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UNIVERSITY OF THE WITWATERSRAND

School of Arts

Saving or selling underwater heritage? The role and impact of treasure hunting on the Island of Mozambique.

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A dissertation submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg in fulfilment of the requirements for the degree of **Master of Arts in Heritage**.

Johannesburg, October 2020

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Co-supervisor: Doctor Justine Wintjes (Wits School of Arts)

Declaration

I, Anézia António Asse declare that this dissertation is my own original work. It is submitted for the degree of Master of Arts in Heritage in the Faculty of Humanities at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.



Anézia António Asse

Abstract

Maritime archaeologists claim to be the ones with the legal rights and skills to research and determine the use of underwater heritage. This raises tension with other stakeholders such as academic researchers, local communities, governments and professional treasure hunters. I explore this situation using the case study of Mozambique Island where a large-scale commercial treasure hunting company, Arqueonautas, recovered and sold valuable underwater heritage items around the world. Under pressure from various concerned stakeholders, the Mozambiquan government terminated Arqueonautas' hunting contract in 2014. Thereafter, maritime archaeologists stepped in to preserve and conserve what was left while some local communities took part in small commercial treasure hunting activities. To understand perceptions on underwater heritage, this ethnographic research interviewed marine tour guides, informal sellers, boat manufactures and fisherfolk whose lives depend on the Island of Mozambique sea. Accordingly, the research contributes to underwater heritage debates arguing that it is crucial to take into consideration the interests of all the stakeholders (the government, international organizations for conservation of cultural heritage, local communities, marine archeologists, academic researchers and treasure hunters) associated with underwater heritage.

Dedication

To my late mother Elisa Salomão Manusse (in memory) for infinite inspiration.

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List of Acronyms

AD	*Anno Domini*
CEO	Chief Executive Officer
EMU	Eduardo Mondlane University
ibid	ibidem (in the same place)
IDM	Ilha de Moçambique
NDCH	National Directorate of Cultural Heritage
PADI	Professional Association of Diving Instructors
Pers. comm	Personal Communication
PI	Património International S.A.R.L
SWP	Slave Wreck Project
UNCLOS	United Nations Convention for the Law of the Sea
UNESCO	United Nations Educational, Scientific and Cultural Organization
USA	United States of America
WiSER	Wits Institute for Social and Economic Research

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Chapter One: Introduction

Aim

Shipwrecks and their cargo form a tangible underwater heritage that is susceptible to natural and human threats. In the main, humans are the main culprits. Natural threats result from unstoppable chance occurrences such as tides, tsunamis, cyclones, and other catastrophes. These cannot be completely prevented but proper impact reduction measures allow us to reduce the risks posed by such events (UNESCO 2015:12). Human threats include the harm stemming from developments such as construction, dredging, trawl fishing, laying cables and pipes, and mining. I argue that the worst threat to underwater heritage is treasure hunting.

On the Island of Mozambique, treasure hunting is practiced on the one hand, by companies that present themselves as archaeologists promoting and protecting underwater heritage, and on the other hand, local communities that collect artefacts to sell to tourists around the Island of Mozambique (de Carvalho 2009:4). Companies undertake massive underwater excavation and selection of prized artefacts for sale around the world, while some local group communities engage in small scale collection and transaction of the same.

As a maritime archaeologist, I undertook this research to interrogate the tension between underwater archaeologists and large-scale commercial treasure hunters at the Island of Mozambique. The latter group has been described as the major threat to the conservation of underwater heritage. I focused on the large-scale commercial treasure hunting activities of the Portuguese firm Arqueonautas. It soon emerged from the interviews I conducted with the local community that even local people were also involved in small-scale treasure hunting for the underwater artefacts. Suspecting that there were spiritual or religious meanings associated with the underwater artefacts that led the local community to conserve their heritage for such a long time only to change their conduct after the profitable sales of Arqueonautas, I focused my attention on the local community to grasp their unknown or silenced role as stakeholders in underwater heritage practices.

By foregrounding the local community perspective, this research aimed to answer the following major questions: what were/are the community attitudes and practices towards underwater heritage? How were/are these different to official polices? How have large-scale commercial

treasure hunting practices affected the local community? In addressing these questions, this project sought to contribute to the debates around underwater archaeology in poor countries where the lack of advanced research equipment and scarce financial resources can lead to inefficient or nonexistence of underwater archaeology research to the loss of irreplaceable historical information and weak conservation of underwater heritage. I also sought to reflect on different values associated with the underwater heritage beside scientific ones, such as the economic and cultural ones.

Rationale

This study seeks to contribute to the debates around archaeology and treasure hunting in poor nations such as Mozambique. Marine archaeology science privileges the expensive handling of underwater heritage requiring certified archaeologists trained in diving, sophisticated equipment for research and subsequent conservation of the artefacts. Treasure hunters offset the steep costs and make profits through retailing their finds. Between archaeologists and treasure hunters, the latter seem to be the main threat to underwater heritage.

This project also seeks to perceive underwater heritage as cultural assets. These artifacts are valuable socially, scientifically and economically. Underwater heritage is one of many categories of tangible cultural inheritance that consists of traces or manifestation of past human life. These can be movable "paintings, sculptures, coins, manuscripts, ceramic, textiles and so on" (Prott & O'Keef 1992:308) or immovable if found in the original place of creation as is the case with "monuments, prehistoric caves, ancient cities, buildings and landscapes" (UNESCO 1970: Prott & O'Keef 1992). They contain diverse meanings to different stakeholders. While archaeologists see the scientific value to be accrued through scientific methods, treasure hunters see them as assets that can provide affluence and adventure. For governments they are both resources to be explored and protected at the same time. This project seeks to unravel these competing meanings among diverse stakeholders in the context of the Island of Mozambique.

Background of Maritime Archaeology and Treasure Hunting in Mozambique Island

The Island of Mozambique or Mozambique Island is a unique UNESCO (United Nations Educational, Scientific and Cultural Organization) world heritage site located in the Republic of Mozambique. The Island whose name was adopted for the state as a whole is around "one

square kilometer and located in the entrance of Mussuril Bay which opens into the Indian Ocean in Nampula province from where the Island is administered" (Ministério da Cultura 2010:10). A bridge of 3,5 km, built in the 1960s, joins the small Island to Lumbo. This small Island hosts the most important known underwater heritage in Mozambique resulting from two ancient maritime trade routes with the far east and later with Europe. The first route is the oldest one and dates before the arrival of Europeans in East Africa and formed part of the monsoon-driven trade between Asia and Africa though the Indian Ocean. Dominated by Arabs, this trade lasted for centuries until the arrival of the European trade ships which established new routes and later came to dominate the old trade routes. The Island's underwater heritage comprises in particular wrecked ships from the 'C*arreira da India'*, Portuguese caravels, carracks and galleons of the sixteenth to the eighteenth centuries sailing to or returning from India (de Carvalho 2009:2).

Different stakeholders have been drawn to this heritage. International and Mozambican scholars have shown interest in researching the underwater heritage at the Island. In 1998 for example the EMU (Eduardo Mondlane University), initiated an underwater survey around the Island where it claims to have identified and documented ceramic jars, cannons, piles of ballast stone and other artefacts. This survey was discontinued when the government granted the concession of an exclusive license to a treasure-hunting company called Arqueonautas Worldwide (Duarte 2014).

According to an investigation by journalist de Carvalho in his Masters dissertation, "The underwater cultural heritage of Cape Verde and Mozambique" (2009:18), Arqueonautas Worldwide is a "large-scale treasure hunting company that has largely focused on developing countries such as Cape Verde, Mozambique, Vietnam and Indonesia" that lack the human and technical resources to protect their underwater heritage. Consequently, Arqueonautas has gained permission to explore the underwater heritage of these poor regions. Desperately poor governments often gave the company a free hand, allowing it to survey, excavate and then to export and sell the heritage to the highest international bidder.

In November 1999 Arqueonautas in association with Património International SARL - a non-profit making organization "80 percent owned by the Mozambican State and 20 percent privately owned, signed a contract with the Mozambican government" (de Carvalho 2009:18).

This contract gave exclusive rights to Arqueonautas to survey, excavate, export and trade underwater heritage artefacts. Curiously, Arqueonautas maintained that the underwater heritage from the Island was being plundered by local and international looters and it was their intention to promote and protect this heritage.

The contract was initially valid for three years. In 2000 Arqueonautas started to survey and excavate around the Island. The contract stated that 50 percent of the archaeological finds belonged to Arqueonautas Worldwide and of the other 50 percent, the Mozambican State had the right to choose the best items while the rest would stay with the PI (Património Internacional SARL). The PI was tasked to invest the income from the sale of those artefacts towards further underwater archaeological investigations, but it seems this did not happen. There are no references or reports about this due to slack heritage management practices in Mozambique. Some members of the State, civil society and academics took issue with Arqueonautas/PI contract, considering the sale of heritage clause in the contract to be ill-advised (de Carvalho 2009:18).

According to article 10 of the law 10/88, concerning the protection of Mozambican cultural heritage (*lei sobre a protecção legal dos bens materiais e materials do património cultural moçambicano*) the state has the inalienable absolute right to the heritage. However, the terms of the contract between the government and Arqueonautas were undisclosed. The information about underwater archaeology on the Island first appeared in the public domain through international press publications about gold artefacts and Chinese porcelain sold by Arqueonautas on international auctions. Another source of information was the Arqueonautas webpage on the internet, but the company only posted what it wanted to be known by the public (de Carvalho 2009).

From the three years initially accorded for exploration of the area around the Island, the contract was later extended in time and area. By 2014 the contract covered 700 km of the Nampula coast. Over this stretch of 700 km, 45 underwater wreck sites were excavated of which 24 were located on the Island of Mozambique (Duarte 2014). While Arqueonautas explored the Island, a debate arose among academics and civil society publics denouncing the destruction of the heritage of a UNESCO world heritage site. The main issue raised in the debate was that the world heritage site was threatened through the company's treasure hunting activities. These debates were made available on a digital platform which compiled texts written in emails and newspapers (see Anonymous 2004).

In May 2004 around 1553 Chinese Ming porcelain items and 21 gold objects were sold at the British auction company Christie's for €117,289. One thousand silver coins were also auctioned through the internet, for example on the United States Mint website. While the academics were complaining about the commercialization of heritage artefacts, Arqueonautas and the Mozambican government denied treasure hunting accusations, claiming that scientific papers on underwater archaeology on the Island were being prepared and would soon be published.

To date no scientific papers have been published by Arqueonautas. The government's response at the time was that the contract was legal and that they had consulted the National Council of Cultural Heritage (*Conselho Nacional do Património Cultural*) before the exportation of the objects. In May 2003, UNESCO as the international body responsible for encouraging countries to protect their heritage, organised a seminar vis-à-vis the UNESCO 2001 Convention on the Protection of the Underwater Cultural Heritage. Mozambique attended the meeting. According to UNESCO this convention was intended to enable countries to better protect their submerged cultural heritage.

Curiously, Mozambique did not ratify the 2001 Convention. In 2012 Professor Ricardo Teixeira Duarte from EMU published an article reinforcing the value of the underwater heritage from the Island. Under mounting pressure, in May 2014 the government temporarily suspended the contract with Arqueonautas. The EMU together with the government undertook research to evaluate Arqueonautas' activities. In 2015 a team led by Duarte conducted field work (underwater and on land) to evaluate underwater heritage conservation status on the Island of Mozambique. The findings were published in the same year with the inference that Arqueonautas had ruined wreck sites and the remains of the wreck sites. The report resultantly endorsed the revocation of Arqueonautas' operating license to avoid the total loss of the heritage.

EMU is presently documenting what remains on the wrecked site explored by Arqueonautas. These remains include pieces of timbers, ballast stone and pieces of broken ceramics. Alongside this work, and in partnership with George Washington University, scholars from EMU are investigating wrecked slave ships under the SWP (Slave Wreck Project). For the celebration of the 200th anniversary of the Island's elevation to city status, UNESCO undertook the management plan of the underwater heritage in 2017 and last year the University inaugurated the

Center of Archeology on the Island. The Center focuses mainly on research and the creation of documentary archives on slave routes and wrecked slave ships.

Main Activities Related to the Sea

The local community of the Island of Mozambique are beneficiaries of marine life. More than 80 percent of their food come from the Indian Ocean. In addition, some of them produce the traditional boats that are utilized for fishing, tourism and transport. The local marine community can be classified into the following different groups; fisherfolk, informal traders, marine tour guides and ship manufactures. These groups have an intimate relationship with the Indian ocean. The fisherfolk (including women and children) seem to be the most prominent and dominant group on the Island of Mozambique. Their activities can be divided into two, on one side are men who fish at sea using small and medium boats, and on the other side are women and children who hand-fish and collect molluscs on the beach during low tides. After fishing, the fisherfolk separate a small amount from their catch for family consumption and sell the rest. Fishing is followed by retelling sea and fishing taboos stories. Every man intending to become a member of the fisherfolk must join the Association of Fisherfolk and fish according to the set rules - for example, no fishing during the night without a candle or salt for protection against the hostile spirit of the sea. Additionally, no fishing is permitted during important religious festivals such as Eid Mubarak.

It seems that for local communities, the underwater heritage constitutes sacred possessions bequeathed by their ancestors, mostly as slaves whose lives were lost at sea. The fisherfolk indeed knew about the existence of underwater heritage before the arrival of Arqueonautas. Upon its arrival, some of their members joined Arqueonautas in various capacities such as shipwreck site locators.

Selling of fish occurs on the beach, between the fisherfolk and a group of informal sailors (mostly young men). Some of the sailors come from the Island and others from the mainland. They buy fish from the fisherfolk and transport it back to the community for consumption. After fishing, women and children separate a small amount for family consumption while the rest is sold around the Island.

The tourist guides comprise professional groups certified by the local authorities and informal groups of youths. They lead tourists to experience the sea in the vicinity of the Island and for visits to two small adjacent islands. The main attraction in these tours are the shipwrecks IDM002 and IDM003 excavated by Arqueonautas. The last group, are the traditional ship manufactures who work around the beach, renovating old ships and building new ones. Without the Indian Ocean, these local groups have no life purpose.

Literature Review

Treasure Hunting Worldwide

The term treasure hunting denotes the practice of searching, collecting and managing ancient objects or artefacts containing cultural, social and or economic value (Salerno at al 2019). These values could be associated with one object at a time or separately depending on the background and interests of the individual or a group who find the artefact. The individuals or groups could be local inhabitants, those living where the artefacts are located, scholars who are expected to bring a scientific meaning and manage the objects and treasure hunters. The latter are known in the literature as looters and salvors for devoting their time to searching, collecting managing and selling ancient objects (Throckmorton 1998; Salerno at al 2019; Winter 2020). These hunters are often looked down upon by conservationist archaeologists, who claim to be the only ones with the skills and rights to manage the archaeological remains, as selfish, corrupt and unethical (see Aznar-Gómez 2010; Marano 2015).

Treasure hunting takes different forms, and still is one of the most common activities associated with the acquisition of artefacts worldwide. As Joy Ding (2020) reports, items in the Peabody Museum at Harvard were collected by an archeology student encouraged by his professor to collect artefacts from his home country, Peru. In Argentina, a group of archaeologists reported in 2019 two recent cases involving treasure hunting activities by the local community. According with Salerno et al, two local individuals from Antofagasta de la Sierra and, the Vuelta de Obligado, started collecting artefacts after a long time working as local guides in several archaeological campaigns. The two individuals started collecting and keeping artefacts left by their ancestors. For them, those artefacts embodied the visible and tangible part of their long past history. However, the two individuals were accused of treasure hunting by the authorities and their collections confiscated and displayed in Argentinian government museums.

While these examples demonstrate treasure hunting practices on land, marine treasure hunting is more common, attracting more people, often in search of adventure and funded by wealthy individuals, governments and corporations. Treasure hunting at sea is hence a huge trade entangling a global market sponsored by governments and the world wealthiest individuals (Throckmorton 1998; Winter 2020). The treasure hunting trade worldwide is driven by experienced and well-connected treasure hunters from large-scale companies registered as professional treasure hunters and underwater heritage managers, capable of exploring areas thousand miles away from the coast and many meters depth (Throckmorton 1998). The thriving treasure hunting industry has been growing, resulting in the removal of artifacts by large-scale companies in developing countries and selling on to museums, private collectors and wealthy individuals. In Jamaica, Dominican Republic, St. Kitts and Nevis, United States treasure hunting companies have been removing artefacts. These activities decreased what used to be the usual income from underwater tourism in those islands as Throckmorton (1998) indicates. However, in some cases, when large-scale companies explore treasure in developed countries, their actions are challenged in court, with the hunters being seen as culprits and in some instances, losing their rights to explore the wreck site in question. Examples include the case documented by Marano (2015) in which the US National Park Service' decision closed research and public access to the British warship HMS Fowey shipwreck which had been found by professional treasure hunters. The shipwreck is located in Biscayne National Park, at a depth of approximately 9.14m and after a long legal battle between National Park Service and its finders, it was awarded to the government of the United State. Another case concerns the Vasa, a battleship of 1628 in Stockholm Harbor. After it had been explored by treasure hunters, it was then transformed into a large and successful tourist site.

