

A suggested blueprint for the development of maritime archaeological research in Namibia

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Abstract

During the last few decades, maritime archaeology has developed into an internationally accepted field of specialisation within the discipline of archaeology. It has, however, only gained academic recognition in Southern Africa since the late 1980s, when a lecturing post for maritime archaeology was established at the University of Cape Town. This resulted in initial efforts being focused on South Africa. Now, however, the time has come to expand the development of maritime archaeology to neighbouring countries. Due to various positive factors – including the presence of an important research potential as well as growing interest and positive contributions by some organisations and private individuals – Namibia provides a fertile ground to extend the field of operations. This article first summarises the objectives and methodology of maritime archaeological research in general; then it offers suggestions as to how to establish this research specialisation in Namibia, bearing in mind local circumstances.

What is Maritime Archaeology?

Maritime archaeology developed by means of an evolutionary process from underwater salvage, treasure hunting, the collecting of antiquities and the kind of archaeological work that was done until the early twentieth century. During the 1960s, the field became an area of specialisation within the discipline of archaeology. This period saw a growing involvement of professional archaeologists, the rudimentary development of research designs, the improvement of diving equipment, and the application of techniques that facilitated work in an underwater environment. The initial emphasis, however, was on the latter.¹ As a result, the field did not obtain widespread support from its terrestrial counterparts, where efforts were generally directed at solving specific research problems. From a theoretical perspective, therefore, maritime archaeology lagged behind. This situation was only partly rectified during the decades that followed.² Even to

¹ For example: Willard Bascom, *Deep Water, Ancient Ships. The treasure vault of the Mediterranean*, Newton Abbot/London, David & Charles, 1976; George F. Bass, *Archaeology under Water*, London, Thames & Hudson, 1966; Philippe Diolé, *4000 Years under the Sea. Excursions in undersea archaeology*, London, Pan Books, 1957; Bill St.John-Wilkes, *Nautical Archaeology. A Handbook*, Newton Abbot, David & Charles, 1971.

² For example: O. Crumlin-Pedersen, *Archaeology and the Sea*, Amsterdam, Stichting Nederlands Museum voor Anthropologie en Praehistorie, 1996; Richard A. Gould, (ed.), *Shipwreck Anthropology*, Albuquerque,

this day, there is a world-wide emphasis on specific projects with limited scopes. A shipwreck, for instance, would be studied in isolation, the larger picture being ignored. This approach seems to be the driving force behind the fact that the relevance of maritime archaeology is still being questioned by some terrestrial archaeologists.

If one defines maritime archaeology as: a scientific approach that attempts to study people's past relations to the sea by means of the surviving material evidence and all available additional evidence, a more holistic proposition has been identified. This definition implies that the emphasis should be placed on people of the past, on their actions, accomplishments and the events that surrounded their lives.³ Following this, an archaeological site can be regarded as an archive of material culture that reflects some of these aspects in one way or another. For this reason, emphasis should be placed on information of a social, economical, political and cultural nature that can be abstracted from such sites and not on the items they reveal *per se*. These items, admittedly, may on occasion have commercial value as well. It is on this premise that the suggested blueprint for the development of maritime archaeology in Namibia has been based.

Maritime archaeological research

Maritime archaeological research focuses on information provided by material culture of a varying nature that may be contained in different types of sites, as well as the context in which this material is found. The word 'site' as used here has specific meaning and can be defined as: an area or feature placed in the natural environment that contains or stands in some relation with archaeological evidence – being artefacts or other material remains and their stratigraphic and contextual information – and also environmental information contained therein. Archaeological sites are thus locations where some form of human activity has taken place, as witnessed from a single artefact to a dense and complex concentration of cultural material. A functional classification of maritime archaeological sites discerns four general types. These relate to the motivations with which they were used or created, or certain relations they held to people in the past.⁴

The natural-static sites comprise immobile shelters, living and working places, deposition areas and obstructions formed by natural processes, including erosion and changing sea levels. Archaeological traces resulting from these are situated in the same geographical location where the sites were formed originally. Most of them only gained a function for occupation and settlement, or as areas where material was deposited, some

University of New Mexico Press, 1983; Keith Muckelroy, *Maritime Archaeology*, Cambridge, Cambridge University Press, 1978; Unesco, (ed.), *Unterwasserarchäologie. Ein neuer Forschungszweig*, Wuppertal, Putty, 1973; Bruno E.J.S. Werz, *Diving up the human past. Perspectives of maritime archaeology, with specific reference to developments in South Africa until 1996*, Oxford, British Archaeological Reports International Series 749, 1999; Chris Westerdahl, "The maritime cultural landscape", *The International Journal of Nautical Archaeology* 21, 1992: 5-14.

³ Werz, *Diving*: 2-11, 133.

