Cape of Storms or Cape of Good Hope? The development of maritime archaeological research in South Africa and prospects for the future

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Abstract

This paper provides a brief overview of the maritime cultural heritage of South Africa and some of the constraints that have characterized the development of maritime archaeology in the country. From this more general frame of reference, attention will focus on one specific geographical region. For thousands of years, the Table Bay area has been a meeting point for indigenous people, but during the last 500 years also for others. Besides that, the development of maritime archaeological research since the late 1980s has been concentrating on this region. In the second section, an indication is given of the archaeological potential of Table Bay. From there, attention focuses on four case studies. These relate to different types of archaeological sites that date to different periods, whereas individual research designs and the fieldwork methodology that is being followed for each of them varies. By discussing these projects, it will be demonstrated how diverse South African maritime archaeological research can be. The concluding part of this paper focuses on future development of the field. Previous experiences have shown that the best way to facilitate this development is to support the Southern African Institute of Maritime Archaeology (SAIMA). SAIMA may soon become an institution that will play a leading role in future research in these parts. This is important from an international perspective, as many links exist between traces of past maritime activities that can be found in the waters and on the shores of southern Africa, and the history of other nations elsewhere in the world.

1 The maritime cultural heritage of South Africa; potential, prospects and problems

Before 1988, very little archaeological work was done in the sea and along the shores of South Africa. Although some basic articles dealing with aspects of practise and policy related to maritime and nautical archaeology had been published during the years preceding, most authors had no practical experience in these specific fields. Moreover, the majority of writers never made an indepth study of the various problems that were obvious at the time [1]. Although these few short articles certainly raised some questions, they did little to improve the situation that existed.

Others authors stayed on safer ground and focussed more on aspects of legislation, the history of specific shipwrecks, or associated materials [2]. Although these studies provided valuable information, most of them were quite limited in their approach. Juxtaposed to the limited number of academic publications are some more popular works. These were written by enthusiastic authors, fascinated with the lure that is presented by historical wrecks, and by treasure hunters. Although criticism can be voiced on the contents of most of these books and the projects they describe, it is to the credit of these authors that at least some information was not lost [3].

With the introduction of maritime archaeology as a formal academic subdiscipline in September 1988, it seemed that the field was gaining ground. Several developments were set in motion, resulting in a number of students focussing on this specialization. Beside that, a variety of scientific publications were produced and a public information and education programme was set in motion. Contributions were also made to cultural resource management, by drafting improved salvage regulations that were accepted by the South African National Monuments Council (NMC) in order to protect the underwater cultural heritage [4]. Nevertheless, financial constraints affected the field from the start and eventually led to the temporary discontinuance of the lectureship in 1996. It thus seemed at the time as if not much had been gained. There was no possibility for students to specialise in the field anymore and the public education and information campaign was stopped. Research and the publication of scientific articles continued, however, as did the providing of advice to the NMC and its successor, the South African Heritage Resources Agency (SAHRA).

Legislation to protect the underwater heritage had been previously introduced by amendments to the National Monuments Act. Nevertheless, salvage and treasure hunting operations were going on as they had been for decades. It even seemed as if some *mala fide* divers were becoming more impudent by the day. The authorities did not have a system in place to control interference with submerged archaeological sites and relied on others to report any contraventions of the law. Even though they were informed of some such incidents, a general attitude of lethargy prevailed and no offender was ever successfully convicted by a court of law. New and more appropriate legislation was introduced through the National Heritage Resources Act of 1999. Although this act addresses especially

the shipwreck issue more seriously, no significant improvement in monitoring and policing such sites has been achieved to date. Although the number of treasure hunting activities seems to have dropped during the last few years, the main reason for this can be attributed to the fact that few commercially interesting historical shipwrecks remain and that South African treasure hunters have been looking for greener pastures elsewhere.