Island of Mozambique

The inventory of the intangible heritage of Island of Mozambique (2009) states that the name of the Island and later the name of the nation was coined during the Portuguese colonial era. The name of Mozambique came from attempts to pronounce "Mussa son of M'bique", the name of the sultan who "owned" the Island when the first group of Portuguese led by Vasco da Gama arrived in 1498. The name Mozambique coexists with the name *Omuhipiti*, a name by which the local people termed the Island from time immemorial.

The Island of Mozambique was the first capital of the country from 1507 to 1898. It was elevated to the status of a city two centuries ago. The Island is around 3 km long and 600 m wide,

and 180 km from Nampula City the capital of the province. It is connected to the sea on the navigation routes of Madagascar, Mayotte, Comoros, Ibo and the Archipelago of Zanzibar (ARPAC 2009; Ministério da Cultura 2010). This Island is close to three uninhabited small Islands namely: São Lourenço, where the Fort of the same name is located, Goa or São Jorge and Sena or São Tiago, better known as Ilha das Cobras. The Island of Mozambique is in the middle of Mossuril Bay about 4 km from the coast (Lumbo) and connected by a bridge built in 1966 (ARPAC 2009; Ministério da Cultura 2010).

In the district of the Island are two administrative posts: Island of Mozambique and Lumbo. The area of the district of the Island of Mozambique corresponds to the area of the municipality. The designation "Island of Mozambique" refers simultaneously to the district, the administrative post and the city/municipality, respective political-administrative entities that are overlapping in the same territory (ARPAC 2009). The Municipal Assembly forms the head of the political-administrative structure of the Island as a district, followed by the City Government, whose head is the Administrator. The Urban Administrative Posts are headed by the Heads of the Urban Post. The island has four regulated posts, two on the island and two on the mainland, which collaborate with the secretaries of the 30 neighborhoods. The community leaders are the link between the population and the administrative and governmental authorities (Municipal Council and City Government). The community leaders are organized into Muslim (as the main religious group) religious associations called Xadulias and Cadirias, but Islam is not the only religion (ARPAC 2009).

The Origin of the Shipwrecks in Mozambique Island

The shipwrecks on Mozambique Island date from maritime connections with the Eastern World from the beginning of the last millennium and later through the trade with the Portuguese from the fourteenth to the nineteenth century. The people of the Persian Gulf, the Arabian Peninsula, India, and China had long settled on the East African coast. The Arabs of the Persian Gulf created ports from Mogadishu in Somalia to Sofala in central Mozambique and spread Islam (Duarte 2012). The Indian Ocean trade was prosperous and gave rise to major cities such as Mogadishu, Melinda, Mombassa, Kilwa, Zanzibar and later Angoche and Sofala in Mozambique. The main products exported from East Africa were gold and ivory and the products imported to Africa were porcelain, guns, glass, silk fabric and spices. The oldest indications of this trade are mentioned by an Arabic traveler Al-Masud of the tenth century. The Indonesian trade joined the Arab trade in the twelfth century and by exchanging their oriental products

they gained gold, ivory, leopard skin, turtle shell, grey amber, rhinoceros' horns and later slaves (see ARPAC 2009; Duarte 2012; Arnold 2014).

In Mozambique, trade with the Indian Ocean world and the ancient Asian states such as Persia, India, Indonesia and China among others, was based on the exchange of gold and ivory coming from the interior of the country and exchanged for silk fabrics, glass dishes and porcelain. The prosperous trade between East Africa and Asian states attracted the attention of some countries from Southern Europe who were already buying gold, ivory, and spices from India and wanted to have a monopoly over the trade. Portugal was the first European country to reach East Africa by sea (ibid). The Portuguese fleet of three vessels led by Vasco da Gama arrived on the Island of Mozambique on February 28, 1498. They settled initially in Sofala and only came to establish the first fort in 1507. Around 1530, the Island replaced Sofala as the capital of the Portuguese establishments in Southeast Africa, a status that would remain until the end of the nineteenth century. Between the sixteenth and seventeenth centuries, the Island was one of the most important commercial ports of the Indian Ocean. A hospital and fortress of San Sebastian, the biggest ones in the region were built. This fortress protected the Island from attacks from the sea traffic (Alpers 1976).

Arnold (2014) suggests that in the journey from Portugal to the Indian Ocean via the Cape of Good Hope, the channel of Mozambique was the most taxing. After the ships had left Portugal, they passed the archipelago of Cape Verde in the Eastern Atlantic and then the Cape of Good Hope. Mozambique Island was the first place in the Indian Ocean for refreshments and curing of the sick. The Island was a significant trade station that reached its peak in the eighteenth century when it channeled more than two-thirds of the region's ivory trade. It not only became a political and commercial center for the Portuguese in East Africa, but also served as the fortress for its expansion into the continent, towards the Zambezi Valley and interior gold markets. The pilots of the vessels from Asia were experts on the navigation of the Indian Ocean. They knew and documented the characteristics of the Indian Ocean related to wind, currents, tides, depth and hazards - shoals and sandbanks - to avoid ship losses. The Portuguese pilots who were initially unfamiliar with the characteristic of the navigation conditions of the Indian Ocean lost time, money and many vessels in the area (ibid). The passage through the Mozambique Channel was one of the most dangerous parts of the route around the Cape to India, because of the existence of reefs, sandbanks, irregular winds and cyclones that caused the loss of many ships. Another factor that caused several vessels to sink was the war between the

European countries for the control of the trade routes (Arnold 2015; Duarte 2014). These battles for trade routes involved the British, the French, the Spanish, the Germans and the Dutch inter alia.

One such unfortunate ship loss was the nau[1] *Nossa Senhora da Consolação* that sunk in 1608 and was subsequently excavated by Arqueonautas and registered as IDM 003. This nau was part of the second outward-bound fleet that arrived in Mozambique Island in 1607. The other three vessels were the nau *Nossa Senhora do Loreto*, and the galleons *São Filipe e Santiago* and the *Santo André* which continued their voyage without stopping at the Island. The nau *Nossa Senhora da Consolação* sunk when Dutch vessels attacked the Island in 1608. After the first attempt the *Consolação* remained stranded and in order to impede the second attempt the Portuguese set her on fire and the Dutch managed only to seize some cargo (Arnold 2017: 57).

This wrecked vessel registered as IDM 003 was excavated and surveyed for many years. The remains of the wood structure were reconstructed, the artefacts were excavated, documented and recovered from the site (ibid: 78). From the twenty-two other wreck sites excavated by Arqueonautas in the vicinity of the Island such as the *Espadarte* (1558) registered as IDM 002, the *Consolação* was the most fully excavated and studied. Thousands of porcelain items from *Espadarte* were sold at global auctions although it was only partially excavated. These wreck sites are located close to the fort San Sebastian. The *Consolação* lies at a shallow depth and has the highest number of artefacts recovered from the sea. The *Espadarte* is located at a deeper depth with less visibility and is hence more difficult to excavate. Some of the recovered artefacts are housed in the conservation room on the Island while others were sold around the world.

The Development of Underwater Archaeology

The first underwater archaeology activities were identified as "antiquarian oriented salvage operations" (Bass 2011:2). These activities were carried out by pre-scuba divers who had no archaeological training. They were concerned with removing valuable objects of art from under

[1] Nau describes the old sailing boat, used in the war and merchant navy. It had two or four main masts high and large edge, high bow and stern castles, (Dicionário Infopédia da Lingua Portuguesa Porto Editora 2019), consulted in 23.04.2019 available on: http://www.infopedia.pt/dicionarios/lingua-portuguesa/nau

the sea (ibid). Burgess in his book *Man 12,000 Years Under the Sea: A Story of Underwater Archaeology* (2013) suggests that underwater archaeology began in the 1960s when George Bass led a team for the first systematic excavation of wrecked ships under water in Cape Gelidonya, in southern
Turkey (Burgess 2013). Bass's team were archaeologists who lacked diving experience, some being mere volunteers who had never dived before. Although consisting of amateur divers, the team were pioneers in developing ways to apply techniques of land archaeology under the sea. The team planned to survey the wreck site using the most common land archaeological techniques, hence they used meter tapes to measure the distance of things around the wreck, from previous triangulated fixed points around the wreck. The data was recorded on sheets of frosted plastic. To obtain an image of what the whole wreck looked like, one member of the team dived slowly to photograph the entire wreck. After the analysis of the data gathered from the recording techniques described above it was possible to conclude that the wreck was from Syria and had been involved in the Mediterranean trade. This work comprises the first scientific record of an underwater excavation (ibid).

In addition to the adoption of land excavation techniques and documentation of archaeological sites in an underwater environment, the pioneering sub-discipline of archaeology required a term that better described its aims. The tentative terms used to qualify this type of archaeology included 'underwater', 'marine', 'submarine' and 'maritime', but each of these restricted in some way the reach of the new sub-discipline in the environment in which it is practiced. The term underwater, for example, is related only to the submerged sites, while the term marine refers to sites associated with the sea in general. It is the term maritime archaeology that extends the sub-discipline beyond the environment where it is practiced and further captures the field's broad scope. Maritime archaeology has come to be defined as a sub-discipline of archaeology which "studies the past ways of life, and cultures and humans on and around the sea, lakes and rivers" (Sharfman 2008: 38).

Maritime archaeology has been developing, incorporating, on the one hand, recent diving techniques and on the other hand, implementing computerized techniques that enable the documentation and interpretation of underwater sites. Many underwater sites continue to be found and excavated around the world. This practice inspired the need for a (re)definition of strategies for dissemination of information about, and protection of the underwater heritage. According to the 2001 UNESCO convention, underwater cultural heritage:

> means all traces of human existence having a cultural, historical or archaeological character which has been partially or totally under water, periodically or continuously for at least 100 years. Sites, structures, building, and human remains, together with their archaeological and cultural context, vessels, aircraft, other vehicles or any part thereof, its cargo or other content, and objects of prehistoric character.

From the above definition of underwater heritage, there has been growing debates in many countries among academics, archaeologists and cultural heritage managers. The debates whirl around the establishment of laws and norms on how to use, conserve and protect underwater heritage. Some of these norms are summarised by UNESCO, the international body that mobilises the world to apply a holistic system for the protection of cultural heritage and builds international cooperation to share experience between states. The 2001 UNESCO Convention on the protection of underwater cultural heritage clarifies the definition and sets out basic principles for the protection of underwater heritage and, provides as well practical rules for the treatment and research of the underwater heritage.

These principles and practices of underwater archaeology were fashioned to deal with treasure hunting activities that mushroomed alongside maritime archaeology progress. Treasure hunters are different from underwater archaeologists. They are interested more in finding the most famous historical shipwrecks. Thereafter, they trade the most valuable objects recovered from the same. By digging up the most famous wrecks in history they suggest to the public the image that the seafloor is beautiful and full of treasures. And they further tell fantastic stories associated with these ships. The cargo-less shipwrecks and the part of shipwreck that do not constitute treasure do not interest them. They are interested in merchantable artefacts rather than social or scientific knowledge production. What differentiates an underwater archaeologist from a treasure hunter is what each does with the excavated artefacts. For the archaeologist, each artefact is unique and is a valuable piece of the puzzle to reconstruct past life experiences. Archaeologists also see the artefacts as a heritage left by the earlier communities, consequently it is a public good, and needs to be preserved for the generations to come.

For a treasure hunter, only those artefacts with economic value are worth recovering. To them, artefacts belong to the finder and will be sold to the highest bidder. Curiously, they seldom call themselves treasure hunters. This term is ascribed to them by archaeologists, journalist and

other professionals. In their eyes (treasure hunters), they are serious archaeologists working in a methodical and scientific manner. With the passage of time, the number of companies interested in selling artefacts rather than in knowledge production has grown steadily. Some of these companies are Mel Fisher, Odyssey Marine Exploration and Arqueonautas Worldwide (Sharfman 2008). These companies are often connected to prominent members of governments. This relationship enables a free pass for the exploration, excavation and global trade of underwater heritage artefacts.

Arqueonautas Worldwide Arqueologia Subaquática S.A

This research focuses on Arqueonautas, a treasure hunters' company that explored Mozambique Island from 2000 to 2014. It claims to be fulfilling rehabilitative and philanthropic roles in incapacitated developing countries. There is even a link to an alleged petition for saving maritime heritage on their website (see Sharfman 2008; de Carvalho 2014). All the same, the way they have presented themselves has changed over time because of the contestation around their work in various contexts. They are doubtless aware of the negative connotations that come with the treasure hunting tag and for that reason shun it. The Arqueonautas website nonetheless shows that the company has an unabashed commercial aim to promote their brand. Arqueonautas frames itself as a private archaeology company. The company was created in 1994 to "recover cargoes from historical shipwrecks in an economically viable manner" and two years later it became a "leader in commercial marine archaeology… for shallow water operations" (de Carvalho 2009:13).

Prominent members of the Portuguese government, including the legislator who wrote the decree umber 416/70 that recognizes that archaeological remains found at sea are the property of the state, were later associated with Arqueonautas. Rui Gomes da Silva worked as Minister of Parliamentary Affairs when the law was approved. Four years after the enactment of the law, he became Arqueonautas' lawyer and then worked for the office of the Secretary of State for Culture. The heir to the Portuguese throne Dom Duarte Pio and Duke of Bragança sat on the company's board. Maria João Bustorff, connected to an important cultural foundation (*Fundação Ricardo do Espirito Santo Silva*) and a prominent figure in finance, was also associated with the company. Ms. Bustorff who became the Minister of Culture during the government led by Santana Lopes, was the Secretary of State when the law was approved (de Carvalho 2009).

After the creation of the company in 1995 Arqueonautas went to the Azores, more specifically the Island of Terceira, to start its treasure hunting operations. These activities were led by John Gratton, an ex-officer of the British Royal Navy who had treasure hunting experience from these islands. Two decades before, he was entangled in an acrimonious dispute with his former partners that culminated in his arrest and sentencing to 25 days of imprisonment, subsequently reduced to a fine by a Portuguese court. Twenty years later, Gratton was blacklisted by the local community of Azores that had not forgotten his past treasure hunting activities. They did not want him back on the Island. Nikolaus Sandizell, the CEO (Chef Executive Officer) of Arqueonautas was dumbfounded by the community's reaction but was compelled to discharge Gatton suggesting that he had not known about his past (de Carvalho 2009).

Disconcerting episodes like the Azorean one forced Portugal to amend its legislation, a move that terminated Arqueonautas' operations in Portugal and drove it to hunt for novel pliable territories. This was made easier because the heir to the Portuguese throne had contacts with governments of African countries such as Cape Verde and Mozambique. Cape Verde was the first destination for Arqueonautas and in 1995 a contract was subsequently signed between the Minister of Culture of Cape Verde and Arqueonautas. The operations started in the same year as the signature of the contract and lasted until 2001. The second chosen destination was Mozambique where operations began in 2001. Thereafter, while still operating in Mozambique, Arqueonautas signed new contracts with Asian nations' governments of Indonesia and Vietnam (ibid). From the sale of artefacts found in these countries, Arqueonautas expanded and accrued capital assets worth about €5,000,000, up from the prior €3,000,000. They invested in new ships and modern equipment such as magnetometers, sophisticated instruments used to search for shipwrecks. This enabled them to locate and gather up more shipwrecks' cargoes in a short period of time. As a trail-blazing player in shallow water exploration, the company begun to associate itself with other treasure hunting companies such as Odyssey Marine Exploration which helped them to sell coins on the internet (ibid:14-15).

Arqueonautas in Cape Verde

Cape Verde consists of two small archipelagos on the western coast of Africa. The archipelago of Cape Verde provided the vessel sailing route between Europe and America. And during the fifteenth century, it become an important slave entrepot of the Portuguese maritime empire. Many vessels sank during this period. Since Arqueonautas could no longer operate in Portugal,

the heir to the Portuguese throne Dom Duarte de Bragança, who already had contacts with the Cape Verdean government, chose Cape Verde as the first destination for their treasure hunting activities (de Carvalho 2009:14). In 1995 the Cape Verdean government and Arqueonautas signed a contract which was later extended to 2001. The contract gave exclusive exploitation rights to Arqueonautas. Between 1995 and 2001 Arqueonautas reported that it located 146 wrecks. From this number, they excavated those with the most valuable cargo. Thousands of artefacts including coins and other valuable objects were sold "at auctions in London's Sotheby's on 19 December 2000 and in Copenhagen on 12 June 2004", and some of the artefacts continued to be sold on the internet at least until 2009 (de Carvalho 2009:14).