⁴ Leon Jacobson and Graham Avery, "Archaeological conservation along the Namib Coast," *S.W.A. Wissenschaftliche Gesellschaft Newsletter*, 29, 5-6, 1988: 1-10; Werz, *Diving*: 12.

time after their formation. They consist *inter alia* of caves, springs, reefs and submerged rocks. Juxtaposed to these are the artificial-static sites, which can be described as immobile structures produced by people with a specific purpose in mind. Presently, these are also situated at the same location where they were constructed originally, but they started to fulfil their purpose upon completion. Artificial-static sites can include harbour works, lighthouses and shipping yards.⁵

Natural-dynamic sites were formed unintentionally and are mobile or subject to change of location due to environmental agents. Because of certain favourable characteristics people used them in the past or, alternatively, they became obstructions resulting in the unintentional deposition of material culture. Usage as well as unintentional deposition happened only some time after the formation of such sites by natural processes. They include beaches, estuaries, lagoons and sandbanks. Artificial-dynamic sites, on the other hand, can be described as mobile structures that were built by past people with a specific purpose in mind. These sites are presently situated in a different location to where they originated and started to fulfil the purpose for which they were constructed immediately after completion. Artificial-dynamic sites include all types of rafts and vessels, boats and ships. This category can even be expanded to include the wrecks of aeroplanes. An example of this would be the fighter planes that were lost during the Battle of Britain in 1940. Artificial-dynamic sites and specifically shipwrecks form the most obvious examples of maritime archaeological research.⁶

Although the functional classification of sites assists in a better understanding of the subject matter, it will be clear that this categorisation is not always rigid. Exceptions do occur and an example of this is the Bremen cog, an unfinished vessel dating to approximately 1400 AD that was found during dredging operations near Bremerhaven, Germany, in 1962. The vessel was obviously still under construction when a flood swept it away from the building slip. Even though valuable information on constructional aspects has been obtained from this wreck, the ship did not fulfil the role for which it was intended, as it was never operational. Thus, its value as a research subject is reduced, especially with regard to economic and social aspects within a late medieval Western European context.⁷

By the same token, it will be clear that maritime archaeological sites are not only found under water but also in the coastal zone, sometimes kilometres away from the sea. Harbours that silted up during the course of time, such as Rye on the English south coast, or areas of reclaimed land that contain shipwrecks, such as the Dutch polders or the Cape Town Foreshore, provide examples in this context.⁸

Another aspect, which must be borne in mind, is that different types of sites may exist concurrently in the same area. An example of this would be an underwater obstruction

⁵ Werz, *Diving*: 12-14.

⁶ *Ibid.*: 14-15.

⁷ *Ibid.*: 15.

⁸ *Ibid.*: 11-16.

like a rocky pinnacle, which becomes a natural-static site when material culture is deposited. Ships that grounded there during the course of time become representatives of the artificial-dynamic sites category. To prevent further incidents from happening, an artificial-static site such as a lighthouse may have been erected on the pinnacle at a later date.⁹

Lastly, it should be noted that there is hardly a chronological limitation in studying maritime archaeological sites and the material culture they contain, which can range from 100,000 year old stone tools to World War II battle ships. Anything that dates to before the present and that may reveal information that is relevant for the answering of specific questions, emerging during the formulation of a research design or during the course of a particular analysis, may be incorporated. Thus, modern debris such as plastic bags and golf balls assisted in explaining the dynamics of natural processes on a seventeenth century shipwreck site in Table Bay, indicating some of the wreck transformation processes involved.¹⁰

Now that the subject matter of maritime archaeological studies has in part been described, it is time to turn to the methodology that can be followed in unearthing, securing, documenting and analysing the information that is contained in the variety of deposition sites. Depending on motivation and circumstances, however, individual scientific projects may or may not incorporate specific stages, or deviate slightly from the sequence that is described hereafter. To put this in perspective, a local example can be given.

Over a period of many years hundreds, if not thousands, of coins were washed up on a remote Namibian shore near Meob Bay. Visitors to the area collected substantial quantities and kept them in private collections until finally a small number was passed on to the author for identification purposes. Initial analysis showed that the coins are all of the same type and struck in the same year at the same mint. More specifically, they are all Dutch East India Company (VOC) *duiten*, dating to 1746 and minted in Middelburg, in the province of Zeeland, in the then Dutch Republic. Study of dispersed material that was recovered without the source being located indicated the presence of a shipwreck in the area. It also revealed the probable identity of the wreck (Dutch, VOC) and provided a *terminus post quem* for the sinking of the vessel, i.e. in 1746 or thereafter. With this information, some specific research questions could be formulated that focus on the identification and history of the ship that is supposed to have foundered in the area. The collecting of other data that were not provided by the coins, focusing mainly on archival sources, followed. As a result, it could be concluded that the VOC ship 'Vlissingen' most probably sank in the area during the course of 1747.¹¹

⁹ Ibid.: 15.

¹⁰ Bruno E.J.S. Werz, '*Een bedroefd, en beclaaglijk ongeval'. De wrakken van de VOC-schepen Oosterland en Waddinxveen (1697) in de Tafelbaai*', Zutphen, De Walburg Pers, 2004: 91, 106.

¹¹ Correspondence Bruno Werz – Dieter Noli, 1993; Theo Schoeman and Gunter von Schumann, "Meob 'VOC' survey, March/April 1993", unpublished report, Namibia Underwater Federation, 2001; Theo Schoeman and Gunter von Schumann, "Meob 'VOC' survey part 2, 12-23 April 1994", unpublished report,



A N N O 1732.

Contemporary depiction of a VOC ship similar to the 'Vlissingen'. (Nationaal Archief, The Hague).