But it is not only the actions of profit-motivated divers that have caused disturbance and destruction of maritime archaeological sites and the resulting loss of information. Developers and the offshore diamond industry also have an impact on this dwindling and non-renewable resource. The effects of these activities are as yet difficult to judge, but it may be assumed that the consequences are serious. What makes an assessment of this nature even more difficult is the fact that few people are in a position to check what is going on under water and that most developers and mining houses are not exactly known for their willingness to share information. In this context, it should also be mentioned that a situation has developed whereby SAHRA renders a service to developers and others. SAHRA has taken it upon itself to undertake impact assessment studies related to the submerged cultural resource. The fact that these limited desktop studies to date have only taken into account historical shipwrecks is maybe not even the most valid point for criticism. More serious is the fact that different responsibilities are not clearly defined and that this institution now combines the role of controller and consultant [5]. This situation is not acceptable within the context of proper cultural resource management.

The maritime cultural heritage of South Africa is considerable and diverse. All along the approximately 3000km long coastline, traces of the human past can be found. Hereafter, only a basic impression of this heritage can be given but this will suffice to indicate its importance. To this purpose, sites are discussed according to the functional classification that was previously suggested by Werz Natural-static sites include caves and rock shelters that were used by [6]. indigenous people during prehistoric times. Some of these, like Smitswinkel Bay cave near Simon's town and Die Kelders, near Gansbaai, are bordering on the sea. They have revealed layers of deposits, including fish and shellfish remains, which indicate usage during the Late Stone Age [7]. Substantially older are deposits from Klasies River Mouth cave that also contain remains of humans that differed only slightly, in the anatomical sense, from those of today [8]. Natural-static sites of another nature are submerged rocks and reefs where cultural material was deposited. A well-known example is the Agulhas banks, a graveyard for dozens of vessels that foundered there during the last 400 years. Artificial-static sites include prehistoric fish traps that can be found along the Western Cape coast [9]. Various harbour works, piers and lighthouses that were constructed during historical times also fall within this category. The same applies to coastal fortifications. Smaller segments of these, such as the central well in the Cape Town Castle, can also be regarded as artificial-static sites as they played a role in the function and operation of the greater entity of which they formed part.

Natural-dynamic sites include beaches, estuaries, lagoons and saltpans where past human activity took place. Examples of this are the eastern beaches of Table Bay, where Late Stone Age hunter-gatherers roamed in search of marine food, and seasonal camps further up the coast, such as the ones near Elands Bay [10]. Natural-dynamic sites also include sandbanks and anchorages where ships found an untimely end, or where others left anchorage debris behind. The roadsteads of Saldanha Bay, Table Bay, Port Elizabeth and East London all contain examples of this. Artificial-dynamic sites that can be found in South African waters or on adjacent beaches consist mainly of shipwrecks. This category is the most obvious for maritime archaeological studies in these parts and also the most diverse. To date, no remains of pre-historical rafts have been recorded and the emphasis is therefore on ships that were constructed during the historical period, most of which came from overseas. The basic information that is available at present is based on various casualty lists that are available. Nevertheless, these should be treated with some caution. Especially for the earlier periods, some references are quite vague. Furthermore, no extensive studies in overseas archives have been undertaken that could possibly reveal more incidents. The possibility therefore exists that much more wrecks were deposited around the coast of South Africa and the figures that are presented here thus represent absolute minimums.

When looking at the information that is available to date and specifically at vessel nationalities and minimum number of recorded casualties for the period 1550–1984, it can be concluded that at least some 2,935 incidents took place. These resulted in at least 1,506 wrecks but this figure is most probably much higher. The identified shipwrecks originate from at least 25 different nations in Europe, Africa, the America's, Asia and Australia. The large number of vessels in the category 'Other/unidentified', nearly 1,200, partly reflects the incompleteness of many of the historical sources and emphasizes the need for further in-depth study. Another aspect of the diversity of vessels is indicated by the more than 25 different types that have been identified to date, most of which were used during the 19th century. This period also saw the highest number of recorded wrecks, which can be partly explained by the fact that during this time the process of colonization and the influx of people reached its peak [11].

