehistoric and historic chronological periods that are important to preserve and to be used as a memory of the active cultural, social, economical and human occupation of the past and present day territory of Mozambique.

3. Legal framework and heritage protection

In Mozambique the Portuguese colonial administration in the XX century realized that there was a need to protect monuments, prehistoric and historic evidences. Thus in 1943 the first cultural conservation legislation was adopted (Legislative Diploma nr 825) and it made it a crime to destroy any site that had scientific interest.

Together with this document, it was in 1947 created the National Commission for Monuments and Historic Relics (NCMHR). This institution played a relevant role in protecting the material culture of Mozambique colony. Therefore the focus was placed on the conservation of immovable heritage and protection Portuguese colonial monuments such as buildings, churches, fortresses (DAA 1980; Macamo 2006:222). There were also recommendations for the conservation of rock art sites (Felgueiras 1965; Oliveira 1962, 1971); but Stone Age (rock paintings and microlithic tools) and Iron Age (Early Farming Communities until before the arrival of Portuguese sailors) were not a priority within heritage management policy during the colonial period.

In 1975 Mozambique gained Independence from Portugal and the new nation was affected by political, economical and social changes. This changes affected the management and presentation of cultural heritage. From this period more emphasis was placed on the heritage that best served the construction of identity that was developed with the new state (Jopela 2010). Thus in 1977 the National Services of Monuments and Museums (NSMM) was created to build an archaeological framework for popular education and to preserve a new cultural heritage part of the new state identity (Sinclair 2004; Macamo 2006).

The NSMM did a national campaign to inventory, classify and preserve tangible and intangible heritage resources in the country (Serviço Nacional de Museus e Antiguidades 1981). As result of this campaign was created the Cultural Heritage Archive (ARPAC) in 1980 were results of this project were stored for future research (Jopela 2006: 34).

Unfortunately this campaign was progressively disrupted because of the civil war (from 1977 to 1992) between FRELIMO (Frente de Libertação de Moçambique) Government and RENAMO (Mozambican National Resistance), were field archaeological research and heritage management was very difficult to practice. Associated to the civil war, internal problems[1] in the country, logistical and funding difficulties, as well as an absence of infra-structural[2] development and the existence of a limited number of qualified archaeologists to work in the LSA and rock art (Macamo & Saetersdal 2004: 189; Macamo 2005: 128; Sinclair 1993: 412).

Towards the end of the Civil War, in 1988 the Law for the Protection of Cultural Heritage (Law nr 10/88, 22nd December) was approved and it also contributed to break with colonial legal framework. The new law at the time established general principles for the protection of cultural heritage, including its material and immaterial properties.

[1] Difficulties in getting access to archaeological sites and other problems.

[2] According to Macamo (2005: 128) there was an absence of institutional structures for the archaeological research in the country. On the other hand the lack of archaeological curriculum for pre-colonial history, since the primary, secondary and university instruction.

Macamo and Saetersdal (2004) indicated that only a single chapter referred to archaeology, dealing with accidental finds and archaeological excavations [article 14, chapter V (Law nr 10/88:16)]. The Mozambican Government after the end of the civil war, to close this gap passed a bill on the Rules for the Protection of Archaeological Heritage (Decree 27/94, 20th July 1994). It established the principles and norms to for carrying out work on prehistoric evidences and for the conservation of objects sites and monuments on the national territory (Decree 27/94; Macamo & Saetersdal 2004; Jopela 2010).
Aspects of traditional or community based management systems of cultural sites was not also integrated in this bill (Jopela 2010).
This heritage legislative document thus, did not go far enough, as issues related to the distinction between research permits and rescue archaeology on a clear point of view (two separate permits), leaving a gap to misinterpretation and responsibilities of two different tasks in the archaeological field activities that need to be monitored or legally defined. For instance of the aspects that should be stated was the tasks of the heritage inspectors of the national board of heritage but they do not exist and it gives the responsibility to a group of individuals in the State institutions to monitor the all country.

