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between the fields of use of information on with most other contribute to a more interpretation of the shipwreck projects away from the wreck site. This interpretation of the terland, but also the wreck site. This interpretation of the terland might have specific ship showed represent changes in production processes reached. Finally, the has been undertaken to increase its value, not

SUMMARY AND CONCLUSIONS

Studies which focus on the various relations people in the past held with the sea traditionally fall under the research specialisations of maritime history and maritime archaeology. This choice of wording emphasises the separateness of the disciplines of history and archaeology, whereby either use is made of documentary sources or material culture. In the context of this work, however, an effort is made to combine maritime historical and archaeological studies. Although use is made of the term 'maritime archaeology', this study defines maritime archaeology as: a scientific approach which attempts to study people's past relations to the sea through surviving material evidence and all available additional evidence of whatever nature.

The research specialisation of maritime archaeology is still rather underdeveloped. This is partly due to its relatively young age, but more so to the limited number of practitioners in the field, their respective backgrounds, as well as the particularism which is evident for many maritime archaeological projects. As a result, very few efforts have been undertaken to explore more general theoretical issues pertaining to this specialisation. This shortcoming is evident even on a basic level. Attempts to define the field of interest, for example, have only been undertaken by few. The same applies to efforts to classify part of the subject matter i.e. archaeological sites, material culture contained therein and related site information. In an attempt to partly rectify this deficiency, which to some extent seems to have prevented general acceptance of the field as a research specialisation in its own right, this study indicates and explores some of these issues.

The study is divided into three major parts. Chapter 1 discusses some theoretical and practical aspects of maritime archaeology which are not necessarily bound by a specific region or time period. In Chapter 2, the focus is on developments related to the field in the Republic of South Africa until 1996, specifically within the context of cultural resource management. In Chapter 3, the geographical focus is further limited to the greater Table Bay region. This chapter concentrates on three case studies which form part of a South African research programme in maritime archaeology. The results of these studies, both from a research and cultural resource management point of view, provide practical examples for a variety of issues which are discussed in Chapters 1 and 2.

The composition of this study also reflects some of the more significant problems which it addresses. The first of these problems, dealing with the
status of various specialisations within the field of archaeology and specifically those which touch on the maritime sphere, technology related to navigation, or technical specialisations which deal with underwater sites, is discussed in Chapter 1. It indicates that maritime archaeology forms part of the discipline of archaeology and may touch on several other fields. In this context, specifically nautical, marine and underwater archaeology are discussed whereby it can be concluded that maritime and nautical archaeology are problem-orientated and undertake to answer research questions, whereas marine and underwater archaeology are technical specialisations focusing on excavation in the underwater environment.

All four specialisations mentioned here deal to some extent with archaeological sites. Archaeological sites can be described as areas or features placed in the natural environment, together with archaeological evidence - being artefacts or other material remains and their stratigraphical and contextual information - but also environmental information contained therein. To date, few attempts have been made to classify such sites. For a better understanding, attention is devoted to this aspect in Chapter 1 where a division is undertaken on three levels. The first of these reflects physical appearance and original function. Four general types are distinguished on this basis: natural-static; artificial-static; natural-dynamic; and artificial-dynamic sites. Of these, artificial-dynamic sites are described as mobile structures which were built by people in the past with a specific purpose in mind. These structures started to fulfil the role for which they were built immediately after completion, but the majority is presently situated in a different location from where they were originally constructed. This category includes all types of waterborne craft and forms the main body of research subjects for maritime archaeology.

The second level of site classification focuses on geographical characteristics of sites and relates to the place where research subjects were deposited in the past, but also to the place where they are excavated and recorded. In this context, a distinction is made between the sea and all inland waters. This division indicates more specifically those areas where most maritime archaeological fieldwork is undertaken and allows for a clearer distinction between the technical specialisations of marine and inland underwater archaeology. Constraints of underwater fieldwork are further illustrated in the physical and physiological division, whereby water depth is the most generally applicable determining factor. Here, the focus is not so much on research subjects but more on some of the properties of the natural environment and the physiology of the excavator. It can be concluded that water depth plays an important role in the preservation of underwater sites. Environmental characteristics are significant factors in this respect but also the constraints which working underwater imposes on humans. This has partly prevented the disturbance of excavation.

Attention is concentrated on that maritime basis. Fieldwork undertaken to operate divers and the various steps of the source discipline with many historical illustrations.

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The passim of isolation.
The importance of archaeological and historical research related to underwater sites, is that it forms part of their respective fields. In this respect, archaeological and historical archaeology are closely related. Archaeological questions, whereas historical research focuses on events that occurred in the past.

Some extent with the physical characteristics or features of an archaeological site are determined by the taphonomic and depositional processes that have affected them. For a better understanding of the historical context, a division can be made based on the physical appearance of the site. This is illustrated in the context of dynamic sites. These refer to areas where the physical characteristics are immediately after the event, as well as in the context of static sites which refer to areas where the physical characteristics are changed over time.