Ideally, however, the foundation of a scientific maritime archaeological project is laid with the formulation of general questions, before any material from any site is removed. The answering of these research questions may contribute to more or new knowledge on specific aspects of the maritime past. On the basis of these questions, initial data collecting is undertaken. Relevant supporting information can be of a varying nature and may be found in archives and libraries, in museums or private collections and sometimes in the field. Once the rough information has been collected and studied, a set of more specific questions may emerge. These can focus on a specific type of archaeological site or a particular area for further investigation. If the material culture that is expected to be contained in such sites or areas is of value to the answering of the questions that need to be addressed; the tasks that follow focus on the search for and, after discovery, a general survey of such sites or places, without disturbing their integrity. This is where the preliminary research phase ends.

The next phase that can be discerned concentrates on a specific site that has been selected as a result of the preliminary research phase. The first step is aimed at a systematic appraisal of the site and will incorporate such aspects as a survey of its size, for example the surface area covered by a specific shipwreck, and its exact geographical location. Also the thickness and nature of deposits and the variety of objects to be expected, as well as their level of preservation, are being assessed by probing and test excavations. Once a smaller area for further, more detailed investigation has been selected and demarcated, systematic excavation, surveying and recording of objects and additional site information may take place before any finds are removed.

Namibia Underwater Federation, 2001; Bruno E.J.S. Werz, "The 'Vlissingen'. A Dutch East India Company ship that perished along the Namibian shore in 1747," in: Huub Hendrix, (ed.), *Namibia and The Netherlands. 350 Years of Relations*, Windhoek, Embassy of the Kingdom of The Netherlands, 2006: 20-29.

The conservation phase starts as soon as items are exposed. At that stage, decisions have to be made as to what artefacts are going to be retrieved and what is better left *in situ*, awaiting reburial to prevent displacement or decay. In some cases, special preparations need to be considered for artefacts that are going to be removed, due to their fragile nature, their material composition, or as a result of their size or weight. Once recovered, temporary storage and treatment has to be undertaken, which consists of different stages depending on the state and composition of the material.

The post-excavation phase includes the compilation of documentation on a variety of aspects of a specific project and also incorporates conservation, storage, publication and display. During this phase, different analyses are undertaken based on material that was recovered during fieldwork and the data that were amassed. The sum total of these ideally should provide answers to questions that were formulated at the onset of a project, or provide other contributions to more extended knowledge. Nevertheless, it should be reiterated that the above represents an ideal blueprint for an archaeological project and that in practice circumstances may well differ. It is in fact one of the attractions of the discipline that no project is the same and that each demands a tailor-made approach.

Namibia, a maritime archaeological landscape?

Although mostly associated with arid savannah and desert regions, Namibia is a country which also has a substantial coastline. This coastline is orientated north-northwest to south-southeast and approximately 1500km long. It stretches from the mouth of the Kunene River in the north, on the border with Angola, to the mouth of the Orange or Gariiep River in the south, on the border with South Africa. The coast consists mostly of sand and gravel beaches, with rocky headlands and cliffs in places. In many instances, salt pans and high shifting sand dunes back the shore. The coastal area is bounded by the Namib Desert to the east, and has few natural places of refuge. Walvisbaai, situated almost in the centre, and Lüderitz, further south, are the only two ports along the entire coast. They are linked to the interior by rail and road.¹²

The South Atlantic Ocean bounds the Namibian coast to the west. The Continental Shelf, from the low water mark to the 200m isobath, is generally quite narrow in these parts. Just south of the Kunene River, the shelf width is only 10 nautical miles. From there, it gradually increases to a width of approximately 70 nautical miles off the Walvis Peninsula. Continuing further south, it narrows again to about 20 nautical miles off Lüderitz. Opposite the mouth of the Orange River, the shelf width increases to some 95 nautical miles as a result of fluvial deposits. The bottom of the Continental Shelf close to shore consists mainly of sand-covered bedrock, whereas the outer regions seem to

¹² The Hydrographer, S.A.Navy, *South African Sailing Directions. Volume I, General Information*, Kenwyn, Directorate of Hydrography, 1975: 11-12; idem, *South African Sailing Directions. Volume II, The Coasts of South West Africa and the Republic of South Africa from the Kunene River to Cape Hangklip*, Kenwyn, Directorate of Hydrography, 1975: 5.

mainly consist of sand deposits. The predominant current in the region is the Benguela Current that flows in a northerly direction, parallel to the coast. Most of its cold water is brought to the surface by up-welling, caused by prevailing southerly winds that cause the surface layer of water to be transported away from the coast.¹³

In this coastal region, different types of maritime archaeological sites can be found. To date, however, very few systematic larger-scale searches for and surveys of such sites have been undertaken.¹⁴ Based on existing but scanty literature, the following types have been provisionally identified. Nevertheless, it should be stressed that this account is in no ways complete and merely serves to illustrate the potential and diversity of Namibia's maritime archaeological heritage. To discuss this briefly, possible maritime archaeological sites have been classified according to the categorisation that was presented above.