Some prominent academics of Cape Verde demurred the contract signed between the Minister of Culture of Cape Verde António Jorge Delgado and Arqueonautas. This contract stipulated that 50 percent of recovered artefacts belonged to Arqueonautas while the other 50 percent went to the Cape Verde government. It also postulated that the government should invest the proceeds from the sale of the artefacts to cover the costs of operations. According to Carlos Carvalho, the president of the National Institute for Research and Cultural Promotion, the country lost a lot of money and its underwater heritage through the activities of Arqueonautas. (de Carvalho 2009). The most famous object found by Arqueonautas in Cape Verde was an astrolabe salvaged from the São Francisco wreck. This instrument of navigation was a unique artefact made in silver, dating from 1645, and signed by the Portuguese Nicolau Ruffo. The instrument was auctioned in London by Sotheby's in December 2000 and purchased by an American museum; the Mariners's Museum in Newport News Virginia after Portugal refused to purchase it (de Carvalho 2009:16).

Arqueonautas in Moçambique

Mozambique's maritime history invited Arqueonautas' attention. Most of the shipwrecks in the Island of Mozambique are found in shallow waters. These shipwrecks were first seen and described in the 1960s by Quirino da Fonseca, a Portuguese architect working on the Island. He described how it was possible to see the shipwrecks from a plane because the waters were crystalline (Fonseca 1962). Fonseca and his team conducted an archaeological survey, collecting cannons and other objects. Decades later in 2001, Arqueonautas began its explorations and by August 2002 had discovered 11 shipwrecks in the area around Mozambique Island. Near the San Sebastian fortress they found the wreck registered as IDM 002 (where the initials IDM

stand for Ilha de Moçambique and the numbers 002 means the sequence in which each site was found) that was full of gold objects and Chinese porcelain from the Ming dynasty. According to Christie's, the gold and Ming porcelain continued to be sold until 2004 earning a total of €117,289 (de Carvalho:18).

Eduardo Mondlane University's Activities on the Island of Mozambique

The EMU began its underwater archaeology work in the late 1990s. From this research, they discovered what looked like wrecks covered with ballast stones and some martaban jars. The EMU team led by the only underwater archaeologist at that time Ricardo Duarte, made a photographic record and according to him planned further works around the identified sites but all prospects were canceled when the Mozambican government gave exclusive rights to Arqueonautas (Duarte et al. 2014).

When the Arqueonautas project started several EMU academics and the civil community contested the contract signed by the government and Arqueonautas. It opened a debate around the legality of the contract on online networks and newspapers. This disputation gained traction when Arqueonautas started to advertise the sale of the artefacts found on the Island on the internet and at auctions in Europe. Articles, emails, and exhibitions at seminars were presented by the EMU, journalists and civil society to denounce the damage done by Arqueonautas to underwater heritage in the Island of Mozambique (Duarte 2014; Anonymous 2004). In late 2014, after 14 years of exploring the Island's underwater heritage, the Mozambican state provisionally canceled the contract with Arqueonautas and delegated the EMU to make an evaluation report on the work done by Arqueonautas (Duarte 2014). Apparently, international pressure played a role in this decision. The state claimed that they did not know that Arqueonautas was selling artefacts even when the government had signed all paperwork over the years granting the firm permission to export and sell artefacts outside Mozambique.

The EMU together with the Ministry of Culture, and the local community represented by the Association of Friends of the Island (*Associação dos Amigos da Ilha de Moçambique*) requested technical support from George Washington University and the University of Cape Town and together they conducted an evaluation titled: "*Resultados de avaliação do project PI/AWW respeitante ao património arqueológico subaquático na Ilha de Moçambique de 22 a 25 de Julho de 2014*" on the Island's underwater heritage. The evaluation focused on the verification of the wreck sites IDM002 and IDM003 because they had been the most excavated

sites. They discovered that the IDM003 had been entirely excavated and all the artefacts removed. The most valuable artefacts such as silver coins, bronze cannons, various gold objects, Chinese porcelain among others had been sold. Other artefacts such as plates for daily use, local pottery, seeds, coconuts, bottles of wine and gin and other items were abandoned on the Island without an acceptable conservation plan (Duarte 2014). The evaluation report also stressed that the archaeologists employed by Arqueonautas were not interested in the archaeological value of the artefacts and for that reason left the excavated remains in a vulnerable state. The wood that makes up the wreck structure that for centuries were protected by ballast stones in the sea were left exposed without any preservation plan. Due to the susceptible nature of underwater heritage items on land and at sea, the report recommended urgent further work towards the documentation and conservation of the underwater heritage of the Island of Mozambique (ibid).

In 2015, Celso Simbine, a young archaeologist from EMU, prepared a report on the artefacts removed from the sea by Arqueonautas. Over the course of 3 days, Simbine together with the Ministry of Culture and Tourism, the Museum of the Island of Mozambique and Arqueonautas, elaborated a numerical and photographic record on the state of conservation of the archaeological artefacts. This report was prepared and submitted to the government (Ministry of Culture and Tourism) under the broader context of investigations on Arqueonautas' management of archaeological artefacts. Simbine (2015:2) notes that the archaeological collection consists of "1213 artefacts which comprise local ceramics, porcelain, glazed dishes, local beads and glazes, various copper objects, some silver and bronze coins, ceramic jars, bottles of gin and wine, martaban jars, ingots of lead and bronze, cannons and others". Of the total number of objects, some (mostly gold coins) were taken to Maputo by Arqueonautas. Some were delivered to the Museum of the Island of Mozambique and the rest were given to Ministry of Culture and Tourism.

Simbine underlined the deplorable conservation of the objects as mentioned in the report led by Duarte in 2014. He suggests that Arqueonautas removed the artefacts from the sea without any preservation plan for the objects. These were stored in a 'conservation' room in the Maritime Administration (*Administração da Marinha*) on the Island without the minimum requirements for treatment and conservation. This room was used by Arqueonautas as a laboratory during the period of their activities. Resultantly, many of the objects are rusting, some without any identification, while those that have identification have been damaged. The room lacked any temperature or humidity control among other minimum conservation necessities. Simbine

thus recommends an urgent management plan for the artefacts. From what I could observe, it is apparent that the artefacts were simply abandoned after the cancellation of the Arqueonautas contract. After the assessment of the state of conservation of the underwater archaeological heritage in the sea and on land around Mozambique Island, the EMU began the work of documenting the wreck sites. This documentation gave priority to the wreck of IDM003, the Nau *Nossa Senhora da Consolação* because it was the most excavated and ruined by Arqueonautas. An outline of the wreck was prepared and measurement of all the recovered pieces of ceramic artefacts was made. The timbers were then covered with a geotextile fabric to protect the exposed section from deterioration by microorganisms (see Mahumane 2016/7; Simbine 2016; Asse 2016).

In the other shipwreck sites, it is still possible to see ballast stones, woods and pieces of ceramics among others. The IDM 002 site that is believed to be the *Espadarte* of 1558 is one of the more interesting wreck sites, located near the fortress of San Sebastian. It is a big site with two different parts: the first part is relatively shallow (about 10 m) and it is possible to spot a pile of ballast stones. The other part of the wreck is at a depth of 30m and is therefore yet to be completely explored due the difficult characteristics of the site. The artefacts of these sites were recovered and deposited in the room at maritime administration and others at the Museum of the Island while a lot of them were sold around the world.

At the end of 2017, I worked on a management plan on behalf of UNESCO for the underwater heritage of Mozambique Island. In that plan, I suggested that any excavated artefact should be taken to the Museum of the Island. It is the only place on the island with proper conditions and institutional resources for the conservation of artefacts. In the Museum, the artefacts can also be made accessible to the public and be available for research. Last year the Centre of Archaeology of the Island of Mozambique was inaugurated as part of the program of the commemorations of the 200th anniversary of the Island. The Centre was sponsored by the United States of America Ambassador's Fund for Cultural Preservation and opened at Fort San Sebastian by the EMU (Ministério da Cultura 2018; AIM 2018). According to Duarte, the Centre for Archaeology, Research and Resources aims to conserve archaeological artefacts and to be a reference point in the studies of underwater archaeology in the region. The Centre will also deal with the conservation of the underwater artefacts. It is still installing the suitable infrastructure for conservation.

From my perspective, as I indicated in the last paragraph, the opening of this Center is unnecessary considering that the Museum of the Island has appropriate infrastructure for underwater heritage management. The money used for the new Center could have been used in training and hiring an expert in underwater heritage management to join the already existing Museum' team. Seemingly, the inauguration of this Center is a way the UEM deployed to show their expertise to Arqueonautas and that they are able to do better in underwater heritage management than Arqueonautas did.

The Local Community of Island of Mozambique

The local community of the Island of Mozambique originated from the Bantu-speaking people migration of the first millennium AD. They established themselves in the region of the Island and adopted a marine way of life. These communities specialized in craft industries: "pottery, weaving, production of metals and developed the local trade and long distance". The way of life of these communities and the location of the Island soon conditioned the encounter between Africans, Persians, Arabs, Turks and Indians (Duarte & Meneses 1996:39). With the expansion of Islam, the Island became a political-administrative structure termed a Sheikhdom (*Xeicado*), founded by Moussa M'biki around the eleventh century. Later, from the fifteenth century with the arrival of the Portuguese, the Catholic religion was introduced. This cultural blending is also apparent in the style of the houses in which the Portuguese, Hindu and African styles predominate (Ministério da Cultura 2010).

The trade between the local communities and Arab merchants gave rise to the first town currently called the Stone City Museum, an area where products were sold and exchanged. Economic and social infrastructures were installed including the port, shipyard, post office among others thus giving rise to a vibrant city of stone and lime. The stone was brought from the old quarries located in the southern part of the island. The removal of the stone made the southern area very low in altitude. The poorest inhabitants of the island stayed in the lower and southern part of the island and built their houses using macute (coconuts' tree leaves) which gave its name to the city of Macute (ARPAC 2009). Thus, the community of the Island of Mozambique is distributed into eight neighborhoods grouped in two different areas: Stone Town and Macute Town whose building material define the communities to this today (ibid).

According to the general census in Mozambique held in 2017, the community of the Island has 65,712 inhabitants. The majority of the inhabitants of the Island are young and are mostly in the city of Macute and are mostly Muslim. There are a small number of Hindus and Christians. Fertility rates are high coupled with a high mortality rate. The community is characterized by high levels of poverty with per capita income below tolerable limits. Most families live on less than half a dollar a day. Fishing, agriculture, salt extraction, and informal trade are the main economic activities of the island. The soils of the district of the island of Mozambique are infertile, rendering agriculture an unprofitable activity. Small quantities of "vegetables, maize, cassava, sorghum, rice, sweet potatoes, beans, sesame, cashew nuts, and sisal are produced" (ARPAC 2009:46).

For the interests of this research, I foreground those activities related to the sea: fishing and informal trade. The production of fishing boats is the lifeline of each fisherman. The vessels used for fishing are canoes, sailing boats and motorboats. The production of the canoe, normally about 4 to 5 meters long involve the excavation of the trunk of a cashew tree or mango tree. The canoe is widely used for small-scale fishing near the coast. The sailing boat is the most common on the island. Its predominance is due to the affordable materials used for its construction such as iron wood (*Caesalpinia leiostachya*) and the high level of knowledge in flotation techniques amongst fishermen. The construction of the motorboat follows a similar course of sailing boat production. The difference is in the shape of the bow. The bow of a motorboat is more open to enable the assembly of the engine while the bow of the sailboat is flattened. With the motorboat, it is possible to fish in deeper areas and carry more fish but, the price of the engine is not affordable for many of the fishermen (ARPAC 2009).

Fishing was traditionally accompanied by a secular ceremony held by fishermen termed *Mwacamo.* This ceremony intended in part to show gratitude for the success of fishing and specially to plead for safe fishing in times of crisis. The community of the Island believes in Allah, the spirits of the sea (both good and bad) and in mermaids (ibid). Mwacamo prayers are accompanied by incense. It is led by a Sheik or traditional female leader. As the ceremony takes place, a group of previously chosen women prepare sumptuous food. This food is taken during the night to canoes where it is transported to an area of certain depths and is thrown into the sea for the spirits. After that, the fishermen are obligated to resume fishing after a week of hiatus (ibid). According to Andigg Loy, the ceremony was much practiced until the late 90s

(pers. comm 2017). The abandonment of this ceremony came about after many years of treasure hunting activities on the Island by Arqueonautas and later by the local community. The treasure hunting activities changed the belief that the underwater artefacts are a sacred ancestral heritage as these became saleable objects with economic value. In addition to the fishermen, many young people have also removed this heritage from the sea. Some artefacts are found on the margin of the Ilha das Cobras. Most of the artefacts are sold in front of the Island Museum. The Associations of Friends of the Island and Fishermen consider themselves to be underwater heritage custodians. When EMU and its partners arrived on the Island to conduct the first underwater survey campaign in 2016, some members of these associations prevented the survey from taking off without the integration of some members of the community into the team. EMU was eventually compelled to call a diving instructor from the United States and another from South Africa who was able to give a diving course to two community members. A week later, when they were ready to dive, EMU was able to start its work.

Research Methodology

The main purpose of this research is to examine the impact of 14 years of treasure hunting activities by Arqueonautas on the local community of the Island of Mozambique. It appears to me that this has had an impact on how different stakeholders deal with the underwater heritage (wreck sites and artefacts) in the area, especially among local communities. To pursue its purpose, this research project took a qualitative research approach that combines online research and semi structured interviews. First, I visited libraries, archives and online databases of the University of Witwatersrand (Johannesburg South Africa) and EMU (Maputo Mozambique) to locate a theory helpful for framing the information of underwater heritage and its diverse stakeholders on the Island of Mozambique, mindful of the aims of this study. Secondly, I analyzed the reports published by Arqueonautas detailing how the biggest underwater archaeology project in south-eastern Indian coast was done. I also privileged both national and international legal recommendations underlining the weaknesses and strengths therein to unravel why Arqueonautas opted for massive excavations of the famous wrecks sites IDM002 and IDM003 artefacts.

Thirdly, I analyzed the data from my interviews undertaken on the Island from 10-21 October 2019. This is in line with Filippucci's (2009) observation that interviews help us understand

the contribution of the local community, probing closely into their lifeworld perceptions, exploring pertinent questions such as definitions of treasure, heritage conceptions, engagement with underwater heritage andpolicy-makers. Kumar (2019) and Quivy & Campenhout (2005) explain that interviews bring to the investigation process issues that are absent in the literature reviewed. The interviews were conducted with marine tour guides, fisherfolks, ship manufactures and informal sellers. By interviewing these groups, I aimed to understand what kind of activities each group are involved in and why, and if they were influenced and/or impacted by Arqueonautas.

Chapter Outline

This research contains four chapters. Chapter one introduces the project, explains the aims, gives the overview of the Island, identifies why the Island is rich in underwater heritage, describes the locals and their ancestral origins, shows the methodology used and provides a review of relevant literature. Chapter two navigates from what I consider to be maritime and underwater archaeology practices to the shadow activities of large-scale treasure hunting companies using a clear illustration from one of the prominent companies that worked in Mozambique. It also showcases the legislation that seems to outlaw treasure hunting as acceptable practice and suggest tools in preventing it. Chapter three manifests the interview data focusing on the opinions of the diverse local community of the Island. It classifies them, traces the relationship they develop with the underwater heritage and the power they possess as landowners of the Island. Chapter four presents the findings of the research and highlights the relevant aspects for the future underwater heritage management based on the findings.

Chapter Two: Large-scale Commercial Treasure Tunting on the Island of Mozambique

Introduction

The purpose of this second chapter is to explore large-scale commercial treasure hunting practices through a case study of treasure hunting on the Island of Mozambique. To meet that aim the chapter first provides definitions of the terms marine archaeology, underwater archaeology and large-scale treasure hunting. It considers how international and Mozambican legislation define and stipulate underwater heritage and its exploration. Using a sequential methodology to establish a clear picture of the actual state of underwater heritage on the Island, this chapter

concludes with an analysis of Arqueonautas' reports from 2000 to 2014 about their activities on the Island and in its vicinity.

Large-scale Commercial Treasure Hunting

Some Definitions Related to Large-scale Commercial Treasure Hunting

Humankind has been using the ocean as a transport highway for centuries. However, it is not every ship that reaches its destination: some sink under the oceans due to natural disasters or mechanical failures from which crew and cargo information are lost. After a long time of submersion under the waters, the sunken ship forms a shipwreck whose structure and cargo are preserved up today (see Mel Fisher's treasure). People working with the water environment or living close to it, are those most alive to the presence of shipwrecks. Local fisherfolk are usually the first to find these wrecks when they are in shallow waters. However, goods in deep water need to be intentionally hunted, excepting the very rare cases where wrecks are located during oceanography studies. For the purposes of this research, I will focus on the former case, that is those intentionally found.