The two heritage legislation bill that Mozambique has as seen above is a result of political and economical context that the new country passed through since 1975 until the end of the Civil War in 1992. Then, despite the inequalities and omissions as consequence of the process of building a new state it protects the tangible heritage. For the implementation of the legislation and management of the heritage it's crucial the involvement of different stakeholders, and here the local communities role is a key aspect. Unfortunately, since the Portuguese colonial administration and later after Independence Mozambique did not realize the importance of the guardians of the heritage since ancient times.
Local communities involvement in management, according to Jopela (2010: 37-38) needs to be recognized by legislation but also incorporated with the formal state institutions that have the mission to protect heritage.

Legal framework in Mozambique is not up to date and leaves space for different interpretations but the most problematic aspect is the lack of enforcement of the two bills related to heritage and archaeology. Apart from the lack of enforcement, it is also visible the little investment of the state in capacitating the heritage national institutions with means and human resources (the national board of heritage is understaffed and works with limited funds) to protect the prehistoric and historic past over the country.
The aim of the article is to investigate whether a more effective and sustainable method of defining, managing and protecting archaeological sites with development projects and related prehistoric evidences by looking at the other academic forums without disciplinary boundaries. We will now move to look at the international, regional standards and best heritage practices that can provide models to conserve evidences of the ancient past and constant human interaction.

4. International, regional standards and best heritage practices

At the international level there are series of conventions and agreements that provide guidelines to best preserve and protect tangible heritage related to human past.

Conventions and agreements

The most important international agreements regarding the protection of cultural resources are UNESCO's Convention for the Protection of the World's Cultural and Natural Heritage (1972) and it's Convention on the Means of Prohibiting and Preventing the Illicit Import, Export or Transfer of Ownership of Cultural Goods (1970). Mozambique has one World Heritage Sites, which is the Mozambican Island (first capital of the Portuguese colonization from the 15th century to the end of the 19th century).

Mozambique is also a member of the Cotounou Agreement between the European Union and the African, Caribbean and Pacific (ACP) Group of state. In addition to development cooperation issues, the Cotounou Agreement also recognizes the social and cultural dimension of cooperation projects and programs based on the following principles:

- Integrating the cultural dimension at all levels of development cooperation;
- Recognizing, preserving and promoting the value of cultural heritage; supporting the development of capacity on this sector; and
- Developing cultural industries and enhancing market access opportunities for cultural goods and services. (Article 27 on Cultural Development).

IFC's Performance Standards on Environmental and Social Sustainability

The International Finance Corporation (IFC) has developed as series of Performance Standards (IFC, 2012) to assist project proponents in assessing the environmental and social risks associated with a project and assisting the project proponent in identifying and defining roles and responsibilities regarding the management of risk. The IFC Performance Standard 8 regarding Cultural Heritage (World Bank 2012) will be used as a reference for this article to manage impacts associated with archaeological, heritage and cultural risks.

In accordance with Section 1 of the IFC (International Finance Corporation) Performance Standard 8 Guidelines, and professional archaeologists and heritage specialists were appointed to conduct the screening and gap analysis of archaeological and cultural heritage in the project area. The assessment of the significance of heritage has two aims:

- To protect cultural heritage from the adverse impacts of project activities and support its preservation.

- To promote the equitable sharing of benefits from the use of cultural heritage.

The Association of Southern African Professional Archaeologists

In sub-Saharan Africa, the Southern Africa Development Community (SADC) is the an important institution that as one of the important goals is to have a common future within a regional community that will ensure economic well-being, improvement of the standards of living and quality of life, freedom and social justice and peace and security for the people of Southern Africa. Thus, it was established the Association of Southern African Professional Archaeologists (ASAPA) to develop archaeological research, management (the term management includes all related concepts such as conservation, curation, archaeotourism and restoration), outreach and the exchange of archaeological expertise and information in, and beyond, Southern Africa. ASAPA members are archaeologists that can apply for professional membership with Cultural Resource Management (CRM) accreditation (for instance: Stone Age, Iron Age, Coastal Shell Midden, Maritime, Colonial Period, Industrial, Rock Art, Grave Relocation and other areas as specified by the applicant) (ASAPA 2006:6).