Potential natural-static sites that occur along the Namibian coast include caves or rock shelters, reefs and submerged rocks, and islands. It may be assumed that the first group presented suitable occupation sites for people that roamed the coastal landscape in the past. Two basic requirements were, however, essential; the presence of drinking water and a food supply. A rock shelter near a spring or water hole and in close proximity to the sea therefore provided an ideal option. To date, the only documented excavation of such a site in Namibia was undertaken during the period 1986-1988. The coastal cave that was excavated is situated on the western side of a granite hill, overlooking Lüderitz Bay. The site, which is situated approximately 1.7km from the present shore, revealed organic material such as bone, eggshell and plant material, but also stone tools and historical material, indicating later visits to the site. Different species of shellfish, including limpets, whelks and black mussel were recorded, as well as rock lobster and fish remains. The deposits also included African penguin and Cape Fur Seal bone, indicating that an important part of the diet of the cave's inhabitants originated from the marine environment. Radiocarbon dating indicated that occupation goes back as far as 5600 ±60 BP.¹⁵

Submerged rocks and reefs occur all along the coast. As many of these form a danger to navigation, it is highly likely that some of these natural obstructions contain individual shipwrecks and even concentrations of wrecks, together with associated debris fields. This is often the case in the approaches to harbours and landing places. By the same token, vessels that were hugging the coastline due to inexperience with local conditions or unreliable navigation techniques may have foundered in more remote areas.

¹³ The Hydrographer, *General Information*: 25-26, 30.

¹⁴ Dieter Noli, *An Archaeological Investigation of the Koichab River Region of the South-Western Namib Desert, Centred on the Activities of Holocene Hunter-Gatherers*, Ph.D. diss., University of Cape Town, 1989; Peter Reiner, Gunter von Schumann and Theo Schoeman, "A window on the past of Possession Island. Report on an archaeological survey, 21-26 April 2001", unpublished report, Namibia Underwater Federation, 2001; Mary K. Seely, "Namib Dune Coast reconnaissance 1973," *Namib und Meer*, 5-6, 1974-1975: 15-26.

¹⁵ Noli, *Investigation*: 11-16, 28-39.

Submerged dangers have been reported between the Kunene River and Cape Fria. As a result, the Blue Star liner 'Dunedin Star' ran into problems during the night of 29 November 1942. The ship grounded in heavy surf, broke up, and parts ended up some 250m from the high-water mark. The survivors' camp became a conspicuous landmark on the desolate coast. The area off Hottentot Point and Danger Point is also hazardous, as is Wreck Point, further to the south. This is amply illustrated by the names. South Reef, close to Possession Island, is also a danger to navigation as it consists of rocky foul ground with heavy breakers. This caused the wrecking of the steamer 'British Prince' in 1915. The 'Nautilus' foundered four years later in the same area. The ship's cylinder block is still visible during low tide, on what is now called Nautilus Reef.¹⁶

The artificial-static sites category is also well represented and most such sites can be found on land. Among these are the remnants of Portuguese explorations. In 1485, Diego Cão landed at Cape Cross and erected a stone cross or *padrão*. Shortly thereafter, in December 1487, Bartholomew Dias landed on what is now called Dias Point near Lüderitz. Here, another *padrão* was erected. Fragments of the Dias cross are currently dispersed and kept in different museums in Namibia and abroad, while the original Cão *padrão* is presently housed in a museum in Berlin.¹⁷

Bartholomew Dias first reported Walvisbaai in 1486, naming it the Bay of our Lady Immaculate. During the early sixteenth century it was renamed *Bahia da Baleas* or Bay of Whales. In 1793, the master of the Dutch vessel the 'Meermin', François Duminy, took possession of the area. Although no structural development occurred in that period, contact with local inhabitants was established. Walvisbaai was annexed by Britain in 1879 and later became a South African enclave until the area was returned to Namibia during 1994. It currently has a modern fishing harbour, tanker berth, additional berths, a repair jetty and a patent slip. Nevertheless, it may be expected that current structures cover late nineteenth and early twentieth century developments that could warrant future investigation. The same applies to Lüderitz. Like Walvisbaai, Dias first reported it in 1486. He named it *Angra dos Ilheos* or Bay of Islands. After a name change to *Angra Pequena* or Little Bay, the area was finally called Lüderitz, after a merchant from Bremen who settled there in 1883. Two other ports, Swakopmund and Sandwich Harbour, lost their function during the course of time. Swakopmund was selected as the site for a port in 1889. At a later date, a stone mole and an iron jetty were constructed. The mole, however, silted up some time thereafter. Even though passengers and cargo had to be brought ashore by surf boat, Swakopmund became a flourishing port during the end of the nineteenth and the beginning of the twentieth centuries. In 1915, the port ceased to exist after South Africa annexed Swakopmund. Sandwich Harbour developed

¹⁶ The Hydrographer, *Coasts*: 5, 38, 58; Gunter von Schumann, personal communication.

¹⁷ W. S. Barnard, "Die fisiografie van die sentrale duinsee van die Namib", *Suid-Afrikaanse Geografiese Vereniging Konferensie 1972*, 1972: 1-26, (2); Vasco da Gama, *De ontdekking van de zee weg naar Indië. Een ooggetuigenverslag 1479-1499*, Baarn, Uitgeverij Hollandia, 1991: 9; R. Humble, *The Explorers*, Amsterdam, Time-Life Books, 1985: 37-39; The Hydrographer, *Coasts*: 12, 44.

similarly to Walvisbaai but on a smaller scale. In time, it lost its role and is at present nothing more than a lagoon that is periodically closed by a sandbank.¹⁸

Associated with these coastal settlements, and specifically harbours, are other features that may be regarded as maritime archaeological sites in their own right. These include lighthouses such as Swakopmund Light, a red granite and concrete tower situated in the southern part of the town, and Pelican Point lighthouse, on the Walvis Peninsula.¹⁹