While many groups have an interest in these wrecks, two groups have a particular concern to survey, excavate and manage not just the goods but the history associated with them: underwater treasure hunters (I use the term 'underwater' to differentiate them from land-based treasure hunters) and maritime archaeologists. To analyse the large-scale commercial treasure hunting on the Island of Mozambique, I shall first address maritime archaeology since treasure hunting activities are defined in relation to their practices and protocols. Treasure hunters can only excavate material that falls outside the realm claimed by underwater archaeologists. Both groups possess diving skills and adapt technologies to allow them to work underwater. The idea of maritime archaeology comes from mainstream or land archaeology and it has adapted excavation and management techniques therefrom. Usually, marine archaeologists see themselves as the only ones who have the right to excavate past human remains, whether on land or in water, partly because mainstream archaeology is the only science which deals with past human remains found on land, rejecting, as researchable artefact, any object found without the application of excavation techniques by a licensed archaeologist. To control its practices there is a principle in mainstream archaeology which states that if there is any activity involving land removal, it must include archaeologists who will do survey research in the area before any

construction project is undertaken. In these cases, the company running the construction project pays for the survey, allowing that almost all areas are surveyed before being transformed into buildings, roads and dams inter alia (Flatman 2003). These survey principles are relatively easy to enforce in mainstream archaeology which operates on land. Once in the water, things become more complicated.

Each country with a coastal area has its territorial waters (and access to international waters), which can be used for fishing, dumping or hunting for treasure (UNCLOS1982). Working conditions in water are quite different from those on land. Working in an underwater environment means dealing with arduous conditions such as tides, currents, depth, water temperature, and visibility which decree when work can happen. Maritime archaeology requires more team members, more equipment and is therefore more expensive than mainstream archaeology. The term maritime archaeology can be defined as a science which deals with past human remains found in any aquatic environment (Jasinski 1993). And because of different research methodologies inside maritime archaeology, the field incorporates other terms such as underwater archaeology, naval or nautical archaeology and marine archaeology. Underwater archaeology is the preferred term based on its all-encompassing scope, suggesting the study of human remains located in water (sea, lake, river or lagoon). Research on the technology, design and past construction of ships is associated with the term naval or nautical archaeology.

Like mainstream archaeology, maritime archaeology requires the analysis of contemporary sites where the shipwrecks are found, suggesting a third term known as marine archaeology. Accordingly, all the different terms meet on the conservation, management, and dissemination of shipwrecks and their cargos. From an underwater archaeology perspective, underwater heritage should be used only as a research tool, from which information about ways of life of the past societies can be obtained. In other words, the purpose is not to collect artefacts as such, but to create interpretations of what happened in the past, using artefacts among other sets of data. This view considers any other interested parties like local communities with an interest in an underwater shipwreck and its cargo as illegitimate (analyzed in chapter three). It also considers treasure hunters as one of several threats to underwater heritage conservation (Argueso & Ciarlo 2017). Treasure hunting activities, defined broadly as the practice of collecting attractive objects, started before maritime archaeology, a science that was established relatively recently (during 1960s) (Flatman 2003:144). There have always been people interested in the history that can be read in the shipwrecks and objects that lie underwater. Over time these

people organized themselves into groups composed of professional divers, historians, boat technicians and other specialists in the finding and recovering of shipwrecks and objects with historic value. They formulated excavation methods that were subsequently adopted into maritime archaeology.

Firstly, as demonstrated in the literature review section large-scale treasure hunters search for and read historical sources about past marine navigation and selected ships containing valuable cargo, or those that have historical importance or prominence in public memory like the Atocha. In some instances, treasure hunters do surveys on wrecked ships containing valuable objects belonging to their own family or state (see Mel Fisher). Secondly, they evaluate the capacity of their team to find and recover the shipwreck. In the case where the team is able to implement the expedition, they make it public. By informing the media about their research, they aim to show their investors how complicated working under water is and to win more people (future artefact buyers) interested in the precious historic objects. When the shipwreck is found, photographs of the original wreck are taken followed by measurements for comparative purposes. These methods help with excavation planning that will inform the lifting of objects from the seafloor without damaging them. Retrieving unbroken objects is of paramount importance in treasure hunting. This is both for the public who elevate the treasure hunters as courageous heroes bringing them the past as it was before it sunk, and for the antiquity market where intact objects attract a higher price than broken ones (Duarte 2012; Burgess 2013; Ancient origins Website; Mel Fisher Website). Once retrieved from underwater depths, objects are registered in a photograph before cleaning. After cleaning and restoration to its original aspect, more photographs are taken to capture the before and the after of the objects. This process of restoration has the effect of breaking down the time distance between the past and the present. Thereafter, the objects are drawn in highlighting the characteristics of the objects which are used to make historical deductions about the nature of the society that produced the object.

Subsequently, the treasure is carefully cleaned and displayed online, in antiquity stores, and at museums for sale (Mel Fisher's treasure https://store.melfisher.com/collections/authentic-atocha-coins-1). Depending on the age and period to which each object belongs, they are sold at different prices to private collectors' antique dealers and museums. The process of selling artefacts starts before excavation. Part of this strategy involves hyping up the expedition with a stress on the idea of adventure and the excitement of exploring the unpredictable submarine world.

One influential treasure hunter was Mel Fisher who started a personal historical treasure hunting company. He is famous for finding the Spanish galleon *Nossa Señora de Atocha* in 1985 after a decade of searching. According to Kollmeyer (2015) the precious jewels, gold and silver from the ship were valued at $ 450 million. It was to be followed by many other shipwreck discoveries containing famous treasures which were proudly made public. In recovering treasures that most considered were irretrievably lost under oceanic depths for centuries, and through showing their passion for history and ability to bring back important objects, treasure hunters established their formidable reputation in the public eye.

Like maritime archaeologists, treasure hunting companies are fascinated by the history of the wreck and its objects. But even though they are interested with the same objects, archaeologists and treasure hunters hardly work together. Archaeologists consider treasure hunters as solely interested in wrecks with marketable objects and hence as the main culprits responsible for underwater heritage damage. For maritime archaeologists any kind of artefact found is a piece of past human history. Maritime archaeologists also tend to be opposed to the sale and trade of artefacts since they see these as belonging to society as a whole and not just to a few fortuitous individuals. All the same, treasure hunting companies often work with underwater archaeologists on their team, who often lack the funds and equipment for submarine excavation and so rely on treasure hunters helping in the interpretation and excavations methods. Unlike Mel Fisher, not all treasure hunting companies are comfortable to be termed treasure hunting companies. Many are interested in the removal and trade of valuable objects, but still consider themselves as maritime archaeologists doing underwater archaeology to preserve artefacts and keep them away from local fisherfolk treasure hunters. This is the apparent case of Arqueonautas, the company I analyse in this chapter.

Regulation of Underwater Activity

As mentioned above, shipwrecks are likely to be found by people involved in fishing, recreational or professional diving, swimming, research in marine biology, engineering construction, and, of course treasure hunting. Shipwrecks and their cargo located in shallower water are more likely to be found by small-scale fisherfolk who usually collect objects that are useful for their everyday life. As regards the shipwrecks located in deep waters, the industrial fishing companies are the ones who often find them, usually when their nets become entangled with the

remains of the ship (Kingsley 2016). With different groups of people finding, interpreting and manipulating shipwrecks, the need to legally regulate the survey, excavation, and management of shipwrecks and its cargo presents itself. There are international and national (Mozambiquan in this case) laws concerning the regulation of underwater activities.

International Legislation

On 10 December 1982 in Montego Bay Jamaica, the United Nations approved the International Convention of the Sea (UNCLOS) which is also known as the Convention of the Sea. The Convention of the Sea stipulates how coastal states and land-locked states should use water and its resources. The uses are regulated according to the location of the water and attendant resources. There are different uses for water and resources from territorial waters, contiguous zones, exclusive economic zones and the high or international waters. In article two, section one, territorial or national waters correspond to the twelve nautical miles from the coastal line including the sea floor, seabed and under the sea. The twelve nautical miles measure should consider the variability of the coastal line and should start from Islands and Archipelagos where it applies (UNCLOS article 3).
Contiguous zones are the bordering space right after the territorial waters (section 4, article 33). The exclusive economic zone according to part five article 55 is an area with no more than two hundred nautical miles beyond and adjacent to the territorial waters, and the high waters form all other areas after the exclusive economic zone (section 7, article 86). One of the main aims of the Convention of the Sea is to recognize the sovereignty of the coastal countries over their territorial waters. This gives them the exclusive rights to control, regulate and explore water and its resources. The coastal countries also control the contiguous zone, but they are obliged to give free circulation to international ships in transit, and they should consult the coastal countries before any activities in this area (section 3). In cases of conflict around the economic zone it should be solved by the state/s involved and the coastal state by equity principles, relevant circumstances and the interest of the states (article 59).

The conflicts around shipwreck excavation inspired the need to regulate underwater archaeology activities in conformity with the Convention of the Sea. UNESCO adopted the Convention of the underwater cultural heritage, also known as 2001 UNESCO Convention (UNESCO 2001:2) in Paris, on 2 November 2001. One of the main aims of this Convention is to protect underwater heritage from the negative impact of unauthorized commercial treasure hunting

activities and promote conservation *in situ* (in its original place under the water). This Convention considers as underwater heritage all objects used or made by humans with at least 100 years partially or under the water (article 1). From articles three to ten, the 2001 UNESCO Convention, promotes the principle of international collaboration between states which rectified this Convention for archaeological research in the contiguous and exclusive economic zones. This collaboration may include a creation of specific legal agreements where the foreign country in contiguous or economic zone should report any finding or intention of research to the national country. The agreements must respect the sovereignty of the coastal country in conformity with the law of the sea.

The 2001 UNESCO Convention has an annexure where rules concerning underwater activities are set. These rules stipulate how underwater archaeologist should frame their project from field work, data analysis to results publications. The rules start by challenging archaeologists and the teams to use non-destructive techniques, allowing shipwrecks and artefacts to stay close to their original aspect. Moreover, the full project plan should be designed before the work starts, and the most experienced archaeologist shall be responsible for the team ensuring that the activities follow the plan. After composing the team, the project shall be signed by what I will call here the archaeologist coordinator, who will submit the project to the competent authorities. The other team members' qualifications, experience and responsibility must be included. The competent authorities then analyse the project in the light of international, national and local rules and approve the project if the aims are clear. Previous studies about the area where the project will be held must also be included. The project must specify the methods (preferably non-destructive) to be used and techniques, as well as anticipated findings.

Underwater projects should not end without a plan for shipwreck site maintenance. Issues about the environmental and social impact of the activities must be carefully spelt out. Local museums and/or other institutions must be part of the project. The last rule concerns the design of reports and publication strategies. Reports must be presented in the most extensively spoken language of the respective nation to enable far-reaching access to the research. There are nonetheless states like Mozambique and Cape Verde which are not part of the 2001 UNESCO Convention, but their archaeologists all the same promote the principles stipulated in the convention.

Mozambican Legislation

Now, I bring all the polices valid at a time when Arqueonautas explored the Island. The protection of cultural heritage in Mozambique is enshrined in the Mozambican Constitution (*Constituição da Republica de Moçambique*). In the first paragraph of article 98 it is stated that all the resources in international and territorial waters belong to the state. The third paragraph states that the conservation and management of cultural heritage is regulated by law. Underwater heritage is regulated specifically by law 10/88 which was promulgated on 22 December 1988 for the legal protection of tangible and intangible Mozambican cultural heritage (*lei sobre a protecção dos bens materiais e imaterias do patrimonio cultural Moçambicano*) (article 1 from chapter one).

In chapter two, law 10/88 attributes to the state the responsibility to create and promote institutions such as museums, libraries, archives, laboratories and centres for conservation and restoration of cultural heritage. The state should, as well, promote conservation through local institutions, integrate and create educational programmes via the National Education system and media to educate citizens about the values and reasons for the protection of cultural heritage.
In chapter four, legal instrument 10/88 further states that the Council of Ministers (*Conselho de Ministros*) must classify and/or declassify the status of cultural heritage artefacts. But goods such as monuments and archaeological objects are immediately classified as items of the cultural heritage of Mozambique. In article ten of the same chapter, law 10/88 considers as alienable propriety of the state, all cultural heritage goods and these will be unlikely to be acquired by usucaption. The disposal of a classified good must be notified in advance to the Ministry of Culture, which reserves the right of first preference in the event of a sale (article 11 numbers 1 and 2).

Chapter 5 on archaeological excavation (sections 1,2), states that all archaeological research shall require the authorisation of a competent authority and, the activities should follow scientific norms and international principles of best practice. Chapter 6 states that the Council of Ministers regulates the exportation and importation of cultural goods and forbids the exportation of classified Mozambican cultural heritage items. Because the rules concerning the exportation of cultural goods are unclear for most archaeological objects and contexts, six years after the approval of law 10/88, Decree No. 27/94 was enacted on 20 July 1994. This law arose out of the need to regulate the protection of all categories of tangible and intangible goods that because of their archaeological value form the archaeological heritage of Mozambique (chapter 1, article 1; Maleiane 2017:31). The decree (27/94) defines archaeological heritage as all the

mobile and immobile goods with archaeological, paleontological, anthropological or geological value, related to the past generations, from surveys or excavations. It should include studies, records and results of analysis (article 2).

In chapter 2, article 3 states that only licensed researchers are allowed to carry out archaeological research and the permit shall be given by the National Directorate of Cultural Heritage NDCH (*Direcção National do Património Cultural*), museums and other public organisations designated by the Ministry of Culture which manage activities related to archaeological research. The organisation that issues the licence is also responsible for the supervision of the activities, and the reports should be sent to NDCH. In case of malfunctions the NDCH may cancel the research permit. It shall be given to someone with a degree in archaeology and experience in the field and registered with the Ministry of Culture. The person shall indicate in his research permit application all the survey, excavation and management plans including the conservation plan after the research. In the end of each excavation season, the designated archaeologist(s) should take excavated objects to the museum or other site indicated by the competent authority. In addition, the archaeologist should publish the results of her/his research. Chapter 8 article 24 considers the use of archaeological heritage. It states that if the archaeologist with the permit to excavate wants to use the encountered artefacts for commercial purposes, he shall submit his intention to the Ministry of Culture to obtain consent from the National Council of Cultural Heritage.

Arqueonautas

Like any other large-scale treasure hunting company such as Mel Fisher's and Odyssey Marine Exploration discussed above, Arqueonautas is owned by various shareholders. Profits, sales and investment reports are displayed on their website (see the Arqueonautas Website http://aww.pt/), updating the investors about the financial gains of the company from ongoing or upcoming activities. Anyone interested in underwater artefacts can support the team through investing money for a specific underwater project. If any valuable treasure is found the profits gained from sales will be shared with the new investor(s). The company is also open to government invitations for surveys and excavations of shipwreck sites (usually those located in deep waters) where the national maritime archaeology departments lack the requisite technical expertise and equipment to conduct the research. The government will cover almost all the

research expenses and their maritime archaeologists will join the project. In relation to the present case study, there is no evidence that the Mozambican government made financial investments. Since the documentation underscoring the outstanding architecture of the buildings of the Island and its submission to the UNESCO and subsequent classification of the Island as UNESCO World Heritage Site, every conservation project was made up by foreign investments. Following the UNESCO director Federico Mayor's 1997 international campaign promoting and safeguarding the heritage of the Island of Mozambique, a fund was created by the United Nations Development Programme, the European Union and the Finnish government (Jopela 2015). To benefit from this fund, the government hired Arqueonautas, a company which could operate and share the profits with the government.

According to their website, Arqueonautas concentrates on shallow water operations for the preservation and conservation of underwater heritage. The company was created in Portugal by some members of the Portuguese royal family in 1994 to ostensibly "recover cargoes from historical shipwrecks in an economically viable manner" (de Carvalho 2009:13). Arqueonautas's activities on the Island of Mozambique surfaced to public view almost five years after they started surveying. Their activities became popular when an image of a diver underwater holding sixteenth-century Chinese porcelain bowls from the San Sebastian shipwreck (codified as wreck IDM002 by Arqueonautas during excavations) was displayed at Christie's auction in Amsterdam on 19 May 2004 (Duarte 2015:15). Back in Mozambique, people were upset, querying why treasure hunters were selling artefacts recovered from a world heritage site. This attention directed towards the Island, a world heritage site, brought to light the complication that the protection of underwater sites pertains only to countries that ratified the UNESCO 2001 Convention.

Various strategies were nonetheless explored to recover the artefacts. One possibility was suing Arqueonautas under the national laws de rigueur within Mozambique (law 10/88 and 27/94). The other option was petitioning the government to protect the coast from looters and pirates. Up to the present, greater public opinion considers as illegal Arqueonautas's activities (see Carvalho 2009, Duarte 2012; 2015). However, according to Mozambican archaeological law, these activities were above board and under government supervision. If we look closely at article 15, chapter VI of the law 10/88 from 22 December 1988 we see that Mozambican tangible heritage artefacts can be imported and exported under the supervision of the Council of Ministers (*Conselho de Ministros*). A further decree published on 20 July 1994 stipulates in

section four, chapter II, article 22, points 1 and 2, that the NDCH is the government institution responsible for the authorization, monitoring, and cancelation of any archaeological project in Mozambique. Part of the drama also lies with the earlier history of Arqueonautas's controversial activities. The company initially commenced its activities in Portugal but ran into legal wrangles that led to the termination of its activities there. To avoid further legal problems, the company which is sponsored by members of the Portuguese government decided to restrict its activities to shallow waters (national water), meaning that they would not face problems from international laws. They also started to refocus their activities towards developing nations such as Mozambique, Cape Verde, Vietnam, and Indonesia, where they could easily persuade desperate governments into sharing profits from lucrative artefacts trading.