For the CRM practitioners it is recommended for development projects regarding infrastructures, natural resources and public work to do Archaeological Impact Assessment (AIA). The AIA are required where potential conflicts have been identified between archaeological resources and a proposed development. Sites are located and recorded, and site significance is evaluated to assess the nature and extent of expected impacts. The assessment includes recommendations to manage the expected impact of property development on the site. These recommendations may include: 1. Avoiding the site; 2. Recovering archaeological site information prior to land altering activities. And 3. Monitoring for additional archaeological site information during land altering activities (https://www.for.gov.bc.ca/archaeology/preservation_process/archaeological_impact_assessment.htm accessed 7th September 2017).

Basic principles and guidelines of ASAPA to practice rescue/consultancy archaeology are valid for all the SADC and are important to specify the technical archaeological specialisation (can also include archaeobotany, archaeozoology, isotope work, archaeometallurgy, human skeletal analysis, etc) of each applicant.

The different examples of best recommended practices in the Mozambican case do not help to define an archaeological site and its boundaries but it contributes to draw codes of conduct/ethics for professionals in archaeology but most important to the practitioners of consultancy to safeguard prehistoric and historic evidences. The next section of the article draws a specific analysis of the archaeological site and it's surrounding were research or rescue archaeology take place.

5. Sites, boundaries: rescue archaeology versus development projects and

On a general point of view an archaeological site is a place (or a group of physical sites) in which evidence of past activity is preserved (either prehistoric or historic or contemporary) and which has been, or may be investigated using the discipline of archaeology and represents parts of the archaeological record. Evidences (accumulation of artefacts, as well as the associated presence of organic elements) from the past can be sites that range from those with few or no remains visible above ground, to buildings and other structures still in use. Surface archaeological sites (usually open-air sites, unlike

those located in caves or rock shelters) characterized by the surface distribution of the material) or stratigraphy (arrangement of the material by different archaeological horizons) can be found.

The sites are located in the open air, in caves or rock shelters or under the waters of seas, lakes, etc. (in the last two cases are the underwater sites) (Meneses 2002; Shaw & Jameson 2002). The context of archaeological evidence, beyond this, the definition and geographical extent of a "*site*" can vary widely depending on the period studied and the theoretical approach of the archaeologist (Shaw & Jameson 2002).
Analysing the definitions of archaeological site it is almost invariably difficult to delimit a site and its boundaries. For instance, it is sometimes taken to indicate a settlement of same sort although the archaeologist must also define the limits of a human activity around the settlement. Any episode of deposition such as a hoard or burial can form a site as well (Meneses 2002; Renfrew & Bahn 2012).Thus development-led archaeology undertaken as CRM, has the disadvantage (or benefit) of having its sites defined by the limits of the intended development project.
In a similar case to this, in describing and interpreting the site, the archaeologist will have to look outside the boundaries of the site or the project area.
A frontier or boundary was considered by social science researchers, to be a spatial term to designate a physical margin, fringe or outer (Lightfoot & Martinez 1995: 475). Alternatively, Kopytoff (1989: 8-12) considers frontier as a matter of physical political division within a geographical space. He defends that frontiers can arise because of cultural divergences within older cultural continuities, or on the other hand, frontiers can be caused by ancient processes of interaction, social formation within and between separated political groups (Kopytoff 1989).