Namibian artificial-static sites also include remnants of whaling and sealing activities and guano collecting. This group focuses specifically on the settlements constructed to harbour hunters and collectors, together with associated work places and storage spaces. Remnants of whaling and seal hunting activities during historical times may still be found at places like Walvisbaai, Sandwich Harbour and Wolf Bay, North and South Long Island and Possession Island, to the south of Lüderitz. Guano collecting also took place at several locations along the coast and on nearby islands. Examples are Bird Rock, near Walvisbaai, Possession Island, near Elizabeth Bay, and several other islands between Spencer Bay and Lüderitz. Most of these still contain remnants of the guano collecting days, including sheds and jetties. Other sites may include fishing factories, such as the ones in Walvisbaai, and the remnants of a rock lobster factory in Hottentot Bay.²⁰

Other cases in this context are represented by remnants of mineral and diamond exploitation, as these natural resources were deposited in the sea in the past and mined in the near-shore zone and on the coast. They may include sheds and living quarters, pump houses and mine dumps that can be found in areas like Meob Bay and between Panther Head and the Orange River Mouth, where the coastline is strewn with such materials. Lime kilns may also be included in this group, as well as salt works such as the one approximately 9 miles south-southeast of Rock Bay. Another salt works is situated south of Walvis Bay Lagoon, bordering on one of Namibia's most important and ecologically fragile wetlands.²¹

Natural-dynamic sites can include beaches, estuaries, lagoons, river mouths, sandbanks and salt pans that shift their position regularly under the influence of natural processes. People in search of food visited many of these sites on a temporary or seasonal basis. An example is the Walvis Peninsula, to the west of Walvisbaai, which has seen drastic changes in its appearance due to sand accumulation and deposition. The lighthouse, in itself an artificial-static site, represents modern evidence of maritime activity, whereas

¹⁸ The Hydrographer, *Coasts*: 15, 21-22, 29, 48; G. von Schumann, personal communication.

¹⁹ The Hydrographer, *Coasts*: 15, 18.

²⁰ Barnard, "fisiografie": 2; P. Dekker and C. de Jong, "Whaling expeditions of the West India Company to Walvis Bay," *Namibia Scientific Society Journal*, 46, 1997-1998: 48, 50, 52-53, 56, 61-62; The Hydrographer, *Coasts*: 18, 29, 31, 38; Reiner, von Schumann and Schoeman, "window"; M. J. Wilkinson, J. E. Blaha and D. Noli, "A new lagoon on the Namibian coast of South Africa: sand spit growth documented from STS-29 Shuttle photography," *Geocarto International*, 4, 1989: 63-66, (63).

²¹ The Hydrographer, *Coasts*: 15, 68; Reiner, v. Schumann and Schoeman, "window": 13; Seely, "Namib": 15, 19.

footprints of indigenous people and tracks of domesticated animals provide evidence of older human presence in this area. Dramatic landform changes have also been reported for Sandwich Harbour, due to erosion and sedimentation at different points.²²

In 1926, a skeleton was excavated from the western bank of the Lüderitz Lagoon. At the time it was supposed to represent the remnants of a young Western African woman, left behind by the explorer Bartholomew Dias in 1487 or 1488. An anthropological study undertaken in 1987 did, however, indicate that the skeleton is that of an elderly Khoisan/Strandloper male.²³ It is quite possible that this person died in the vicinity while engaged in foraging, and his body was buried on the spot. Similar burials have been found at different places along the coast. These can sometimes be linked to midden sites containing residues of marine foodstuff such as shell, whale and seal bone, and sometimes also stone tools, pottery and ostrich eggshell beads. Examples of this have been recorded for the Koichab River region, Meob Bay, Fischersbrunn, Sandwich Harbour, Conception and Spencer Bay.²⁴ Other prehistoric sites reported near the Orange River mouth, Conception Bay, Swakopmund, Gregory Point, Cape Cross and the estuary of the Ugab River revealed much lower concentrations of such materials or isolated finds only.²⁵ Nevertheless, in most cases finds were observed during geological surveys and it may therefore be assumed that archaeological work concentrating on these specific areas will reveal more material.

In this context, it could be argued why most prehistoric midden sites are classified here as being of a natural-dynamic nature. The main reason is that many of them seem to be of an ephemeral nature, established in the open and reflecting short-term occupation. Reasons for their formation include scavenging on beached whales, harvesting of shellfish in a specific area until the source dried up, or providing temporary shelter en route to other destinations.²⁶ This is not to say that the same location was not re-occupied on several occasions, either by the same people or others. Only where there was a sufficient and continuous water supply, where there was an abundance of food on a day-to-day basis and where more permanent (natural) structures were used for

²² The Hydrographer, *Coasts*: 18; Jill Kinahan, "Human and domestic animal tracks in an archaeological lagoon deposit on the coast of Namibia", *South African Archaeological Bulletin*, 51, 1996: 94-98; Wilkinson, Blaha and Noli, "lagoon": 63.

²³ Erich W. Wendt, "The end of a legend. Part I: the legend, the archaeological evidence, the dating," *South African Archaeological Bulletin*, 43, 1988: 79-82; E. M. Winkler and B. Winkler-Holler, "The end of a legend. Part II: the anthropological study of the skeleton of the so-called Dias negress from Lüderitz, South West Africa," *South African Archaeological Bulletin*, 43, 1988: 83-90.