Curiously and problematically, Arqueonautas demands exclusive contracts with various governments, stipulating that when Arqueonautas is operating no other local or international entity can work in the same area. In these fragile countries, it is the government that inspects the excavation activities, providing the necessary time and space for Arqueonautas to work without intrusions. In his analysis, De Carvalho (2009:18) shows that Arqueonautas signed an underwater archaeology contract in November 1999 with PI a not-for-profit organisation (80 percent owned by the Mozambican government and 20 percent privately owned). This contract gave exclusive rights to Arqueonautas that allowed it to survey, excavate, export and sell artefacts. The contract stated that 50 percent of the archaeological finds would belong to Arqueonautas and from the other 50 percent, the Mozambican government could choose the best items while the rest would stay with PI. PI was supposed to invest the income from those artefacts in further underwater archaeology research, but it seems that this never happened, because during and after Arqueonautas, no research was sponsored by PI.

This contract was signed under the law 10/88 and decree 27/94, with Alejandro Mirabal appointed as the underwater archaeologist licensed by the NDCH. Mirabal is a Cuban maritime archaeologist with more than 10, 000 diving hours around the world and is also a founder of Heritage Exhibition project (see https://theheritageexpeditions.com). For the project, Arqueonautas took some of the steps explained in the 2001 UNESCO Convention for the protection of underwater cultural heritage. These include a proper archaeological research project plan, surveying, excavation, conservation, management and public dissemination of knowledge about the respective underwater heritage. However, it completely overlooked the inclusion of

previous studies and a broader management for the shipwrecks sites and artefacts as the reports analysed in the next paragraphs reveal.

Arqueonautas' Reports

During its Island of Mozambique operations, Arqueonautas committed itself to write and submit reports on its progress, finds and challenges after every three months of activities as recommended by the NDCH following decree-law 27/94. After fourteen years of activities, they were supposed to have submitted 56 reports to the NDCH. From that expectation, only 21 reports, some edited in English and others in Portuguese, dating between 2000 to 2014, are available in the archive of NDCH. Most of these reports concern the excavation of *Espadarte* and *Nossa Senhora da Consolação* shipwreck sites, with the ship reconstruction, interpretation and complete artefacts inventory of *Espadarte* as well as the artefact inventory of the cargo of *Nossa Senhora da Consolação*. Also included is one survey report from a British underwater survey company called Aquascan (a British company specializing in underwater metal detection for commercial operations, large-scale treasure hunting and hobbyists alike, Aquascan International (see Aquascan website https://www.aquascan.co.uk/), subcontracted by Arqueonautas. To be able to analyse Arqueonautas' work through the reports, I will combine the information available on the reports with my observations on the Island. I will then analyse the reports following the sequence of underwater research surveys, excavation, conservation, and management.

Survey

A year after the signing of the contract between the Mozambican government and Arqueonautas, the later began survey activities on the Island of Mozambique. The survey was conducted using a magnetometer, the most popular and efficient underwater survey method in underwater archaeology (Burgess 2013; Bass 2011; Argüeso & Ciarlo 2017). A magnetometer is an instrument with a hardware part that is connected to a specialized computer by an electronic line. The hardware is attached to a boat sailing above the area under survey. The hardware is switched on and dropped into the water before the boat moves around following a zigzag pattern. The data generated appears in the form of straight lines on a computer with anomalies where ferrous materials are detected. The mechanism detects any human-made ferrous material under the sea such as iron cannons, anchors or ballast mounds by locating and presenting

changes in the earth's magnetic field (Burgess 2013). According to a report from Aquascan (2000), it was subcontracted by Arqueonautas to conduct electronic survey operations in the vicinity of the Island during the first semester of 2000. The survey aimed to record and register on a map the potential sites containing shipwrecks. Aquascan duly surveyed around an area known as Goa Island (Ilha de Goa) using a magnetometer. To read and interpret magnetometer data, Aquascan used an axeditor (a software processor that reads the data from the magnetometer and presents them as a graphical image). The survey detected over 188 anomalies indicating, potential human-made wrecked material.

After processing the data, Aquascan transposed all 188 anomalies on to maps and gave them to Arqueonautas. Arqueonautas then initiated a diving survey with the aim, according to the report (Mirabal 2001), to identify the anomalies registered by the magnetometer (the ordinary procedure after magnetometer survey). But the priority areas for identifications were those close to the San Sebastian Fortress, where, in the 1960s, a Portuguese architect Fonseca had reported seeing anchors and huge pile of ballast stone while he was on a plane. He then organized a team that removed some anchors, cannons and ballast stones, and recommended further underwater research before damages by treasure hunting or local fisherfolk (Fonseca 1964; Mirabal 2001). Portuguese historical documents also located this as the site where the Portuguese galleon *Espardarte* 1558 sunk transporting thousands of pieces of Chinese porcelains from the Ming dynasty period (1368-1644), gold artefacts and ingots. The Ming porcelain is highly prized as it exemplifies the most intricate porcelain arts from ancient China. The auction house called Ancient Origins (see Ancient website https://www.ancient-origins.net/artifacts-other-artifacts/10-most-expensive-antiques-ever-sold-auction-008001) listed these items as some of the most valuable artefacts ever.

After almost a year of identification survey work and excavation of other wreck sites, the galleon was found in May 2001, around 480 meters in front of the fortress. It had been wrecked in the area next to the fortress that is 9 meters deep. However, this location was not entirely Arqueonautas' own work. Mirabal reports (2001) state that Arqueonautas sought extra-help from the local community whom they had initially condescendingly described as looters. It was when the need for their assistance arose that the designation shifted to respectable 'local community', without however recognising their names or areas of expertise (fishing or diving) (Mirabal 2001).

In this site, martaban jars (big Chinese stoneware storage vessels), other Chinese ceramics, a huge pile of ballast stones and cannons were visible from the surface. The evidence of a rich promising wreck convinced Arqueonautas to make it their first excavation site. While excavating this site, registered as IDM002, Arqueonautas became aware of ancient gin and wine bottles within the neighbourhood and enquired from the community about the source of these bottles. The community took them to another wreck site which Arqueonautas registered as IDM003 (Mirabal 2002, 2010). According to Arqueonautas interpretations, the wreck IDM003 was recognized as the ship *Nossa Senhora da Consolação* sunk in 1622. It is next to the north side of the fortress, around 5 meters deep in the low tide and 9 meters in high tide. It was the second underwater site to be excavated by Arqueonautas. The local community was thereafter prohibited from accessing or diving near the site, taken back to looter status. A further 22 shipwreck sites were located, culminating in 24 shipwrecks sites in the vicinity of the Island of Mozambique. Most of these sites were not excavated due to the lack of credible evidence on the sea floor. In other points marked as anomalies, the Arqueonautas survey found different forms of anchors, cannons and other sorts of artefacts not associated with any shipwreck (Mirabal 2002, 2004).

Excavation



Image 1. Arqueonautas' archaeologist dredging or airlift (Arqueonautas 2014).

The excavation process was conducted at different times. After the survey, Arqueonautas started to remove isolated artefacts such as

anchors, cannons, and ceramics and deposited them in the Marine Administration building (*Administração Marinha*) (Mirabal 2010). However, artefacts such as wood and broken pieces of ceramic were not removed. The first wreck site to be excavated was the IDM002 on account of the rich evidence such as martaban jars, an anchor and some pieces of Chinese ceramics. Such evidence promised that further similar artefacts could be found under the pile of ballast stones. To confirm these hypotheses, a team of experienced divers, archaeologists, and Information Technology specialists decided that the removal of the ballast stones (which had covered and protected the shipwreck and its cargo ever since it had been wrecked) was necessary for a proper study of the shipwreck. Mirabal (2010: 3) describes details about the removal process. It started with the removal of ballast stone across an area of almost three meters. This area was determined by an imaginary grid square of about two and a half meters. The ballast stones were removed carefully, to allow the team to analyze the possible artefacts between, and under the stones. This initial grid square was expanded when more artefacts (mostly Chinese porcelain bowls) were found among the ballast stones and eventually more than 80 tons of ballast stones were removed. And with it, around 2.000 intact pieces and other unspecified amounts of Chinese porcelain bowls were found. Together with the thousands of bowls, 12kg of small ingots, unspecified gold artefacts, seeds, cowries, cornelian beads and wood structures were also found (2010:2).

The other extensively excavated shipwreck site was that of *Nossa Senhora da Consolação* 1622. The excavation reports of this site are different from *Espardarte*'s in that they are more detailed. One reason behind this positive shift could be the public outcry probing the legality of Arqueonautas' activities on the Island (see Anonymous 2004). These reports comprise the details on the characterization of the site including the stratigraphy and the descriptions of findings per each grid. This wreck site lies in the north side of the edge of the deep channel entering Mozambique Bay, in fine-grained (mud-like) sand. This area is affected by currents and with the in-and-out of the tides, a swirl of sediments was created. With the accumulation during centuries of sediments over the wreck, a substantial coral reef (*Montastraea* sp. and *Diploria* sp.) had formed. The area around the wreck is covered by seagrass (*Thalassia testudinum* and *Siringodium filiforme*). After the magnetometer survey by Aquascan detected ferrous human-made materials, the Arqueonautas identification survey in 2001 located only six ingots. The scarcity of valuable artefacts persuaded Arqueonautas to forego excavation of this wreck site.

The report on the excavation of the wreck site *Nossa Senhora da Consolação* notes when and why Arqueonautas decided to excavate. Mirabal's report from January 2006, on the excavations in the vicinity of the Island of Mozambique and Mogincual (on the south area of the Island) details how the excavations on this site were made in different steps. The first survey to establish suitability for excavation was made in 2001, where they tried to measure and survey the site. During the survey measurements, only ingots and olive jars were found; not enough evidence to justify an excavation. But in 2005 after excavating and publishing the artefacts from *Espardarte*, some unidentified members of the local community were recovering gin and wine bottles from *Nossa Senhora da Consolação*. After seeing the bottles Arqueonautas which was excavating other areas on the Nampula province coast decided to excavate this site as detailed in the 2006 report by Mirabal. The artefacts excavated from this site include one cannon, an unspecified amount of iron and stone cannonballs, a large amount of lead shot and many artefacts considered ship cargo which includes olive and martaban jars, ceramic lids, ingots, African and Asian (*Elephas maximus*) elephant and hippo tusks (Mirabal 2006:46-47).

Conservation



Image 2. Artefacts (bottles and ceramic jars) stored in a conservation room by Arqueonautas (Arqueonautas 2014).

The conservation process started after the valuable artefacts from *Espadarte* were found.
Before *Espadarte*, the cannons and anchors found in many sites were stored outside of what later became a conservation room in a Maritime Administration building, established by Arqueonautas on premises provided by the Maritime Administration. The report does not say how the cannons and anchors were cleaned, but from the first pictures made underwater and

the actual configuration, I assume that desalination (the most common process described in conservation literature) occurred. It entails the immersion of underwater objects into a recipient containing aqueous alkaline solution to dissolve all the salt on the object. It halts salt corrosion on items after they have been removed from the sea where they acquired new configurations after years under the sea (Watkinson and Rimmer 2013:407).

The conservation site comprised three separate rooms: one was used to store diving equipment, another room containing shelves, was used to store all the diving logbooks (each shipwreck site has its own logbook) with details concerning the name of divers, the time they spent and activities made. In the same room, shelves and the floor were used to store all the artefacts removed from underwater. Each artefact was given a registration number (date and location).

Management

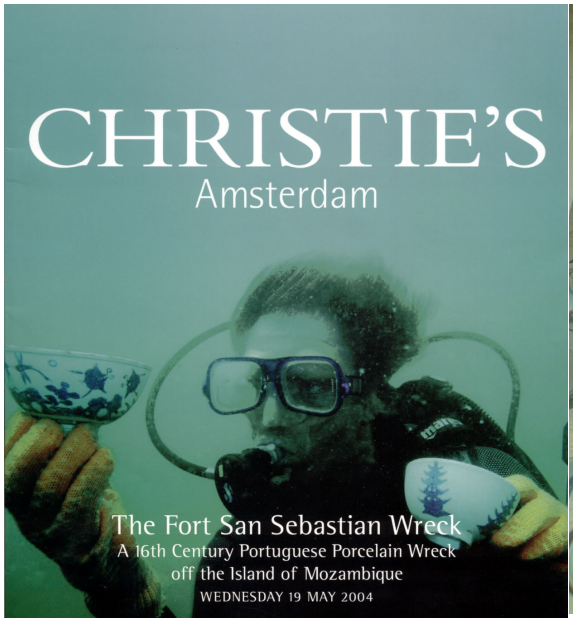


Image 3. Chinese porcelain from wreck site IDM002 exposed for Christies auction in Amsterdam 2004 by Arqueonautas (Duarte at all 2014).

There are no management plan documents from Arqueonautas before the undertaking of archaeological research as required under the decree 27/94 on the regulation of the protection of archaeological heritage. According to Arqueonautas and the Aly Abdul (pers. comm. 2019), a technician from Museum of the Island of Mozambique (*Museu da Marinha Ilha de Moçambique*), "during underwater activities, a collaboration between Arqueonautas (sponsor) and the Museum restored the Maritime section of the Museum". Arqueonautas also included a permanent showcase containing some of the broken pieces of Chinese porcelain excavated from *Espadarte*.

The martaban jars, elephant and hippo tusks (also from *Espadarte)* were stored on the floor in the conservation room of the Maritime Administration room. The gold artefacts, ingots and unbroken bowls of Chinese porcelain were exported. The bowls were sent and sold on eBay, Christie, and the Arqueonautas website. The artefacts from *Nossa Senhora da Conceição* were also stored in the conservation room. According to Arqueonautas (2013), an education programme was carried out by their team members at local schools. The education program aimed to provide the young generation with basic knowledge about underwater heritage, raising awareness about the need for its protection. This programme included guided tours into the maritime section of the Museum and to the conservation room. Notwithstanding, there was no plan for management of shipwreck sites.

In 2014, the NDCH decided to cancel Arqueonautas research permit. By cancelling, the NDCH aimed to allow other underwater archaeologists to research the area. In the same year, the NDCH requested from EMU an evaluation report on Arqueonautas' activities. After analysing the shipwreck sites excavated and the artefacts stored in the conservation room, the report concluded that Arqueonautas destroyed sites and artefacts and with that the loss of paramount historical information (Duarte 2014).

Conclusion

From its start, maritime archaeology has concerned itself more with technical research process matters. It focuses on underwater objects; how to locate, research and manage them. Legislation helps determine who has the right to explore objects according to their location. It also establishes how the exploration project should be conducted and who has the legal right to monitor the process. The focus on the finite resources such as underwater heritage located in open spaces where large-scale companies such as Arqueonautas, with more financial resources than the Department of Archaeology in Mozambique has unforeseen consequences. Often these multinational companies explore underwater treasure for profit while neglecting the intangible value attached to the artefacts and underwater sites with no financial value. It is also clear that in the absence of proper monitoring systems, such companies are accountable to none but themselves. This has serious adverse effects for susceptible underwater heritage sites which are plundered for financial gain, at the cost of cultural and historical knowledge contained therein. Moreover, the profits realised have not benefited local communities. The current situ-

ation of the underwater archaeology in Mozambique raises the need to adopt a holistic perspective based on other values related to the underwater heritage. In this chapter I have presented the large-scale treasure hunting practices and the national and international legislation. I turn to how these practices impacted the local community of the Island of Mozambique in the next chapter.

Chapter Three: Island of Mozambique Community Case Study

Introduction

Part of the history of the Island of Mozambique, the whole nation, and the West Indian Ocean can be understood through underwater heritage findings and the respective people's way of life: their languages, clothes, beauty techniques, songs and food. Research from the Department of Culture (Ministerio da Cultura 2010) considers Nahara to be the most widely spoken languages on the Island. This creole idiom developed locally from a mixture of African languages and Arabic. This blend also characterizes other aspects of life, for instance women wear long colourful clothes covering their heads, adorn with locally manufactured gold or silver jewelry and a face mask called mussiro or *m'siro* (Ministerio da Cultura 2010; ARPAC 2009). The Indian Ocean has since the first millennium AD (Chami 1992) shaped life patterns on the island, supplying food and molding socio-cultural habits. In recent times, around the late 90s the Mozambican government decided to leverage the Island's cultural heritage, by promoting its tourist potential.