2 Table Bay as an international meeting place

Archaeological evidence suggests that the Table Bay region has seen human presence as early as the Acheulean period, approximately 300,000 to 1.4 million years ago. More recent finds include ephemeral occupation sites indicated by shell middens and burials of indigenous people. Gravesites of the early period of contact between indigenous people and Europeans are also present and some of these may relate to victims of shipwrecks, while ethnographic accounts provide more information on the original inhabitants of these parts and their way of life. Contrary to the occasional references to indigenous people, the focal role that Table Bay has played for international maritime traffic during the last 500 years is more extensively documented. This is mainly a result of its important role for

shipping movements in the southern oceans and the location, situated roughly halfway between Europe and the East. It is therefore no wonder that the bay was identified as a place of refuge and replenishment station by many navigators throughout the ages.

The first documented visit to Table Bay was by the Portuguese seafarer Antonio de Saldanha, who called there in 1503. During the century that followed, other Portuguese, English and Dutch navigators visited the bay, which soon developed into a stopover place on the long and arduous journeys. In 1652, the Dutch East India Company established a much-needed refreshment station here. The outpost that was founded in 1652 became the cradle of present-day Cape Town. During the 19th century, when the Cape was in British hands, the process of colonization reached its full force. This resulted in a major influx of people from Europe. Political tension between the British and Dutch, as well as the discovery of diamonds and gold, further fanned this process that reached its peak with the Anglo-Boer Wars that ended in 1902. During this period of political turmoil, Table Bay played a role as a most important link with the rest of the world. Here, people and goods were transferred on a huge scale and this, together with the international growth in maritime traffic during the 19th century, explains for the explosive growth of harbour facilities and increased shipping movements in the bay in this period.

A most important part of the maritime archaeological potential of Table Bay consists of shipwrecks that were deposited during the historical period. The wreck potential is considerable and amounts to a minimum total of 358 recorded sites. Although the number of wrecks is quite impressive for such a relative small area, the true potential for research purposes lies more in the diversity. An indication of this is the fact that the wrecks originate from at least 20 different nationalities, with an emphasis on ships of British and Dutch origin. Most British vessels foundered during the 19th century, whereas the majority of Dutch ships date to the second half of the 17th and the 18th century, thus partly reflecting the area's history. These wrecks also include more than 25 different vessel types. Of the 311 wrecks of which the type has been specified, 278 were sailing vessels. Most of these were used in international navigation but some also reflect past maritime activities in and around Table Bay, including fishing, whaling and the rendering of assistance to other vessels [12].

3 Sites for all seasons

From the above it will be clear that maritime archaeological sites in South African waters and along this country's shores are manifold. The same can be said of the motivations that lay at the basis of some research projects that have been set in motion since 1989, and the methodology or approach that is being followed. Hereafter, four different projects will be briefly discussed, as these illustrate the diversity of South African maritime archaeology. They concern the excavation of a well, a survey of an area of seabed and the adjacent shore, two wreck excavations, and a search for stone tools and other prehistoric material on the seabed. These projects span a time period from possibly 1.4 million years

ago to the present, include both marine and terrestrial sites, and range from natural-static to artificial-dynamic entities.

The central well in the Cape Town Castle, constructed during the period 1682-1683, was archaeologically investigated in 1989 and again in 1999 [13]. The main objectives were to test the structural strength of the well and to record its construction. From a research point of view, the well was of interest as the possibility existed to recover a sequence of cultural material reflecting life within the Castle and spanning a period of more than 300 years. As this material was deposited under water, the level of preservation was expected to be better than that of items that had been excavated previously in other areas of the complex. Due to the rather special circumstances, it was decided not to pump the well dry but to excavate under water, as this reduced the risk of collapse of the structure. Systematic removal of deposits was done in spits and the provenance of any uncovered artifacts was recorded with reference to a simple cross-shaped grid. Debris was removed by means of an airlift and sifted on the surface. Constraints during the underwater work varied and ranged from zero visibility, restricted access, the risk of collapse, as well as the uncovering of live artillery grenade detonators and ammunition. The results of the project allowed for a reconstruction of the sequence of building phases and techniques employed. In addition, a range of materials was uncovered that reflect past human activity in the vault that contains the well. It could be concluded that it had served as a source of drinking water, a sump to discard oil from military garages, as an illegal ammunition dump, and a place where various social activities took place. These included drinking, gambling and playing music, as witnessed by the numerous half-jacks, dice and the fragments of a concertina. In addition, the old walls of the vault may have witnessed some lewd conduct. The high-heel shoes and used condoms that were recovered provided evidence for this. As most artefactual material dates to the 19th and 20th centuries, it could be concluded that the well had been dredged out at some stage, thus disrupting the sequence of material evidence that was expected initially.