²⁴ Noli, *Investigation*; Beatrice H. Sandelowsky and Wade C. Pendleton, "Field work at Meob Bay," *Namib und Meer*, 1, 1970: 45-57; Seely, "Namib": 18, 20-22, 24.

²⁵ O. Davies, "Pleistocene raised beaches in South-West Africa," *XX Congreso Geológico Internacional, Mexico 1956*, s.l., 1956: 347-350, (349); O. Davies, "Pleistocene shorelines in the western Cape and South West Africa," *Annals of the Natal Museum*, 21, 3, 1973: 719-765 (752, 757, 760-1); Leon Jacobson and John C. Vogel, "Radiocarbon dates for two Khoi ceramic vessels from Conception Bay, South West Africa/Namibia," *South African Journal of Science*, 75, 1979: 230-231.

²⁶ Jacobson and Avery, "Conservation": 3.

continuous and long-term occupation, could a case be made to classify such sites as static in nature.



A prehistoric coastal camp site near Meob Bay (Peter Reiner / NUF)

Nearly all Namibian beaches may be regarded as natural-dynamic sites, except for those few places where more permanent settlement occurred, such as at Walvisbaai and Lüderitz. This is not limited to their role as areas where people scavenged for marine food, but also from the perspective as deposition sites of flotsam and jetsam. Although the importance of this last group is limited from an archaeological perspective, as there is hardly any contextual information to be gained from such material, it should be included here. The same applies to offshore sandbanks and roadsteads that changed position in time, together with archaeological material that may have been deposited there. This could possibly include prehistoric material, due to changing sea levels, and more modern deposits such as anchoring debris. The Swakopmund Road, Walvisbaai, and the roadsteads near Sandwich Harbour and Lüderitz all provide possible examples.

Namibian artificial-dynamic sites include all shipwrecks that can be found under the sea, but also those that are currently on dry land. The country is rather unique in that it has several shipwrecks that nowadays can be found in the desert as a result of sand accumulation along certain coastal areas. The most well-known example is the 'Eduard Bohlen' near Conception Bay. This German vessel of 2367 tons was built in 1890 and carried passengers and mail between Germany and Swakopmund. From 1903 onwards, she offered a service between Swakopmund and Cape Town, before grounding on a sandbank in September 1909. Efforts to pull the ship off failed and she stayed firmly embedded at an approximate distance of 100m offshore. At present, the wreck of this ship is several hundred metres inland.



The wreck of the 'Eduard Bohlen'. (Peter Reiner / NUF)

Interested people have identified many more wrecks and several lists and databases of shipwrecks seem to exist, although most are kept confidential for the time being. The shipwrecks identified to date range from the early eighteenth century, and possibly before, to the present. This potential is especially important due to its diversity, consisting of many different types and nationalities. Shipwrecks in Namibian waters range from a possible Spanish galleon dating to 1700, nineteenth century American whalers, to late twentieth century European and southern African fishing vessels.²⁷

Problems involved in studying and protecting the maritime archaeological resource

Like elsewhere, the Namibian maritime heritage is under constant threat. By the same token, it may be assumed that several sites have already been damaged or destroyed completely. The agents that cause damage or destruction are either natural processes or human activity; in some cases both factors may play a role. Natural destructive agents vary. The most obvious concern the influences caused by water and wind movements, chemical and biological deterioration. Under the water surface, currents can disturb archaeological deposits, causing dispersal of artefacts and thus a loss of contextual information. Objects on the seabed may be affected further by exposure, resulting in sand abrasion, chemical and biological deterioration. Similar processes occur on land, where rivers that periodically come down in flood or shifting sand deposits may cover and uncover sites. This also results in a loss of contextual information, followed by further degradation.²⁸

²⁷ G. von Schumann and P. Reiner, personal communication.

²⁸ Jacobson and Avery, "Conservation": 4; Bruno E.J.S. Werz, "Maritime archaeological project Table Bay: aspects of the first field season," *South African Archaeological Society Goodwin Series*, 7, 1993: 33-39 (33-34); Werz, *Diving*: 120.

Loss of contextual information is also caused by the selective removal of artefacts from archaeological sites. This can be done by curious passers-by, who collect items as souvenirs, or because occasionally some finds may also have a monetary value. The collecting of VOC coins from the beach at Meob Bay provides an example of this. Underwater treasure hunters and shipwreck salvors pose another threat. As they deliberately target shipwreck sites and destroy substantial parts of a wreck and its contents in search of valuable cargoes, their actions are irreversible. Although not aimed at exploiting such cultural resources, trawl fishing may well have had a similar effect. But also on land, archaeological sites have suffered from human interference.

Although the appearance of the greater part of the Namibian coastal landscape (or should one use the term 'seascape'?) has not changed considerably in time, human activity has had a serious impact on approximately 20 per cent of the region. This is specifically the case in the south, where a 16 km wide stretch of the coastal zone from the Orange River mouth to about 26 degrees southern latitude has suffered severely from extensive diamond mining since 1908. As a result, the entire coastline from the Orange River Mouth to Chamis Bay, a distance of some 100 km, was annihilated with no regard for natural and cultural features present in the area. The rest of this coastline was first picked over for diamonds in German times, but is now receiving renewed attention. This time, however, it is being done with full environmental impact assessments, every attempt being made to limit the damage to the Namibian natural and cultural heritage. For many sites, however, these precautions have come too late. It also has to be noted that in the near-shore zone and even in deeper waters, diamond-dredging operations continue to churn up large tracts of seabed, destroying everything in their paths. No studies ever having been commissioned, it has always been assumed that the seabed was archaeologically barren. Quite apart from the possible existence of shipwreck material, discoveries in Table Bay have indicated that even Stone Age archaeology may have a future on the seabed.²⁹ If this turns out to be the case, extensive baseline studies will have to be conducted on the seabed before the current dredging operations could safely be allowed to continue.