The first management plan (2010) of the Island that included all categories of cultural heritage (except underwater heritage) states that there was little tourist interest in the Island until 1997. This scenario started to change when the government of Mozambique implemented new polices which allowed national and international private enterprises and entrepreneurs to access the Island. This development spurred various significant infrastructural improvements, for example the rehabilitation of the bridge connecting the Island to the mainland, construction of buildings and installation of bank services among others. Various entrepreneurs established international-level hotels and restaurants, increased job access and multiplied national and international tourist arrivals resulting in the palpable transformation of the community. Arque-

onautas is one of the prominent companies given access to the Island in 1998 by the Mozambican government. Other significant players include the Mozambican state, UNESCO, EMU, the Slave Wreck Project an United State based project seeking to uncover shipwrecks related to the slave trade and other research agencies. As I have demonstrated earlier (see chapter two), Arqueonautas is a multinational commercial large-scale treasure hunting company, operating mostly in shallow waters of third world countries. Between 1999 and 2014, Arqueonautas explored 25 shipwreck sites in the vicinity of the Island of Mozambique. Such large-scale treasure hunting activities always impact the target area, leading to changes in how the local community understands and uses its underwater heritage.

This chapter presents a case study of the Island of Mozambique. The intention is to understand how local community groups position themselves as recognisable players and agents in the shifting scene of underwater heritage management. Toward those ends, I first conducted semi-structured interviews with 26 people whose work is related to the sea, especially to the underwater heritage such as fisherfolk, marine tour guides, informal sellers and boat manufactures. I now turn to a brief background which explains what inspired my interest in studying the Island of Mozambique's community.

Brief Background

After the National Directorate of Cultural Heritage (NDCH) commissioned a report from the EMU to evaluate the underwater heritage exploited by Arqueonautas. The report concluded that Arqueonautas activities were harmful to the underwater heritage, stating as well that treasure hunting activities damaged underwater archaeology prospects. The report concluded by defending the urgent need for proper underwater archaeology work to protect the heritage that remained (see Duarte at all 2015). The NDCH accordingly decided to annul Arqueonautas' license. Although this cancellation suggests responsible government protection of the nation's underwater heritage, it must be mentioned that other players continued with their extractive practices without meaningful regulation. In addition, new players such as EMU were further commissioned to embark on new projects. This policy indecision is apparent from some fisherfolk pronouncements (pers. comm 2019) to the effect that Arqueonautas left because it had exhausted the treasure supplies rather than because of the government's license cancellation. Thereafter and in substantiating government's complicit underhandedness in the continued exploitation of the Island of Mozambique's resources, the NDCH gave a new license to EMU

which hosts the Slave Wrecks Project based at George Washington University. This project aims to (re)trace the wrecks of ships carrying enslaved people on routes from Africa to the new world. Some of this work was located around the Island, allowing research in the same area explored by Arqueonautas. The University team arrived at the Island in 2016 together with their partners from George Washington University and Iziko Museums of South Africa, to start the field work. The University team comprised one senior underwater archaeologist, four young relatively inexperienced maritime archaeologists (myself included), two established maritime archaeologists, one curator and maritime archaeologist at the Iziko Maritime Museum in Cape Town, one anthropologist from George Washington University and the head of National Parks Service from the USA.

The work that involved documenting and protecting excavated shipwrecks - *Espadarte* and *Nossa Senhora da Consolação* (Mahumane 2016) - was initially scheduled for two weeks. However, an unforeseen local community demand (from members of the Friends' Association of the Island of Mozambique (*Associação dos Amigos da Ilha de Moçambique*) for participation stopped the field work for a week. This citizen pressure group is made up of three influential individuals. It was formed in 2008 to protect both the Island's underwater heritage and the interests of the local community around that heritage. In making this demand, they invoked the 2010 management plan which designates that the local community are the guardians of the cultural heritage of the Island. By insisting on joining the work, the community argued it would be in a better position to prevent further treasure hunting activities. This turn of events highlights the local community's agency in safeguarding communal resources. This problematises the typical simplistic impression that local communities are helpless victims (together with local natural resources) of global liberal tendencies (in collaboration with corrupt local leaders) of exploitation. With this episode, I started to introspect and interrogate the impact of large-scale commercial treasure hunting activities, not only on the underwater heritage but also on the local community who had co-habited with the underwater heritage until the arrival of capitalist consumerism and related economic activities. In order to pursue these aims, I conducted interviews with different publics including marine tour guides, fisherfolk, boat manufactures and informal sellers. I will first focus on how these diverse groups perceive themselves as players of underwater heritage management.

A Return to the Island of Mozambique

I have visited the Island of Mozambique numerous times, first as part of the Slave Wrecks Project team (2016-17), then as UNESCO consultant for underwater management plan (2017) and then as WiSER (Wits Institute for Social and Economic Research) seminar participant for a conference held on the Island. Four years after my first visit, I went back as an MA candidate in Heritage Studies at Wits University, to conduct research for this dissertation. From my prior visits I had gained some insight into the culture of the Island through interactions with the local community, from which I had come to know and work with some of them, for example the core members of the Association of Friends of the Island. These pre-existing networks enabled me to set up interviews and spend time with those people whose livelihoods depend on the sea. Their contributions gave me an intimate insight into their ways of understanding and managing underwater heritage. These interactions also helped me cope with the intense summer and academic heat.

In the skeptical eyes of some professionals, the local community is 'lazy' and easy-going. When I first heard about this perception, I was studying Heritage Conservation in a classroom at EMU, where my lecturer described them as idle street sellers of artefacts. During my underwater archaeologist stint, the Mozambican' SWP manager saw them as "not hard-working" people thriving on easy pickings from tourists. Nonetheless, I experienced a different side through lived experiences among them, without wearing a diving suit and outside a seminar room. This time, sleeping in a room with no air conditioner but a crude window near the street I could hear the noise of thousands of motorbikes from four o'clock in the morning. I saw the quotidian wretchedness at close quarters; kids wearing big ill-fitting shoes on their way to school, or others who skipped school to dig for molluscs, beads, stones and more on the beach. From time to time some would shadow white tourists, offering them something to sell or begging for money. Youths and elders paradoxically dealing with unemployment even as new development projects emerged, and derelict buildings were being restored. Doing first-hand research at the Island, I was able to shift from my previous armchair view about heritage towards a sensitive humancentric approach. My transformative experience can be compared to Hamilakis' observation (2011:408) that goods experience ongoing transformation from the things and people who live with them. He proposes interviewing as a multidisciplinary approach which helps in shifting archaeologists' obsession with artefacts and allows an understanding of other valorisations and uses of underwater heritage by local communities.

Research Findings: The Interviews

In this section I analyse the interviews that I conducted with various players involved in the underwater heritage management at the Island - people who live on and by the sea - marine tour guides, fisherfolk, shipbuilders and informal sellers. The translations from Portuguese to English are my own. The questions (see the Annex I) were divided into two sections. The first section mainly focused on introductions, in order to establish a relationship with them and to gauge their attitudes towards the island and its history. The second section considered how they worked with the underwater heritage. In the descriptions that follow, I will refrain from using their real names as recommended by the Wits Ethics Committee (non-medical), out of the need to preserve and protect the identity of my interviewees. The presentation and the analysis of the interviews will follow the order in which I conducted them. First, I met with five marine tour guides on different occasions by the beach at northwest side (Bairro Museu). Next I met with informal sellers, then I met fisherfolk at the fish market of Bairro Museu (west side). Finally, I met with boat manufactures at Bairro Areal (southeast side).

Marine Tour Guides

There are around five self-employed marine tour guides, Adam Uacheque, Chabreque Chambal, Abacar Atumane, Albino Miguel and Assane Atento (all pseudonyms) and one tourist agency Ilha Blue Island Safaris offering sea tour guide services on the Island. There are also sea tour services offered by three hotels Feitoria Boutique hotel, Rickshaws Pousada and, Hotel Omuhipi. These numbers of tourist guides may vary from tourist demand depending on the season of the year. In Christmas and year-end, the number of marine tour guides increases to cater for the spiraling interprovincial and international tourists. My research visit fell in summer, just before December. During this time tourists are few and most of the people who request sea tour services are on the Island for work. The self-employed guides and the hoteliers offer the same services. They focus on guiding their customers to strategic spots for snorkeling and submarine sighting in shallow waters. The professional tourist agencies offer cruises to Ilha da Goa and Ilha de Sete Paus, deep sea sighting where customers may see big turtles and sharks, in addition to kayak outings (see Ilha Blue Island Safaris website). For this research, I focused only on the self-employed sea tour guides who work with the underwater heritage. These self-employed tour guides are closer to the subaltern opinions unlike elitist professional multinational and national institutions.

I first contacted the man who is famous on the Island for his work with underwater heritage. He is further prominent for being the most experienced commercial diver who doubles as a sea and underwater tour guide. In his affectionate smile, he told me that he began diving before I was born. I hence assumed that he has close to three decades of professional experience. He came to the Island in the early 2000s as a hired diver for the Arqueonautas project. He subsequently chose to make the Island his home and started a family. With the end of Arqueonautas' project, he started his sea guide tourism project. His motivation was to gift people with an underwater heritage view tapping from his past experience with Arqueonautas and current work with the EMU. He owns scuba diving equipment and a boat. His services consist of submarine sighting offerings, snorkeling, diving around underwater shipwrecks and other underwater heritage artefacts.

Here for ethical considerations to protect his real identity, I will call him Adam Uacheque. Besides his eminence in this community, Uacheque is admired so much that young people report to him any topical issue concerning underwater heritage or conflicts between other self-employed marine guides. Unsurprisingly, he is a core member of the Association of Friends of the Island (*Associação dos Amigos da Ilha de Moçambique*). In Uacheque, I began to understand that certain people of the Island have more power to regulate issues than the official larger political structure itself. In a demonstration of local community agency, this group has organized itself according to different professions, where each profession has a leader. The leader is always someone who has living and working experience outside the Island as this renders a broader perspective. In the case that an external issue is bothering the Island, all the associations group to analyse and solve the challenge. In particular, Uacheque has the power to oversee the underwater heritage at local level, and together with his fellows from the friends' association they have the higher power to influence the management of Mozambique's underwater heritage at national level. This inverts the typical top-bottom approach to resource management, gesturing towards grass roots management of the same.

Mid-50s Uacheque started diving when he was a "boy in the capital city Maputo", as he said (Uacheque pers. comm 2019). He decided to work as a commercial diver because "it was cool. I used to work with different people all the time. I love meeting people and traveling. And of course, the world under the water is so cool. It is not like an ordinary job I feel privileged to wear my working suit". As a diver he joined several projects overseas, which qualified him to join multinational companies such as Arqueonautas (ibid). That allowed him to get technical

skills in excavation and management of underwater heritage. According to reports written by Mirabal from 2000 to 2014, the divers worked three-months shifts where they were obligated to be at sea every day depending on the weather conditions. The divers' role in the first phase of the project was to dive around the abnormalities pin-pointed by a magnetometer to identify archaeological evidences. In the second phase, they were required to excavate and lift the artefacts to the surface. Some divers including Uacheque joined the process of artefacts selling by flying overseas, transporting artefacts (Uacheque pers. commo 2019). From these processes (attending the discussions sections and seminars hosted by Arqueonautas team), Uacheque learned the history of shipwrecks and of the Island. "This is the knowledge I share with my customers" (Uacheque pers. commo 2019). Besides that, Adam sees diving as a potential life-changing avenue for young people in his community.

> "Due to the high level of unemployment here, most young people are making bad decisions in life. I have a co-worker from here. He does his job very well. He is qualified for commercial diving and has been doing a good job outside the Island as well" (Uacheque pers. commo 2019).

He has been preparing another young man to be a commercial diver in the future. Uacheque further shared his hopes for the community youth,

> "I want to show them that there are bright possibilities for their lives, especially the young ones. They need to learn more about their history and find ways to make a living from their heritage".

Uacheque believes in making a living from the underwater heritage, learning from his life experience that changed in the Island. He told me that the income of a commercial diver is:

> "good due to the risk and working condition that it implies. Sometimes you can be diving to install cables in a beautiful coral area in summer. But during other days you have to dive in an area that contains hippopotamus in mud waters with zero visibility. Where all you have is trusting the voice commander coming from the guys who control the cameras inside the boat. You turn left or right, picking things up that feels like the bodies of victims of accidents that you are looking for. And you get flustered when you realize that you just plucked somebody's hair from the rest of the body because it has already deteriorated" (Uacheque pers. commo 2019).

Maybe part of the reason Adam settled on the Island is the pleasure of working in the blue and warm waters. He shared his intentions of turning his business into a professional corporation. He arrived at the Island just days before my arrival. He was coming from Inhambane province (South Mozambique), where he completed his field training for his PADI (Professional Association of Diving Instructors) certificate as a divemaster. He reasoned:

> "I know I have been diving for a long time and, I am good in what I do. But I need to make my business more professional. I need to work following international standards, it will give me more credibility" (Uacheque pers. commo 2019).

Uacheque's routine as he said, and I observed during my almost two weeks fieldwork is that his workday starts early to ensure that he gets into the sea at the right time according to the weather pattern.

> "If I have scheduled customers. I first check the tides and the wind. It allows me to plan the exact time we should visit certain shipwrecks and for how long. It is first for safety reasons and second for the quality of the view. High tides make diving much easier in general. And low tides are good for snorkeling. The wind also interferes in diving. So, it is always good to be at sea before the mild wind which brings dust to the sea" (Uacheque pers. comm 2019).

After that, he prepares the equipment together with his part-time assistant:

> "I prepare diving equipment and the motorboat in the afternoon. In the morning, I often snorkel by the bridge (*Pontão*). When he does not have customers, he spends the day snorkeling, taking pictures of corals and observing the sea [he did not share the reason for this everyday recording], and fishing for family consumption" (Uacheque pers. comm 2019).

His work has given him formidable popularity on the Island. He attracts diverse customers in different ways. Some come to visit the Island and once there, they get to know about the snorkeling and diving service through observation or information from the previous tourists or streets talk. Others come to the Island already knowing about his services (ibid).

By upgrading his commercial diving skills to divemaster, apart from attending commercial dives, he will be able to legally lead any diving excursion, keeping an eye on students, demonstrating, and refining their skills. This is an area with potential interest for scholars and entrepreneurs. He can also look after a group if the instructor is absent and will be responsible for safety equipment and scuba gear (PADI 2020). The divemaster's urge arose when the EMU started its research on the Island. They needed someone who had a certificate in diving to look after the equipment and with intimate weather knowledge. Uacheque was part of the community group that interrupted and delayed the start of University research (see the brief background sections above). He together with his fellow associates from the Island Friend' Association re-appropriated their space and place in the project. While his fellows were still prac-

ticing their diving skills, Uacheque proved to be essential in the project. His long-time experience in the area permits him to wisely schedule dives, equipment choice, and safety issues in certain shipwreck sites. With his divemaster certificate, he aims to further:

> "bring young people from the community. To teach them how to dive. And my future vision is that next time we will not need people from outside to manage our underwater heritage" (Uacheque pers. comm 2019).

Uacheque sees different levels of underwater heritage management. And surprisingly there are times where he claims to be part of the community of underwater heritage managers, mostly when it is associated with good practices. And when it comes to talk about treasure or who is doing treasure hunting activities, he excludes himself as a community member casting himself as the one who came to help the community. However, he has his own way of underwater heritage management which is different from those who are not from the community. He describes three ways of heritage management, a community management approach, his personal one and an academic research management approach. But it is in the first level where his concern is larger and wishes to change as he states:

> "The community does not know its history. They do not care about the conservation of their heritage. They are interested in the money that they can get from it. Here anyone dives and if there are some artefacts they collect for sale or house decoration. The collection practices start from small kids to old men. They do not have good manners required for underwater management" (Uacheque pers. comm 2019).

From his personal heritage management approach:

> "Underwater heritage must be preserved in situ. I am used to be at the sea almost every day unless I have work to do outside. Sometimes I do exploration diving. I have discovered new artefacts. Before I used to show my discoveries to the university team, but I need to reconsider my attitude because it will be documented as the team's discoveries and I do not know what they will decide to do with it. At present, I record and register the sites then I share the artefacts and site views with my customers. I think the best thing to do is to take a tour where everyone would enjoy the heritage. This situation is worse during holiday seasons, when the community does its best in diving without equipment with the visitors. It is like everyone is a tour guide" (Uacheque pers. comm 2019).

Regarding non-community or academic research approach he reveals that:

> "This is the confusing part for me. In the last years of Arqueonautas here, scholars used to call them treasure hunters, and I believed it till I joined EMU team. First, the EMU ignored the community. And then they said that they were here to correct Arqueonautas' destructive work. But in my opinion, this team's way of leading the work is suspect.

> Arqueonautas had a bigger team where each member had her/his role. I never saw Mirabal (the head of Arqueonautas' team in Mozambique) going on diving all the time, he used to stay in the office reading books and doing his research. He was the one who was in charge of telling people what to do. I remember spending all three months at the sea living in a boat in an area close to Nampula with other divers, marine biologists, photographers, and archaeologists. Mirabal came once in a while to dive and supervise our work, but we found shipwrecks and valuable artefacts. But with this team which calls themselves underwater archaeologists the work is comical to put it mildly. The archaeologists spend time diving and at the end of the day they are exhausted. I am not surprised that they are yet to find any new shipwrecks" (Uacheque pers. comm 2019).