None the less, Massey (1994: 3-5) considers that space is not static, but should be seen as socially constituted. Space allows networks of social relations (including solidarity) that are dynamic. Thus, in a landscape where social relations are practiced by individuals and physical barriers do not limit groups and there are chances to manipulate the border and cultural boundaries (Kopytoff 1989; Cosgrove 1993; Flynn 1997; Gupta & Ferguson 1997). In addition to this argument, Sthal (1991: 267-269) after studying ethnic frontiers in west-central Ghana concludes that boundaries are both permeable and flexible to different types of relationships.
From this brief outline of the characteristics of boundaries from social science disciplines (anthropology, sociology, history and geography), it is clear that in physical and political division, strategies of sharing resources and interaction in the past were present between different ethnic groups. In this sense, human beings in the past engaged (interacted) with other groups and were malleable to use the same space on their own way.
As seen both site and boundary limits are two different concepts difficult to determine the geographical extension but there is a need to define a pattern or indication of how it can be done. Thus archaeological survey is a type of field research by which archaeologists to search for archaeological sites and collect information about the location, distribution and organization of past human cultures across a large area (for instance it can be in an excess of one hectare, and often in excess of many km^2). Archaeologists conduct surveys to search for particular archaeological sites or kinds of sites, to detect patterns in the

distribution of material culture over regions, to make generalizations or test hypotheses about past cultures, and to assess the risks that development projects will have adverse impacts on archaeological heritage (Meneses 2002). Here are needed GPS coordinates [UTM (DD) or Degrees, Minutes and seconds (DMS) – Latitude and Longitude].
With this information the National Heritage Authority should be able to make a judgement after receiving research permits for survey and later for excavations on both research and rescue archaeology. On the other hand, it is relevant to give priority to the Mozambican researchers (there is a local technical capacity that needs to be used and supported) to be led investigators in rescue archaeology projects related to development projects associated to the exploration of natural resources and also public and private infrastructures that involve excavation works, removal or land expansion, or removal of submerged or buried objects.
In our opinion, no permits should allow archaeologists either researchers or consultants to have areas under their jurisdiction that are the size of a province, district or the coastline of Mozambique. The survey reports of a specific area will give an indication of the sites that will be investigated. To better monitor and control the licence process at National Level it is needed a database of the archaeological sites for the country and the researchers that are involved in projects (research and rescue archaeology).

These suggestions and recommendations to better preserve cultural resource evidences, can only be successful if more investment is directed to the National Board of Heritage in terms of funds, human resources, capacity building and means to legally enforce the existing legislation. The problem that the Heritage Authorities and other state institutions face to preserve cultural legacy in Mozambique is the fact that for a development project to start it is requested an Environmental Impact Assessment (EIA).
The processes of establishing development projects begin with EIA were there is a small section on cultural/archaeological assessment together with issues related to environment. EIA may be governed by rules of administrative procedure regarding public participation and documentation of decision-making. Thus the assessment has the purpose that decision makers consider environmental impacts when deciding whether or not advance with a project.
As seen in other sections of the article there is a need to revise the legislation to face the challenges that the development projects bring in a context of sustainable exploitation of natural resources. Thus in Mozambique for projects regarding exploration of natural resources, specifically mining concessions and explorations are guided by the mine legislation.[3] Environmental and cultural heritage impact assessments follow specific legislations.[4]
Here it is clear that there is a poor coordination between the Ministers of Culture & Tourism and Minister of Earth, Environment and Rural Development because the EIA component it's exclusively managed by the last State institution and it has recommendations to archaeological or cultural heritage assessment but the first minister

[3] Lei 20/2014 de 18 de Agosto – Lei de minas and Decreto 31/2015 de 31 de Dezembro – Aprova o Regulamento da Lei de Minas e seus anexos.
[4] For Environmental Impact Assessments see Lei 20/97 de 1 de Outubro – Aprova a Lei do Ambiente and Decreto e 54/2015 de 31 de Dezembro – Regulamento Sobre o Processo de Avaliação do Impacto Ambiental.

not always seem to be part of the process and its giving a minor role of supervising heritage preservation. Cultural heritage tend to be less relevant and there are cases of private institutions responsible of designing the EIA using other social scientist to do archaeological impact assessment or bringing foreign archaeologist with no expertise/experience in sub-Saharan Africa prehistory, contributing thus for poor reports quality (on the archaeological sites) and consequently limited preservation enforcement from the Mozambican state institutions that follow these studies. Fragile state institutions shaped by colonial past, the central government decides from top to bottom and very little interaction with researchers and civil society in terms of heritage protection.