The most obvious example of static sites are locations where cultural materials are still present in their original location. These sites include all types of locations, including those for maritime activities.

Archaeological characteristics of cultural materials are often deposited in the sea, and they are recorded. In this respect, the sea can be seen as an environment. This environment plays a major role in the preservation of cultural materials. It is therefore important to understand the environmental conditions that have affected the site and the cultural materials contained therein. These conditions include factors such as water depth, temperature, salinity, and the presence of marine organisms.

Attention is devoted to the relations people held with the sea whereby a distinction is made between immediate and derived roles, to put the interplay between the medium and the people it concerned in perspective. Immediate roles, which include obtaining food, clothing and shelter, are not only reflected in archaeological finds but also in various accounts which describe in detail the catching of fish, the gathering of shellfish and salt or the hunting of marine mammals. Derived roles, which are not focused on subsistence but concerned with improvement from the basic subsistence level, are illustrated by accounts and archival references to international contacts, the acquisition of overseas products and new knowledge.

Ships were important instruments in realizing both immediate and derived roles. This is one of the reasons why wrecks and their contents have become the most obvious exponents of maritime archaeological studies to date. Various roles can be attributed to seagoing vessels and in this context, a distinction between deliberate or active and consequential or passive roles can be made. Deliberate roles of ships and the reasons why they were constructed relate to their immediate function as vessels for fishing, exploratory purposes, trade, colonialism and warfare. Historical information pertaining to these aspects includes references to the building of the Oosterland and the trading organisation this vessel once served: the voyages which the Oosterland, the Haarlem and others -such as the vessels which foundered around Robben Island- undertook; and their various cargoes.

The passive or consequential roles which seagoing vessels played were often an immediate result of their deliberate roles. Ships were not only machines, they can also be regarded as places where people lived and worked in relative isolation. For that reason, shipboard communities needed to be organised.
This was not only reflected in the physical appearance of vessels but even more so in hierarchies, rules and punishments which were reported upon in documents such as muster-rolls and regulations. During voyages, new knowledge of foreign cultures or of a scientific nature was gained, as witnessed by a variety of printed sources, contemporary correspondence and reports. Ships also served as links between different places. This often resulted in the exchange of ideas, the collecting of rarities and specimens, adaptation to other conditions, settlement and integration between different population groups but also disruption of overseas communities, conflict and the spreading of religion and contagious diseases.

The foundering of ships is of utmost interest as this caused the formation of archaeological sites. Historical research can provide valid contributions to a better understanding of such incidents, whereby detailed information on the identity of a wreck, the reasons for sinking, the circumstances under which such events took place and later events which resulted in removal of part of the material culture can be provided. The examples of the Vliegent Hart, Amsterdam, Haarlem, the shipwrecks around Robben Island and the Oosterland all touch on these aspects. In this context, discrepancies which may occur between the archaeological and historical databases need to be acknowledged. Failure to do so results in an incorrect interpretation of past events. Practical examples of this nature are provided by case studies dealing with an illegal shipment of money aboard the Amsterdam and the porcelain assemblage of the Oosterland.

Besides tackling some issues directly related to research, Diving up the human past also contains a more practical element. In Chapter 2, the development of maritime archaeology in the Republic of South Africa is discussed whereby attention is focused on aspects of cultural resource management. This part includes: an inventory of part of the cultural resource; a discussion of the threats and activities which affect this resource; and a discussion of aspects related to legislation, control, management and education in that country.

Natural conditions around the South African coast contributed to many maritime accidents in the past. This was partly due to a lack of harbours of refuge or navigable rivermouths. Other decisive factors included the presence of submerged obstacles, adverse currents and violent and unpredictable weather conditions at sea. Partly as a result of this, more than 1500 ships foundered during the period 1550 to 1984. The shipwreck potential is diverse. Seventeen different vessel types, originating from at least 27 different nations have been identified. These figures are, however, based on incomplete documentation and more work has to be done in this regard. Other research subjects for maritime archaeology—which include natural-static, artificial-static
and natural-dynamic sites have hardly been studied and not even a basic assessment has been made of such sites to date.

Although the South African potential for maritime archaeology is substantial, the resource is threatened by development, mining activities and the actions of divers. Motivations for interfering with the potential differ but seem to focus on the exploitation of shipwreck material for commercial gain. Although several legal provisions have been made to regulate such activities, insufficient control is exercised as a result of financial constraints and a lack of concern. These last-mentioned aspects also affect the proper study, curation and exhibition of material which has already been recovered. In addition, maritime archaeology as an academic specialisation is under serious threat as a result of the current financial and political climate. For this reason, it seems inevitable to pursue new avenues to prevent this field of research from foundering. Although these problems are not unique to South Africa, it can be observed that the current situation is worse than in many other countries. Several national governments worldwide have made much more advanced provisions to monitor, protect and study their underwater cultural heritage. This is done through more stringent legislation and control (United Kingdom, Greece, Turkey, Israel and Australia), by establishing and subsidising special monitoring groups (United States, United Kingdom, France, the Netherlands) and by stimulating education, public participation and cooperation, mainly through museums and universities (Sweden, Denmark, United Kingdom, United States, Israel, Australia).