Uacheque insightfully suggests that a financially weak team may cause more damage to the underwater heritage than Arqueonautas did as he said, "the lack of diving experience and adequate equipment will destroy heritage by mistake" (pers. comm 2019). Moreover, it becomes clear that the cancellation of Arqueonautas' operating licence did not do enough to protect underwater heritage resources, in fact one gets the impression that the incorporation of new players like EMU worsened matters. After Uacheque I interviewed Chabreque Chambal (pseudonym). I met Chambal at his customary spot by Vasco da Gama square at the northwest side of the Island, where he plays games with his friends in between driving his customers to Cabaçeira Grande or Pequena or from there to the Island. He is a young man in his early 20s. Chambal is also a long-time marine tour guide and in the last four years has been working with underwater heritage resources. I started this interview asking Chambal to introduce himself and his work.

> "Well as you can see Anézia, I am a taxi driver in these waters, just like my late father was. When I was a little boy, I started asking my father if I could follow him to work and he said yes. So, I started helping him shipping customers' luggage and observing how he was driving the rowing boat to the Island and then back home to Cabaçeira. I had great fun learning to drive a boat by reading and analysing the wind and tides with him. You must realise that at that time, I was already good at swimming since little children here spent most of their time playing and swimming at the beach. I am so good at swimming that sometimes I cross all the way from Cabaçeira to the Island and back swimming. Sometimes I join swimming competitions during festivals while at other times I just compete for fun with my friends. After working with my father, I saved enough money to get my own rowing boat and started working for myself" (Chambal pers. comm. 2019).

With his excellent swimming skills, I asked Chambal if he knew stories associated with the sea, he laughed and in a contented mood said:

> "You know, I work almost every day excluding our Muslim religious festive days such as Eid Mubarak. We are very religious here. We do not do business during Eid day; we

> do not believe in spirits at the sea. And, all the stories I know are related to accidents involving boats. I remember one day I was working to help a friend of mine in his boat on a windy day and the tide was very high. Violently the wind blew and toppled the boat upside down. We had to swim quickly to the surface to resurface the boat in right position. It was hectic but as always, we managed to do so" (Chambal pers. comm. 2019).

Chambal also shared other similar episodes involving accidents which because of his Muslim religious affiliation he characterises as spontaneous mishaps rather than supernatural events. It appears that most of the times he was not with customers nor on official business but doing other jobs he refused to disclose more about. He also emphasised the importance of teamwork as he talked about his former assistant.

> "as a driver and owner of a rowing boat you need to work with someone younger than yourself to assist in driving the boat. There are two basic requirements in rowing boats; looking after customers in smooth and rough times and driving the boat itself. Up until last year, I had a full-time assistant who was with me from the time I started. But now he has outlived his dependence on me and is determined to manage his own boat business. Coincidentally, I am no longer in need of a permanent assistant since a motored boat is easier to drive than a manual one. Unless there are petrol shortages on the Island, or the customers do not have money to pay for a motored boat, I stick to the latter. In fact, last year I sold my rowing boat to a white lady but sometimes I borrow it from her if the need arises" (Chambal pers. comm. 2019).

Chambal works with the community and with tourists.

> "I know the whereabouts and needs of my customers. Some are workers on the Island, so I transport them to and from here in the morning and evening. Others just come to Island to consult the hospital doctor, buy stuff or for recreational fun. But I also guide tourists who want to visit Ilha do Farol and Ilha das Cobras [the tiny inhabited Islands close to Island of Mozambique]. Ilha dos Farol is the first destination as it is closer to the Island and the main touristic attraction there is climbing the lighthouse to enjoy the aerial view of the huge sea waves. In addition, if you are lucky you get to see sharks and big turtles. The next stop is Ilha das Cobras where the first attraction for the tourists is the suggestive serpentine name of the Islet which promises the presence of snakes. But we have never seen even one. I suspect the fearsome name was given to protect the Islet from exploration. There the tourists go for camping or just walking to see the quiet lagoon in the middle of the Islet surrounded by mangroves" (Chambal pers. comm. 2019).

About underwater heritage Chambal said.

> "I have to confess to you that I am quite disappointed with it. After Arqueonautas there was a positive expectation on fruitfully working with these objects. I thought that I was going to gain financial rewards from it, in the footsteps of Arqueonautas, but that expectation has remained elusive. I have not gained any special income from it. I took tourists for snorkeling around shipwrecks but there are fewer tourists interested in it. It appears the view from the reefs is better than the view from broken timbers. I also

> joined the recent project with the University through hiring out my boat and my time to them, but they pay so little that I am looking for another project" (Chambal pers. comm. 2019).

Fisherfolk

Fishing is one of the oldest professions at the Island dating back before Bantu migration. On my way to the Island near the end of the street, before crossing the bridge I saw people selling and buying fish at the teeming Jempesse fish market. When the car slowly negotiated the market and entered the bridge to the Island, I looked down and could see several fisherfolk canoeing around the shallow waters (it was low tide). Other fisherfolk were at the beach parking their canoes and boats or arranging fishing nets. When the car slowly entered the Island on the southeast side toward the northwest where I was staying, I smelled the strong aroma of fresh fish and sea saltwater characteristic of fish markets. Instantly, my appetite for sea food soared. To understand the fishing practices at this world underwater heritage site and the relationship the fisherfolk have with it, I embedded myself in their norms. I first contacted the head of the fisherfolk association (*Associação dos Pescadores da Ilha de Moçambique*) before contacting the rest of the fisherfolk. In an interview (ARPAC 2009), the former head of the fisherfolk association stated that the principle reason behind the formation of this association was the need to join forces to fight for common fisherfolk goals. One of the main goals is to have a platform where fisherfolks can safeguard their fishing business. The former head further bemoaned that although fishing is a major occupation on the Island, the fortunes of fisherfolk are more miserable compared to other pursuits where practitioners notice positive changes in their lives after years of dedicated labor. But in the fishing business, prospects are dire. This is not helped by the fact that the plentitude of fish in winter results in unsustainable low prices due to the lack of appropriate conservation practices (ARPAC 2009).

The current head of the association is a man in his mid-60s. For ethical reasons I will call him Caetano Francisco. I met him and described my project to him before requesting for some fisherfolk contacts who could share their experiences with me for this research. Caetano Francisco agreed and promised to organize the interviews during the next coming days. To avoid misunderstandings, Caetano Francisco suggested that the interviews should be conducted collectively rather than on individual basis. I had no option but to agree. Caetano Francisco began the interview by explaining that:

> "We have worked with different people before and we are tired of being excluded from the benefits of our contributions. So, my current position is to make sure that my people are not being exploited and that the information they share does not financially enrich other people. Even when it comes to me, I am no longer attending seminars for free. If they want me there, they should pay me first" (Francisco pers. comm. 2019).

Just like Adam discussed earlier, Caetano Francisco has made the Island his home.

> "I was born in Nampula, but I came to this Island to live with my relatives and to attend school. In Nampula my parents lived far from schools. After middle school I left the Island. I worked outside and returned after a long time. However, even now I still go to work outside but I feel that my skills and contacts are more useful here than anywhere else. As part of my duties I attend meetings at local and national levels. As you know the government has been working with organization such as UNESCO Mozambique and usually after these meetings, decisions that affect the whole community are made" (Francisco pers. comm. 2019).

During the collective interview I met seven fisherfolk; Rick, Manuel, Tómas, Abdul, Ussene, Jamal and Mohamad. Caetano Francisco further invited Rita da Luz, an entrepreneur working with some fisherfolk. After Caetano Francisco had introduced me and my project to his group, I started the conversation enquiring why they decided to work as fisherfolk. Rick, who in his mid-20s is the youngest fisherfolk member of this group revealed that he started fishing after failing to find his dream job. "I took a driving license, I wanted to work as driver, but I could not find any job, so I came here to fish and make some money for my family" (Rick Pers. comm. 2019). In the same vein, Manuel and Tómas who share similar backgrounds inherited the profession from their parents. They knew that their initial job prospects were tied to fishing together with their parents before they could move on to become fully-fledged professionals.

> "we grew up here, seeing our fathers preparing their boats and nets early in the morning and returning in the afternoon. We were always excited by the beach as we saw them returning. We usually jumped into the boats helping them in parking the boats; carrying the fish and then cleaning the boats" (Manuel & Tómas pers. comm. 2019).

Rick is still new in this profession and practices fishing as a profession by himself. "I do net fishing by myself. I feel it convenient as I manage my time and still get fish whenever I go fishing" (Rick Pers. comm. 2019). Abdul, Ussene, Jamal practised artisanal fishing with rowing boats for a long time before they decided to join Rita da Luz' project and acquired motors for their boats. Rita proudly described herself as the sole female in this profession in the whole nation.

> "I am from Nacala Porto. I am a fisherfolk's child and I always wanted to do something in this area. But I could not find women in this business, so I then tried different businesses. When I got some money, I decided to invest in buying motors to make fishing

> more profitable for my community. It worked even better than I expected. I now possess many motors and fishing gear around Nacala and I come here to help fisherfolks from this Island who seem to have been forgotten by the government. If you go to places like Inhambane you will see that communities, there are working with good fishing gear provided by the government. Here I must come to the Island and transport fish to sell to other places" (da Luz pers. comm. 2019).

Abdul, Ussene and, Jamal noted changes in their fortunes after working with Rita da Luz.

> "It is cool to have her here. Working with rowing boats makes you slow as your navigation depends on the weather. But with a motor you go far into the sea, and you get more from your day" (Abdul; Ussene & Jamal pers. comm. 2019).

Caetano Francisco reinforces that the Ilha is a place which provides good fishing during all year even in shallow waters:

> "You see what those people are doing now, they are fishing right here (as he points out some people in their canoes fishing in front of us). These practices are new, before we had order in this place but since many white people with money started to come and run projects for their own benefits like Arqueonautas did, the community also thinks that they can do what others did" (Francisco pers. comm. 2019).

Manuel added, "do you see the lights in the night right. Those lights in the middle of the sea. They are Chinese boats fishing all day, which means that in two years' time we will be left with nothing. Can you imagine a fishing community without fish? It will be us" (Manuel pers. comm. 2019). Caetano then said:

> "In few days I am attending a meeting in Maputo, I will be meeting the ministers. I really need to talk with someone who has power. This place carries the history of this country. The government uses this historical fact all the time for their benefit, but their actions show that they do not care about the future of Ilha" (Francisco pers. comm. 2019).

In fact, I could see distant lights from the sea from what looked like industrial fishing vessels that Manuel and others mentioned. Historically, Ilha has been considered as exclusively a place where the local community practises artisanal fishing using manual rowing and sailing boats (see ARPAC 2009, Schwalbach & Maza 1983, Ministério da Cultura 2010). There were no reports about industrial fishing associated with Chinese or other countries. The fisherfolk associate the present fish scarcity with the massive extractive practises of international players. This impression was expressed by Mohamad and supported by the rest of the group.

> "we are not expecting great quantities of fish during summer. We all know that these hot times the fish do not come closer to our hot water, however it is getting lesser and

lesser from the amount we used to get in the past. The numerous industrial scale fishing projects are robbing us of our livelihood" (Mohamad at all pers. comm. 2019).

Caetano Francisco therefore explains that:

> "You see! We, as a community have organized ourselves into associations to regulate the access to our resources. We will block any researcher who comes to the Island for exploration purposes as a way to conserve this place. For that reason, all the associations are working together to deal with people who are not from the community. However, each association is also responsible for choosing members from the community who will be part of responsible research. We are tired of exploitation. Many people come to the Island to rob our heritage for their own good, leaving the community in poorer condition. I think it is only fair that the local community should be the first to benefit from the Island's heritage" (Francisco pers. comm 2019).

Jamal, similarly, shared his views on fishing practices before the advent of industrial scale interventions through foreign companies:

> "Fishing was a noble and courageous activity. Fisherfolks were more respected members of the community. But now it has changed, people who are not doing any job get respected. Going fishing is such a dangerous and unrewarding activity. We risk our lives every day. The sea is unpredictable, especially here. Just consider how many ships sunk to the bottom in the past and how many people died. Fortunately, we know what we are doing and how we do it and that is why we are still alive. We spent years and years learning before we could go fishing" (Jamal pers. comm 2019).

Caetano Francisco shared the details of a certain tradition that is slowly getting neglected by the young generations. This tradition was also recorded in 2009 by the National Heritage Archive.

> "We used to conduct a traditional ritual to thank the spirits of the sea for each fishing season. We know that we are not alone and there are other spirits living at sea. They need to be remembered from time to time. This tradition of expressing communal gratitude to the spirits of the sea, was a way to reunite fisherfolk from the whole Island. We congregated at a religious leader's house where some fisherfolk wives cooked seafood while the fisherfolk offered prayers of thanks, protection and provision. After the prayers, the fisherfolk gathered food for the spirits. The food was carried on a new canoe prepared specially for this. The leader would choose four fisherfolks to take their boats and transport the special canoe to the sea. There the food was thrown to the water spirits and the canoe left there. After the fisherfolks returned from the offering, the party started, and everyone could eat. During this special day no one could go fishing" (Francisco pers. comm 2019.

The abandonment of traditional fishing practices and rituals reflects as well on the changing social habits in the community, as Mohamad said:

> "The mess installed by these projects is reflecting in our kids, they are impatient on learning from us like we did from our parents. They want to emulate the foreigners who run the big projects. They are also looking for treasure. As for me, I grew up

> seeing many things under the sea, but I knew that I could only pick up what I needed for the house and for nothing else" (Mohamad pers. comm 2019).

The last interviewee in this section was with the secretariat of fisherfolk' association. He is an artisan and former Arqueonautas worker. I met him at his house in the Macute City. He started the conversation saying:

> "I am from Maputo like you Anézia. I grew up in Mafalala[2] and after visiting this Island I fell in love with it and decided to stay. My life is shaped by this place and I have kids. I am an artist and I have worked in many projects. My current passion is working with kids in need. As you can see, poverty is widespread here and kids tend to end up following wrong ways. I help them realise that they can do amazing clean jobs" (while he shares children' drawings in A4 white papers) (Fernando pers. comm 2019).

I appreciated the drawings which were well painted with what looked like a professional artist's finesse. Most of those images are representations of the Island's landscape. While I was still appreciating the drawings, he continued:

> "I had a small art school where my pupils used to spend most of their time practicing, but now I do not have money to run a place like that, all that work we do here at my yard. I teach them the history of this country with focus on this Island and we do visual representation of our history" (Fernando pers. comm 2019).

I see artistic representations of ships from the fifteenth and sixteenth centuries sunk at the Island's deep waters, those excavated and processed by Arqueonautas and others. The details of these artwork are so impressive that I wondered about the process of production of this fine artwork. Fernando explained:

> "Look at this piece we have just sold to an American guy. You see this little boy? He is an orphan; he made this piece by himself and I am so proud of him. He is an artist and now I am sure he is confident enough about his life. I learnt a lot from Arqueonautas, I worked as an underwater drawer. I travelled; I went to Germany. I am fluent in German too. Arqueonautas changed my life and, I hope I could do more for the kids as that company did for me. When I joined Arqueonautas I was not that good at drawing, but they had time and resources to teach me. I learnt about diving and I become good at underwater drawing" (Fernando pers. comm 2019).

Like Adam Uacheque, Fernando Mohamad also distanced himself from his community's conservationist tendencies towards the Island' heritage. He told me the following:

> "I can say that maybe it is sheer innocence or lack of good education, but this community lived for a long time with precious treasures under their eyes without exploring them. Arqueonautas came and showed them how rich they were, all they need to do is

[2] Mafalala is a suburb in Maputo province founded by people from Nampula. It is most famous as a place where most of the national heroes lived and planned the liberation struggle against colonialism (Gonçalves 2016).

> to learn and open their eyes. Consider how many people are living miserable lives around this neighborhood? They need to change their lives through wiser use of their heritage. I am so thankful to some Arqueonautas members who are still helping me with donations of drawing material for my kids. I hope you and more people can do the same next time you come here" (Fernando pers. comm 2019).

Informal Sellers

Sellers can be found literally everywhere around the Island. From the Jempesse fish market, the street market at Macute City to Stone City, there are thousands of streets sellers. The latter sell cooked seafood and craft products to the tourists. For this project I considered the sellers from Vasco da Gama square. At this spot each of the sellers has a wooden stall next to one another. The sellers are all different from the previous groups as they are younger with their ages ranging from early 20s to mid-20s. They start working after eleven o'clock in the morning till six towards evening. I met four of them and I explained my project to them. They agreed to participate as a group, "since we are all standing close to each other, we can take part at the same time" (pers. comm 2019).

They introduced themselves as Abacar Ibrahímo, Abdurarremane Malisso, Amade Uandela and José Rocha. Ibrahímo noted that:

> "I sell beachwear and jewelleries. The first I get from Nampula while my brother and I make the jewelleries. He sells around Lumbo and this is my spot. Here I meet customers from overseas. I speak English with them, and they pay me well. They are different from local customers that always negotiate down the prices of everything" (Ibrahímo pers. comm 2019).