Operation Sea Eagle is the codename for a project that was undertaken during 1991 and 1992 on the direct orders of the South African National Cabinet [14]. Its brief was to locate and identify the maritime archaeological potential around the infamous Robben Island. The results of this survey were to assist in the formulation of a management policy for the island, which subsequently became a Unesco World Heritage site. Preliminary archival research indicated that the island's underwater cultural potential mainly consists of shipwrecks. On the basis of relevant records it could be established that at least 22 ships foundered in the one nautical mile security zone surrounding the area. The vessels that met their demise here originate from eight different nations and consist of fourteen different types, dating to the period 1694-1976. During fieldwork that followed, the coast and seabed around the island were surveyed. This took some six months in total, during which fifteen shipwreck sites were located and identified successfully. Historical and archaeological research undertaken during Operation Sea Eagle allowed for the collecting of many data on the shipwreck potential around Robben Island. The project indicated that this resource is varied

and that the contents of most sites are better preserved than many other wrecks in South African waters. Surface and underwater conditions can, however, be extreme and this has resulted in the fragmentation of most wrecks. Even so, they form an important part of the heritage and history of the island and Table Bay as a whole. For this reason, the coastal waters of Robben Island are still restricted territory. In due time it is hoped that Operation *Sea Eagle* may continue and that the security area can be made accessible to divers as an underwater site museum.

The Oosterland and the Waddinxveen were two Dutch East India Company (VOC) ships that foundered simultaneously during a storm in Table Bay, on Friday 24 May 1697 in between 13.00 and 15.00hrs [15]. Since 1994 these sites are studied concurrently. The motivations for this project are diverse and include the fact that both sites are being eroded out by natural processes, with consequential loss of artifacts and site information. In addition, the project represents the first scientific maritime archaeological excavation in South Africa and serves both as a test case and to set a standard for future work. Due to the multi-disciplinary approach that is being followed, the project also allows for the application and testing of methods and techniques that are relatively unexplored in the field of maritime archaeology. Historical research that has been undertaken to date allowed for a detailed re-enactment of events surrounding both ships. Some of these archival data allowed for the identification of the vessels and provided more information on part of the material culture that has been recovered. By the same token, archaeological information gained from underwater fieldwork indicated flaws in the historical record. An example of this is a collection of Chinese and Japanese porcelains that could be identified as part of a private and possibly illicit cargo that was not registered. Material analyses provided more information on specific items, such as corrosion products, which indicated that parts of the sites were buried, became exposed again only to be reburied at different stages. Fieldwork data and specifically finds and their contextual information have been captured on a Geographical Information System (GIS) that allows for the reconstruction of the breaking-up process of the wrecks and subsequent dispersal of materials under the influence of prevailing currents. Although much more work still needs to be done on the sites of the Oosterland and the Waddinxveen, the project so far has resulted in a variety of positive developments. Many materials and associated data that would otherwise have been lost could be secured, studied and publicized. The project has contributed to cultural resource management, as regulations that were proposed for new improved legislation concerning historical shipwrecks have been tested in practice. By the same token, the project has set a standard for future wreck explorations. Public information and education has benefited, as the project received major exposure in the media while several exhibitions were organized. A number of students completed case studies on various aspects of the project for degree purposes, while others were offered an opportunity to gain fieldwork experience. In addition, much information has been secured on aspects of late 17th century trade goods and the material culture of VOC ships during this period.