For the production of an applicable EIA it's required qualified technicians and the implementation of the development projects on a sustainable manner, a better inter ministerial coordination and communication is needed at different levels of the central government to the local authorities where these projects take place. Here it's suggested that to protect efficiently the heritage and cultural evidences the following ministers should coordinate the evaluation of the studies of EIA and approval of the development projects, namely: Minister of Culture and Tourism, Minister of Earth, Environment and Rural Development, Minister of Mineral Resources and Energy, Minister of Public Works, Housing and Water Resources.

The coordination between different ministers can possibly enforce the legislation but most importantly preserve archaeological evidences that are important for the reconstruction of our national identity that is a result of contact between local ancient communities and the rest of the world. To achieve this goal the EIA studies must comply with AIA and follow the legal need of rescue archaeology stated in our heritage legislation for archaeological evidences:

"All projects involving excavation works, removal or land expansion, or removal of submerged or buried objects shall include preliminary archaeological survey works and rescue archaeology in the area covered by the undertaking and, to this effect, its budget should include an allocation of no less than 0.5 percent of the total cost of the undertaking." (Decree n° 27/94 of 20 of July, 1994, Chapter III, Article 12).

What is an archaeological site? Geographical extension of an archaeological site? It's a difficult task to categorize all sites on the same way because, each site has its specifications and the limits/boundaries are dependent to the existence of archaeological evidences identifiable.

So the Decree n° 27/94 of 20 of July, 1994, needs revision to update to the current demands of heritage protection and it clearly has to specify for instance, which are the possibly boundaries of an archaeological site. For instance in South Africa the legislation for the limits and boundaries of some sites is specific as we can see:

"rock art, being any form f painting, engraving or other graphic representation on a fixed rock surface or loose rock or stone, which was executed by human agency and which is older than 100 years, including any area within 10m of such representation" (National Heritage Resource Act 1999, Chapter III Article 2: 6).

The reflections and practical solutions to preserve heritage in a sustainable manner should entail an interdisciplinary approach and permanent debate on the viable paths that can be considered to achieve the main goal of safeguarding heritage.

6. Conclusions

Our discussions of heritage site and it's boundaries throughout this paper highlighted that there is a urgent need to be careful with the attribution of archaeological permits to both research and rescue/consultancy archaeology. Site Boundaries need to be clearly stated and to avoid the trivialization of archaeological heritage protection in our legislation.
A need of carefully evaluates the social, economical and political dynamics in order to best protect our long heritage but also to preserve the memory for the future generations.
Production of knowledge is not disconnected from present day society and archaeology contributes with means of collection, interpretation and transmission of historical information in specific social context and not a merely a way of accumulating knowledge of the past human behaviour (Sinclair et al 1993: 428).
Thus to preserve the prehistoric and historic past societies in Mozambique there is a need to define clearly how archaeology operates within our national boundaries and how social sciences together with other fields can give a contribution to define a site. It's seen that articulation between different state institutions together with scholars, technicians of heritage and local communities along the country is the path for an inclusive discussion and solutions that endanger the archaeological heritage protection. This paper has to aim to analyse the problems we face as prehistoric heritage experts and how the small experience acquired over the years can be substantial input for the development of practice of archaeology in post-colonial Mozambique.

7. Acknowledgements

Euclides Gonçalves, Jaco Van de Walt, Edson Mugabe, Marta Langa for the discussions and inputs over the years.

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