Since the formal introduction of maritime archaeology in South Africa in 1988, through the establishment of a lectureship at the University of Cape Town, several projects have been undertaken successfully. Chapter 3 deals with some case studies which form part of an overall research programme focusing on the greater Table Bay area. This section partly serves to illustrate the fourth major aspect with which this study is concerned: the contemporary situation concerning maritime archaeological research in South Africa. The motivations for undertaking different projects, some of the issues and problems which have been addressed and the methodology which was followed during fieldwork and pre- and post-excavation research will be discussed in detail. The case studies report on research findings as well as contributions which have been made concerning cultural resource management. In addition, some of the results from these case studies can be linked to issues which have been raised in the previous chapters.

For nearly five centuries, Table Bay has been a harbour of refuge for ships in the southern oceans. During the seventeenth century, the bay became more important as a stop-over place for ships which plied the trade routes between Europe and the East. The establishment of a refreshment station on its shores...
in 1652, signified the first permanent occupation of Europeans in these parts and a gateway to the South African interior was opened up. Shipping traffic increased with time, especially during the nineteenth century when the Cape became a British colony. Over the years, a minimum of 358 vessels were wrecked in the bay. These originate from at least 20 different nations and represent a minimum of 25 different types. Shipping incidents were often a result of natural conditions and especially northwesterly gales caused serious losses.

One of the oldest recorded wrecks is that of the Dutch ship Haerlem. Returning from a voyage to Asia, the vessel foundered near the northeastern shore of Table Bay in 1647. The survivors built a camp close to the wrecksite where they were forced to stay for approximately one year before being rescued. During this period, they observed the natural surroundings and came into contact with indigenous people. Upon returning to the Netherlands, a report was produced advocating the establishment of a permanent post at the Cape. As a result, the first European settlement in southern Africa was established a few years later. Due to the historical significance and consequences of the Haerlem wrecking, a detailed study of the 1647 events was undertaken during 1994 and 1995. Information obtained from archival material narrowed down the approximate location of the survivor camp, provided indications for the material culture to be expected should the site be found and indicated discrepancies in several publications based on incorrect interpretation of the historical information. A first archaeological survey and test excavation conducted in the area did not reveal material evidence for the camp site but further work will be undertaken in future.

An archaeological survey of another nature was undertaken in the waters around Robben Island during 1991 and 1992. This project, named Operation 'Sea Eagle', was a joint exercise involving various South African government departments and aimed at inventorising the underwater cultural resource around the island as part of a management plan for its future. Through underwater fieldwork, the remains of many vessels could be traced although historical research played a most important role in indicating the approximate position of such sites and contributed to their identification. Archival and library research further revealed that the number of vessels which foundered around the island was in fact greater than the results of the underwater observations led to believe. In addition, specific details about sinkings, the fate of people on board, but also cargoes carried with and goods salvaged were traced from the available documents. Although the immediate objectives of Operation 'Sea Eagle' were attained, future developments such as the opening up of the island to visitors might well provide a stimulus for the project to be taken further than the initial survey stage.
In the case of the *Oosterland*, a Dutch East India Company ship which sank on 24 May 1697 in Table Bay on a return voyage from Asia to the Netherlands, a preliminary survey was followed by more extensive research. This project can be regarded as the first properly monitored scientific maritime archaeological excavation in southern African waters. Fieldwork on the wrecksite has revealed many data which can contribute to a better understanding of international commerce and trade towards the end of the seventeenth century. Artefacts and finds recovered since 1990 provide a cross-section of material culture of the period and include armament, equipment and stores used on board, but also formal cargo, personal belongings and private trade goods. Historical research allowed for the identification of the wreck and provided many relevant details. These pertain to the building of the *Oosterland*, previous journeys which the vessel undertook, the people on board, the cargo which was transported and the events which led to the foundering of the vessel. The project organisation, the level of fieldwork and project documentation, but also the level and variety of artefact and data analysis, has set a standard for future shipwreck research in South Africa. In addition, the *Oosterland* project is used as a field school for students and members of the general public. These aspects, together with public education programmes in the form of lectures and exhibitions, as well as the publicity the project received to date, has made a significant contribution to cultural resource management in South Africa.

In conclusion, it can be stated that *Diving up the human past* shows that the interest sphere of maritime archaeology can be widely orientated. Essentially, maritime archaeology deals with people's past relations to the sea and all kinds of events surrounding these relations, as well as consequences resulting from them. Different types of archaeological sites and artefactual material contained therein can be used to study and explain these aspects. The main subject matter, however, concerns people. Artefacts can only partly reflect their past behaviour, actions, motivations, achievements and sentiments. For this reason, it is essential to study other, non-material sources in conjunction. Historical texts form the most important and diverse sources of this nature and should be used wherever possible to reveal and explain the complexity of past human existence.