Uandela observed, "I come here to sell at my best friend's spot, he got married and his white wife gave him a job as a receptionist at the hotel". Malisso is a part-time seller, he is multi-talented and has many jobs.

> "I am different from many lazy people here. I work in a white lady's house at Cabaçeira Grande. She travels all the time. When she is not here, I have time to make lamp holders, bracelets from seashells and beads" (Malisso pers. comm 2019).

The selling of these tourist wares also varies from one touristic season to another as Ibrahimo submitted. "November and December are undoubtedly the most lucrative season for our business. But there are other holidays in the middle of the year that are as good as well". Malisso added,

> "We also collaborate with some touristic related institutions such as hotels and restaurants. We provide them with raw materials if they already have someone who can craft,

> or we make the products and sell to them. The only challenge is that every day presents new people on the street selling the same things as us. Mozambicans are not creative at all, they like copying each other's business models" (Malisso pers. comm 2019).

The sellers collect or buy beads and seashells from kids and women to make their products as Uandela explained:

> "when we have a lot of jobs, we buy beads and seashells by the beach from children and women or they come here to sell to us. When we do have time, we go at Ilha das Cobras where there are many seashells to collect for ourselves. During tourist seasons we do not have that time to collect on our own, so we simply buy from others and we create our work here" (Uandela pers. comm 2019).

The raw materials are also collected at Cabaçeira Pequena and Grande. Malisso who makes baskets from dried leaves told me, "I live on that side, so I collect white and black seashells and I look for leaves as well. I dry the leaves at home and then take then with me wherever I go making baskets of different sizes and styles" (Malisso pers. comm 2019).

The products cited above are not the only ones being traded. They later showed me a lamp holder decorated all over with fragmented white and blue porcelain that looked exactly like the famous Chinese porcelain from Ming Dynasty excavated by Arqueonautas (see chapter two). I did walk around the beach from the northwest to northwest side of the Island, and I could clearly find blue, red and black beads and some few fragments of blue and white porcelain. The first are interpreted as some of the principal trading goods brought from India to the Mozambican coast in exchange for gold and ivory before colonialism (Duarte & Meneses 1996).

They also sell old coins, some from numerous centuries ago and iron made kitchen wear. The coins from fifteenth to seventeenth century (inscribed on one side of the coin) were recovered from the sea. Of the old kitchenware, some look similar to the ones exhibited at the Museum of the Island recovered from the sea. When I asked them where these products come from, the two owners (the rest of the sellers did not have these) submitted that:

> "These are original artefacts used by Vasco da Gama himself. We sell with special prices to tourists who curious to learn our history. So, we give them a slice of this fascinating history" (informal sellers pers. comm 2019).

Apart from compelling artwork and craftmanship of different products, the sellers are also well skilled in telling the interesting history of the Island. During my time with them I heard countless times their accounts of the Island's history narrated to tourists.

Boat Manufactures

The increase of fishing results in a high demand, for boats hence there has been an attendant expansion of the boat construction business. From what I observed canoes or small boats are in higher demand compared to rowing boats. While the former are almost exclusively used for fishing, the rowing boats are used for fishing, leisure, tourism and other activities. To see and hear more about this profession at the Island I contacted and met José Paruque. He is a young man in his mid-20s. We met at his house at Bairro do Arreal (Macute City). This time I needed considerable help from my friend Sulemane Rachid who became my field work assistant. He walked me around and helped to find the locations of my interviewees. Rachid did the translation from Portuguese to Macua and from Macua to Portuguese to enable me to conduct the interview with Paruque.

According to Paruque (pers. comm. 2019), he became a shipbuilder because:

> "My father did the same profession years ago, until he retired. My father taught me all about making boats. The most complicated part is to make it float and comfortable at the same time. But I can do it without much trouble" (Paruque pers. comm. 2019).

Paruque said that dynamics had changed in the Island.

> "The only avenue to enter and explore the sea is via a boat. And I am a boat manufacturer, and everyone needs my services. It is not like I am the only one in this profession, we are many. You will see tomorrow morning, but we are all busy thank God". (Paruque pers. comm. 2019).

The following morning, I visited their workplace around the beach close to the main fish market in the west side of the Island. The big open space looks smaller with big tree trunks, unfinished boats parked in different styles with some upside down while others lay on their sides. There are boats of all sizes, including big sizes that made me wonder why I do not see such huge boats at the sea? I then reminded myself that part of this huge boat will be under the sea and it is for that reason that they look much smaller at sea.

Unlike the previous groups, boat manufactures did not talk much instead they invited me to join and see the process of how heavy tree trunks are processed into boat material. Malinda explained:

> "We start early in the morning; we have been working more than we used in the previous decades. Now customers ask for fancier styles and bigger sizes. For example, almost all want versatile ones with covers to protect tourists from the sun. The cover must be easily removable to turn the boat into a rowing boat when there are no tourists. We do our best to satisfy our customers." (Malinda pers. comm. 2019).

Discussion

This chapter attempted to document the attitudes, perceptions and options of the local community vis a vis Arqueonautas and other agencies working underwater from the Island of Mozambique community. The interviews conducted revealed divided opinions about the governmental decision to transform the Island into a competitive touristic attraction site. From the marine tour guides' attitudes of providing underwater tourism services, we see the advantages of local self-employment. However, marine tour guides still need help from the government, EMU and international agencies such as UNESCO on training, to provide safer and educative services to their tourists. The divers who used to work with Arqueonautas retain the diving skills and knowledge about the history of shipwrecks, nonetheless, they should train further in order to acquire skills needed for tourism services. The other notable aspect from the former Arqueonautas workers is their interest in developing the community via cultural heritage.

The informal sellers have become full-time commercial treasure hunters. They have the secret knowledge of the location of artefacts, but it is unclear how they manage to get artefacts for sale during all seasons. Besides the media marketing strategies used by large-scale commercial treasure hunting companies, the sellers at the Island have developed face to face marketing. By closely analyzing the artifacts for selling I was not sure if all of them were from underwater sites at the Island as some presented different characteristics from the artefacts usually from the Island.

Fisherfolks can be described as the scrutineers of the sea. The success of their work depends on general correct environmental behavior at the sea. However, fisherfolks have organized themselves in order to control further large-scale treasure hunting and research activities that do not freely include them as active participants.

The last group is different from the previous groups interviewed. Boat manufactures are beneficiaries of both large and small-scale commercial treasure hunting activities. They expressed their satisfaction with the rising treasure hunting activities and academic research which created opportunities for them.

The divided opinions arise in part from the project's failure to meet the initial high promises made. The most unsatisfied group is the fisherfolk who regret that their working place is being made precarious due to a lack of proper fishing regulation which leads to worrisome fish scarcity. The rest of the groups seem to have benefited from these projects, mainly from Arqueonautas' activities.

In order to cope with and regain relative control of their communal destinies in light of foreign driven projects, local communities have created influential organizational structures to control and prevent further exploration and exploitation of their underwater heritage without their consent. Leading these communal structures are individuals with significant and wide experience in public relations acquired through years of working in different places with different institutions. The grass root structures created are powerful and quite effective in controlling and policing suspicious actions on the Island. These associations are illustrative of communal agency and preparedness in conserving natural resources, filling the huge gap left by indifferent government policies. As the people who bear the brunt of extractive practices the most, it is proper that local communities should police and benefit most from their natural resources.

The case study revealed different perspectives for underwater heritage management within the community. For Adam Uacheque and Fernando Mohamad, conventional and 'modern' heritage management systems provide the most efficient means to protect heritage sites. Their stance is informed by insights gained from their long working experience with Arqueonautas. This system's regime of management argues that underwater heritage sites should the transformed into tourists sites that will benefit the individuals who are in charge of the programme implementation. Conversely, fisherfolk clamor for a holistic management approach where their knowledge of the sea, their diving and navigation skills, and treasure hunting should be validated by the government, UNESCO, and scholars as local community practices in the underwater management process. All the same, all fisherfolk argue for a democratic use of the heritage situated under the sea and equitable distribution of the economic benefits derived from such uses. The two last groups - sellers and boat manufactures - focus on the economic values of the underwater heritage.

What also emerges from the research is that it is too simplistic to blame foreign companies like Arqueonautas and Chinese fishing companies for the harm visited on the Island of Mozambique people. There are more culprits who include the national government whose corruption and indifference to the needs of those local communities condemn most affected communities

to more misery and poverty. In the following and last chapter, I present the measures which all the stakeholders should take to ensure satisfactory and better results in similar future projects.

Chapter Four: Research Findings and Conclusion

Research Findings

From the first chapter of this research, I realised that each country must make decisions on conserving its underwater heritage based on their obtaining conditions privileging the conservation of underwater artefacts. This is in line with the UNESCO Underwater Heritage Convention's (2001) recommendations. This means that for countries like Mozambique which have not yet ratified this Convention, the selling of artefacts ceases to be illegal. This is against the grain of the reports compiled by Mozambican scholars and civil society.

To grasp the Mozambican situation, I consulted its national polices on heritage. I looked at the 22 December 1988 legal instrument 10/88 on the legal protection of the tangible and intangible Mozambican cultural heritage and the 20 July 1994 Decree No. 27/94 on the protection of archaeological heritage. The two legal tools state that the government has absolute power over all national resources including national waters. Moreover, the national polices bestow on the NDCH total power to determine and issue archaeology research permits to an experienced archaeologist qualified to conduct research. Accordingly, based on the reports compiled by Arqueonautas from the beginning of the project, the project seems to have been above board considering that the firm was technically and professionally qualified for the project. Arqueonautas followed the recommended archaeology research steps in surveying, excavating, conserving and management practices.

The national polices on heritage state that the decision to trade artefacts must be presented to the NDCH. The reports I saw contained the stamp of government trading approval. In addition, Uacheque one of the marine tour guides I interviewed proudly and happily expressed how powerful he felt traveling overseas with members of the government transporting artefacts. These members of the government were representing Património International, a company which was supposed to invest the income from artefact trading in further maritime archaeology projects. Up to the completion of this research, there was no evidence of any such investment.

The research revealed why large-scale multi-national treasure hunting firms are the ones leading underwater projects around the world, especially in Mozambique and other poor nations. Arqueonautas is owned by wealthy and privileged political figures from Portugal who have the power to influence decisions to their liking. This power and wealth is felt more in poorer nations like Mozambique where check and balance mechanisms are weak or non-existent. After getting research permits, large-scale treasure hunting companies build and fund a strong advertisement media campaign to shape and manage perceptions about their activities. One such ruse is the impression that most people acquire information about the history of humankind lost at sea from large-scale treasure hunting companies. In reality, recovered historical artefacts are commodified into profitable treasure trophies to be sold to the highest international bidder sometimes on online auctioning platforms. Moreover, this research has revealed that the reckless profit-oriented activities of multi-national Treasure Hunting Companies ruin underwater heritage sites and with that historical knowledge which is irretrievable thereafter. Treasure hunters constitute prominent underwater heritage publics amongst academic communities and selected civil society groups. The Mozambican government, another prominent player is at best complicit with multi-national firms in the pillaging of underwater heritage.

In some places around the world, scholars are working in collaboration with large-scale treasure hunting companies. However, in the Mozambiquan case, scholars prefer the clear distinction between marine archaeologists and treasure hunters. Foreclosing the possibility for collaboration, scholars and civil societies consider themselves to be custodians of underwater heritage while regarding treasure hunters as plunderers of the same.

Among the stakeholders of the Island of Mozambique underwater heritage, this research's significant contribution is the consideration of the local community perspective which is heterogenous rather than uniform. There are different local community groups - ship manufactures, informal traders, marine tour guides and fisherfolk - that have diverse interests. The interviews I conducted among these different groups suggest that the local community perception of underwater heritage is different within and amongst other stakeholders such as academics and treasure hunters. Some of the local groups consider the large-scale activities as the right way to manage underwater heritage while others were disenchanted from being excluded from management projects yet were left to bear the ill-consequences after the completion of these projects.

Interviews Findings

From the interviewed group's perspective, this research revealed that Arqueonautas activities transformed quotidian life on the Island. The large-scale treasure hunting practices introduced new ways of using and seeing underwater heritage. While marine tour guides, sellers and ship manufactures see the benefits through lucrative job creation and better future possibilities as the "good" side, fisherfolk see the harmful "bad" side of treasure hunting activities. Fisherfolk grapple with the challenges from new uses of the sea by both Arqueonautas and international industrial fishing firms who over-fish. Except for the fisherfolk, the other interviewed groups came into gainful employment because of underwater heritage projects, especially through Arqueonautas. The tour services offered by formal and informal marine tour guides did not exist before Arqueonautas. The first marine tour guide is a former Arqueonautas employee and according to him his sector must be seen as one that reduces unemployment amongst the young population at the Island by the professionalization of all practitioners.

The young sellers also benefit from underwater heritage projects through trading to both the local communities and international tourists. For these groups, projects involving underwater heritage are welcome as they promote the Island as a rich historical site where the remains of ocean-human history are accessible. That Arqueonautas widely reported their discoveries and related trade helped publicise and boost the local trade of artefacts. The beneficial impression created among local and international tourists was that the Island of Mozambique waters hold treasures. This notion helps the local sellers to trade their products even if the buyers have no idea where the objects are from.

Of all the local publics, ship manufactures proved to be the most reticent group, maybe because their work is more physically demanding compared to the two previous groups described above. In their few words they expressed how grateful they are with the growth of sea interest among the local community and outsiders. Ship manufactures are directly benefiting from the underwater heritage activities as these inspired more sea-related activities which demand more boat service, sale and repairs.

Of the interviewed groups, fisherfolk have a formal association that speaks about their challenges within and with the government. This is in part because their work is the main economic and sustenance activity on the Island. The other part is that fisherfolk are the ones who deal with the negative impact of activities conducted at the sea by other stakeholders. These activities have been changing the sea and consequently fishing is no longer as profitable as it used to be. The sea is no longer an organized, safe and reliable place. By forming an association, fisherfolk aim to raise their voice, focus their interests and establish an influential platform with power to intervene and impact on future underwater heritage projects. The Fisherfolk Association was disenchanted at their exclusion from government and other stakeholder underwater heritage management projects. They further blame large scale firms such as Arqueonautas and those involved in industrial fishing activities for upsetting their common fishing routine.

The local community discussion involving underwater heritage at the Mozambique Island differs from the official governmental polices on the conservation of cultural heritage or from marine archaeology practices. The local community sees the economic value associated with the underwater heritage and are thus interested in decision making processes. Arqueonautas' large-scale treasure hunting activities created and cemented within the local community the commodification of underwater heritage treasures. This in turn fueled the compact to access underwater heritage at the Island. All these challenges invite stakeholders such as the government, UNESCO and scholars to closely interrogate this competition as it affects the underwater heritage.

Conclusion

This research project intended to explore the role and impact of large-scale commercial treasure hunting on the Island of Mozambique. It closely analysed the field work reports produced by Arqueonautas in relation to the recommendations of national and international polices. In order to underscore grass-roots perceptions, it then considered the voices of marine tour guides, sellers, ship manufactures and fisherfolk, local community groups whose lives revolve around the sea who have interesting perceptions on underwater heritage. Although these groups have been excluded from all archaeology projects, I argue from my findings that an underwater archaeology project undertaken in a transforming urban heritage site such as the Island of Mozambique should respect the underwater heritage, incorporate recommended best-practices

and involve all the stakeholders for an efficient marine archaeology research. The conservation of underwater heritage is affected by natural causes of decay and human monitoring management strategies shaped by seismic social and economic developments as suggested by Veldpaus (2013:8). If one of the stakeholders is unhappy, as is the case of the fisherfolk, future underwater archaeology projects will be hampered and information sharing lost.

The benefit of close analysis of the Arqueonautas reports and the legal polices at national and international levels revealed that the biggest threats to the underwater heritage are not only the large-scale commercial treasure hunters themselves, but the government that did not follow the monitoring procedures of Arqueonautas project as specified in the law. The government also failed in authorizing the artefacts trading without using the income for local research. And scholars from EMU also erred in initially excluding the local community and failing to explain their aims clearly.

Recommendations for Future Studies

For further research, this study recommends future maritime archaeologists to consider in greater detail the roles played by the Mozambican government and secretive multinational organisations in the exploitation of underwater heritage. Moreover, there are more companies than Arqueonautas who are impacting on underwater heritage in Mozambique and these need to be probed. I have in mind mushrooming Chinese firms whose extractive tendencies leave a lot to be desired. It will also be interesting to consider the role that academics and other research-oriented publics play in the conservation of underwater heritage. The government should also create a data base of the values each stakeholder attributes to the underwater heritage, thereafter, decisions should be made based on the hierarchy of the values. The government should also undertake the research evaluations report more earnestly, discussing its results amongst the stakeholders, to enhance its supervisory role.

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