Even though there is legislation in place to protect and preserve archaeological resources, this is in many ways not sufficient. The Namibian National Monuments Act condemns interference with sites and only allows adequately trained personnel to deal with them on the strength of a permit. Nevertheless, mining, road construction and agricultural activities are exempted in many cases. In addition, there is a problem controlling interference with archaeological sites, be it on the strength of a permit or not. That access to diamond concession areas solely depends on approval of the mining companies already indicates the impotence of legislators and law enforcement agencies. But also the fact that it is virtually impossible to control activities in other remote areas

²⁹ Bruno E.J.S. Werz and Nicholas C. Flemming, "Discovery in Table Bay of the oldest hand axes yet found underwater demonstrates preservation of hominid artefacts on the continental shelf," *South African Journal of Science*, 97, 2001: 183-185.

indicates that policing is hardly effective, given the additional constraints on manpower and infrastructure.

A lack of a suitable infrastructure and an absence of suitably qualified personnel to undertake research also add considerably to the problems that are experienced in developing maritime archaeology in Namibia. In fact, this is probably the most serious constraining factor. There are very few professional archaeologists in the country and none of them has experience in the maritime field. The only exceptions are those who have done some work on middens and other prehistoric sites in the coastal zone, but their work stops when reaching the sea. Besides the fact that there is little knowledge and expertise available, there is also no infrastructure in place for underwater archaeological research and conservation of finds from the marine environment. This can be explained by a lack of funding and insufficient awareness of the importance of the maritime heritage. Unfortunately, most people regard the latter as focusing on shipwrecks only. Their view is that wrecks are remnants of the colonial era and have little relevance for the greater history of Namibia. Unfortunately, this point of view will prevail as long as no efforts are being made to educate people and to show them the wider perspective and sphere of interest of maritime archaeology.

One way forward

In sketching a possible way forward for maritime archaeology in Namibia, one has to be pragmatic and take into account the present situation in that country. Factors to be kept in mind include the fact that Namibia has no maritime archaeologist and the prospect that no major growth of archaeology students is to be expected in the near future. As a result, it seems unlikely that additional teaching and research funding will be provided by the national government. Due to the current economic climate, it may be assumed that institutes of learning and museums will face a difficult time ahead and, as a result, their focus will be more on consolidating current activities, rather than expanding into new spheres of interest. This leaves the question of what can be done, given these constraints.

An important starting point would be to create more awareness of the importance of the country's maritime heritage, through public education and participation. Producing posters and pamphlets, presenting public lectures and exhibitions, as well as special school projects can achieve this. The core material would have to be produced by external professionals in the field in conjunction with local educationalists. Schoolteachers, museums or interested amateurs can, however, present the contents. At the time of writing, a first attempt at this is being made. Under Dutch Government sponsorship, material provided by the author is being adapted by the University of Namibia for introduction in the school curriculum and a poster presentation.

Another important aspect is to identify people who are interested in the subject. These can be either keen amateurs or professionals in the archaeological field, who can take up aspects of maritime archaeological research as a sideline. Their major role would be

to collect data. These data can be of general nature, touching on the fields of oceanography, geology or history. In addition, there are the efforts to compile specific information on shipwrecks and other sites that have been mentioned before. Once researchers have been identified, a programme can be developed to structure their efforts and to avoid duplication. This should be accompanied by the scrutinising of accumulated data, to ensure acceptable quality.

With an overall research programme in place, systematic general surveys of selected coastal areas or sites can be undertaken. Again, these should include people of different backgrounds. Only by following this course, will the multi-disciplinary approach that is essential for most projects result in an increased output of information. At the time when maritime archaeology started to develop in South Africa, such a multi-disciplinary project was introduced. Focusing on the greater Table Bay area, the Maritime Archaeological Project of Table Bay or MAP included not only archaeologists, but also hydrographers, surveyors, chemists, geologists, oceanographers and other specialists. Besides that, it was used as a training ground for amateur divers, naval personnel and students. As a result of its multi-faceted nature, MAP resulted not only in students obtaining degrees in different fields but also in a variety of publications. These concern studies dealing with sea level changes, the analyses of various recovered materials, historical studies and the application of Geographical Information Systems (GIS), to name just a few.³⁰

The systematic survey of coastal areas will not only reveal the type of sites that may be expected, but could also result in the identification of sites under threat. In some cases it will therefore be necessary to undertake rescue archaeology, to save what information is left before such sites are destroyed completely. Also during this phase, volunteers and professionals could work hand in hand. The same is applicable in the case of a research project aimed at finding answers to specific questions that emerged from preliminary research, as was discussed before. If, however, projects of this nature are going to be undertaken, certain conditions have to be adhered to. These include obtaining approval from the National Monuments Council, the availability of a suitable infrastructure and personnel, adequate documentation, analysis and conservation of recovered finds, and the writing of reports.