During excavation of the Oosterland and the Waddinxveen, prehistoric materials were found in sediments that underlay both wrecks [16]. These artifacts include Acheulean hand axes-at least one of which was found in situ-that date to between 300,000 and 1.4 million years ago. They are therefore the oldest finds ever made on the seabed worldwide. The discovery of these artifacts presents evidence of human/hominid activity in areas that are currently covered by sea. Bearing in mind that in times of glacial advance the sea level dropped as much as 140m below its present level, this leaves large tracts of seabed to explore for remains of material culture produced by prehistoric people. Operation Zembe ('Axe') was conceived during further study of relevant literature and analysis of the finds. This project will be of a long-term nature and aims to locate prehistoric deposition sites, followed in due time by excavation. No work of this nature has ever been undertaken before in southern Africa and it is hoped that the project may reveal underwater sites that have not been affected by later disturbance, as has been the case with many land sites. In addition, Operation Zembe may contribute to international studies on sea level and climatologic changes. The project is being undertaken together with the South African Navy and the first fieldwork phase that is currently being planned will focus on the area in Table Bay where the initial finds were made. In due time, the seabed around the Cape Peninsula will be surveyed in detail up to the 50m contour, focusing specifically on those areas that contain terrestrial sites on the adjacent shore. Although this project is still in its initial stages, it may develop into a research project that is of national and international importance to a variety of research specialisations. One of its most important aspects within a South African context, however, is that it illustrates the point that maritime archaeology is not restricted to aspects of colonial history.

4 The way ahead

The practical examples that were referred to above do not constitute the full scope of current research that is being undertaken. Nevertheless, they illustrate the importance and diversity of southern African maritime archaeology. Unfortunately, proper development of the field to date has been hampered by different factors, as was already explained before.

With the formal establishment of the Southern African Institute of Maritime Archaeology (SAIMA) in 1999, a new avenue has been opened up to build on the foundations that were laid during the past fourteen years. SAIMA is a non-profit organization with the mission to study and preserve the maritime history of humanity and to make this history public in educational, creative and entertaining ways. The core activity of SAIMA is to undertake scientific research into a range of maritime related subjects and to report on these through academic and popular publications, video documentaries and film. Research is based on a multi-disciplinary approach, to secure acceptable output on different levels. To achieve this, various scientists in the field of marine and maritime studies have been invited to take part in projects guided by SAIMA at present

and in future. Currently, links already exist with several academic institutions in the country and abroad.

SAIMA plays a leading role in the furthering of maritime archaeological research in South Africa but hopes to expand soon on an international level. Several plans exist to cooperate with neighbouring countries and it is expected that not before long the Institute will become involved in a variety of international projects. By the same token, plans are underway to report on research results through public education and participation programmes and exhibitions. Another important aspect is its social responsibility programme. This includes the offering of life skills-by means of a diverse syllabus-to minors from previously disadvantaged communities and school presentations. The course that has been set out for SAIMA thus covers a wide spectrum of It can only be hoped that the objectives of the Institute will activities. materialize in the near future. Some major support has already been received. This includes the recent handing over, by the Minister of Defense, of an historical coastal fortification that now acts as the Institute's headquarters. In addition, a grant was received from the Dutch Government to aid research, while the South African Navy has committed itself to practical involvement and the rendering of infrastructural support. The generous gesture by the Minister of Defense and the fact that the Chief of the SA Navy is SAIMA's patron indicate the trust that has been put into the Southern African Institute of Maritime Archaeology by the National Government.

Conclusions

The maritime history and heritage of South Africa is diverse and spans a time period of many thousands of years. It consists of a variety of entities that have left traces in the historical as well as the archaeological record. This heritage has been threatened for too long and concerted efforts are needed to study and protect it, for the benefit of society. As an important part of this nation's maritime heritage has roots in other countries, study and protection of the various witnesses of the human past is a responsibility that must be shared. This is even more important as the people of South Africa are currently not in a position to take care of things adequately themselves. For this reason, it is hoped that international support and cooperation will be forthcoming in the near future.

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