Beside this more practical approach, it is also essential to devote attention to other matters. One of these concerns the reassessment of current legislation. With the growing international concern for the destruction of the maritime archaeological heritage world-wide, Namibians should scrutinise their own laws and tighten these up where applicable. This is all the more important as offshore diamond mining operations, especially, currently represent a serious and large-scale threat. This does not only affect

³⁰ Bruno E.J.S. Werz, "The excavation of the 'Oosterland' in Table Bay: the first systematic exercise in maritime archaeology in southern Africa", *South African Journal of Science*, 88, 1992: 85-89; Werz, "Project": 33-39; Bruno E.J.S. Werz, "Shipwrecks of Robben Island, South Africa: an exercise in cultural resource management," *The International Journal of Nautical Archaeology*, 22, 1993: 245-256; Werz, *Diving*: 67-132; Werz, *Bedroefd*; Werz and Flemming, "Discovery": 183-185; Bruno E.J.S. Werz and Collin G.C. Martin, "Hydrographic surveys in aid of maritime archaeological research: the example of the Table Bay Project", *The Hydrographic Journal*, 72, 1994: 3-15, (3-4, 15).

shipwrecks, but also prehistoric material on the seabed. Unfortunately, it seems that many sites that were situated within terrestrial diamond fields have already been destroyed. Related to this is the issue of control. Again, this is seriously hampered by a lack of appropriate funding. Another negative factor may well be that law enforcement personnel are not sufficiently abreast of legislation pertaining to archaeological material. This shortcoming may, however, be partly redressed by the proposed public education programme. Finally, education and research programmes in maritime archaeology, changes in legislation and improved monitoring all cost money. Although these last two aspects are the direct responsibility of the national government and are financed by the tax system, research and education in maritime archaeology are not. For this reason, it will be vital to lobby for financial and practical support.

Nevertheless, the current situation is not as bad as it seems. Some preliminary work has already been done by a group of dedicated amateurs, with the assistance of the National Monuments Council, museums and professionals in the field.³¹ Nevertheless, it remains a fact that the country does not have a resident professional maritime archaeologist to steer developments or even to guide local projects. Assistance is thus required and one way of obtaining this is through the Southern African Institute of Maritime Archaeology (SAIMA).

SAIMA was formally established in Cape Town in April 1999, with the aim to stimulate and undertake research in the field on the southern African subcontinent. Staff includes academics that specialise in maritime archaeology and closely related areas. Besides the academic component, the Institute strives to stimulate public education and participation, as well as technological and other developments in the maritime sphere. SAIMA has support from several other institutions and people in South Africa and overseas. These include *inter alia* the South African Navy, the Cape University of Technology's Department of Maritime Studies and scientists from the Bermuda Maritime Museum and the Southampton Oceanography Centre. With this infrastructure in place, the time seems right to support Namibia in protecting and studying aspects of its maritime heritage, before more is lost. The suggested co-operation between interest groups in Namibia and the Southern African Institute of Maritime Archaeology seems the most feasible, logical and appropriate way to go ahead. If this can be achieved, many valuable contributions can be made and common goals achieved.

The suggested international co-operation may even be taken further. As both South Africa and Namibia are situated in the SADC region, a more overall approach could become a reality in future. There are strong indications that the maritime archaeological heritage of other SADC countries such as Angola and Mozambique, have suffered a fate similar to that of Namibia. Also in these parts, a lack of legislation and control, together with infrastructural problems and an absence of adequately trained personnel have had a negative impact. SAIMA could thus also play a leading role in researching those other countries' maritime heritage and offering advice on its protection. In practice, this could

³¹ Reiner, von Schumann and Schoeman, "Window"; Schoeman and von Schumann, "Meob"; Schoeman and von Schumann, "Meob part 2"; Werz, "Vlissingen": 20-29.

be done on a project basis between government agents and private individuals from these countries and SAIMA. In turn, such projects can possibly be supported by European nations, whose maritime history is closely linked to archaeological remains that can be found in the coastal waters of the sub-continent. For the moment, however, it seems wise to put some suggestions into practice first. In that respect and given the current situation, a primary objective is to further develop the suggested co-operation between SAIMA and Namibia before more is lost.

Conclusions

The maritime archaeological heritage of Namibia consists of many different types of sites. A considerable number of these date to prehistoric times, whereas others have been deposited only a few years ago. This heritage is rich and diverse and may in part be of international importance. Namibian archaeological sites reflect certain aspects of the historical development of the people in the country and can be compared with archives that contain a vast amount of information.

Unfortunately, the maritime archaeological heritage is non-renewable and under constant threat. Different agents cause dispersal and irreversible destruction of individual sites and larger coastal areas, both on land and under water. A lot has been lost already and although efforts have been made to preserve what is left, infrastructural, legal and economic constraints prevent blanket protection.

Efforts to study the heritage adequately are also limited by the aforementioned factors. Nevertheless, much can be done to rectify and improve the current situation. This may include amending existing legislation, the introduction of a public education programme and involving interest groups in aspects of research. Given the current constraints, a feasible way to achieve the identified goals, at least in part, is to draw on outside assistance. In practice, co-operating with a specialised institution can achieve this. The Southern African Institute of Maritime Archaeology (SAIMA) is the most appropriate institution for this purpose and assistance has already been offered. If this lifeline is accepted, a practical solution to some of the problems that the country is facing can be realised.

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