



LUND UNIVERSITY

Humans in Wrecks

An ethical discussion on marine archaeology, exhibitions and scuba diving

Iregren, Elisabeth

Published in:
Swedish archaeologists on ethics

2003

[Link to publication](#)

Citation for published version (APA):

Iregren, E. (2003). Humans in Wrecks: An ethical discussion on marine archaeology, exhibitions and scuba diving. In H. Karlsson (Ed.), *Swedish archaeologists on ethics* (pp. 265-286). Bricoleur Press.

Total number of authors:

1

General rights

Unless other specific re-use rights are stated the following general rights apply:

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

Read more about Creative commons licenses: <https://creativecommons.org/licenses/>

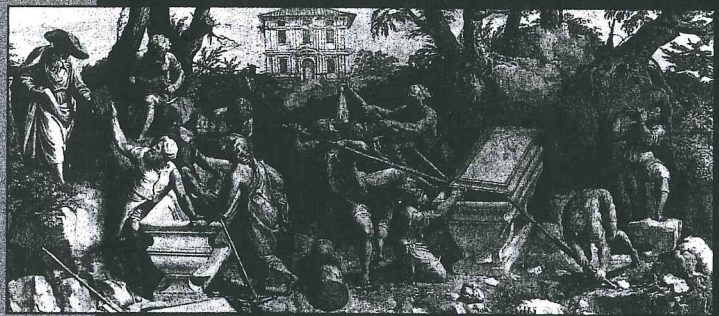
Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

LUND UNIVERSITY

PO Box 117
221 00 Lund
+46 46-222 00 00

Swedish
ARCHAEOLOGISTS
on



Edited by

Håkan Karlsson



Bricoleur Press
2004

Humans in Wrecks

An ethical discussion on
marine archaeology, exhibitions
and scuba diving

Elisabeth Iregren

Abstract

This article is based on a paper presented on the Åland Islands in the summer of 2001. Even though I am an osteologist, general osteological aspects will only be touched upon in this paper. However, some general reflections on Swedish legislation and heritage management policy when it comes to the handling of skeletal material will be discussed. I will also present some cases of skeletal material being kept outside the museum setting and of reburials. Shipwrecks are historical documents, regardless of the age of the ship or the point in time when it was wrecked. Anyway, it is not just the ship, its construction and function, the locality of the wreck and its damages, which are historical documents; human remains are also, as a selection of the past population, a document of huge historical value. This paper will primarily discuss questions on the ethical aspects of human remains in shipwrecks.

Legislation and ethical regulations

Legislation in Sweden

The Swedish Ancient Monuments Act (SFS 1088:950; RAÄ 1990) deals with both shipwrecks and human skeletal remains. Ancient remains that are protected by law include: "graves, grave buildings and grave fields, and cemeteries as well as other burial places," (§ 1.1)

Paragraph 1.8. also specifies: "shipwrecks, if at least 100 years are presumed to have passed since the ship was wrecked."

Paragraph 6 states: "Without permission it is forbidden to /.../ move, take away, excavate, cover /.../ or in other ways change or damage an ancient remain." In the definition of ancient monuments there is also a passage stating that the remains should be products of "human activities" or "ancient use", and that they should be "permanently abandoned".

Specific information on shipwrecks, in the form of general guidelines in connection to Chapter 2 of the cultural heritage law, has also been published (1990: 1). Shipwrecks have had legal protection since 1967, when similar legislative protection was introduced in Denmark, Finland and Norway. In the specific guidelines provided by the National Heritage Board mentioned above, human remains are not mentioned at all.

Guidelines from the National Heritage Board and the Swedish Museum of National Antiquities

In 1983 the National Heritage Board and the Swedish Museum of National Antiquities published guidelines with the title "Care, keeping and reburial of ancient and medieval skeletal remains" (Underrättelse 1983: 7). In their guidelines the authorities stress that osteological experts should evaluate the scientific value of the skeletal material. If the material has a scientific value it should be examined and preserved. Reburial can sometimes be allowed, but *not in the ground*. One can instead consider crypts where the individuals are marked and kept separate. Security and good preservation conditions must be guaranteed, as well as accessibility for researchers.

In Sweden a small amount of skeletal material has been reburied or returned to churches based on decisions made by the authorities. The presentation below is primarily based on Karin Lövgren's undergraduate seminar paper as well as my own previous experiences. One such case concerns 14 skeletons from the church of Björnlunda in Södermanland (mid-Sweden). It was considered that these medieval skeletons lacked legal protection since the cemetery is (at least partly) still in use today and thus has not been "permanently abandoned". Today the skeletons are kept inside the church building

(Lövgren 1994: 15-16). Skeletal material (48 individuals) has also been returned to the abandoned church of Källa on Öland, although the Swedish Museum of National Antiquities remains responsible for the material. Here too the skeletons are kept inside the church building (Lövgren 1994: 25). In neither of these cases has an inspection of storage conditions and/or accessibility taken place by the Swedish Museum of National Antiquities (Leena Drenzel, pers. comm.)

In connection with another request for reburial the government, as supreme authority, decided that the skeletons of three children from the church at Bonderup, Scania, should be kept at the University of Lund's Historical Museum (dnr KU 91/5691 K).

The returning of skeletal material to a parish brings to the fore questions on the supervision of conditions of preservation, security and accessibility. These questions must – at least in my opinion – be solved before the heritage authorities can agree to the return of the material. Can responsibilities that are normally associated with a national museum be transferred to a parish? Another model of preservation has been used for the huge amount of skeletal material from the Dominican monastery at Västerås. The skeletons are kept in a cellar in the municipal town hall. The question in this case is: is it the municipality or the county museum that is responsible for security and for ensuring access for researchers?

The skeletal material from the church of St. Johannes in Norrköping has, after a decision from the County Administrative Board, been reburied in its entirety (Lövgren 1994: 27; During 2002 pers. comm.). Limited osteological analysis was carried out before the reburial. Sofia Prata (1997) has dealt with a part of the excavated material in an undergraduate seminar paper. The examined skeletons date to the period 1700-1813 (Prata 1997: 4). However, no professional (osteological) assessment was carried out on the material's scientific value and research potential before the County Administrative Board made its decision. This skeletal assemblage is one of the few that would have been able to present knowledge about post-Reformation times, since only a limited number of excavations – carried out in Sweden – have been directed at materials of such a late date (Redin 1991: 94). It is obvious from Lövgren's presentation that the managers at the county museum, as well as at the county administration, appear to have an old-fashioned view of science. It

statutes, as is the case with the Swedish law, do not mention the victims of the accidents. On the other hand, the actual texts do mention "items" and "parts" of the ships, and it is obvious that it is forbidden to remove these. I presume that the legal protection for skeletons in shipwrecks would be stronger if they were actually mentioned in the text.

The legal disposal over the grave, sanctity of the grave, graves of wrecked ships

A grave plot in a cemetery is usually leased for a period of a minimum of 15 and a maximum of 50 years. Use of the plot can also be granted in perpetuity, rather than a limited period. This right of use is regulated by the law on burials (SFS 1990:1144; Nationalencyklopedin 1992). Grave robbing or the disturbance of graves has been viewed as a crime, at least since the Middle Ages, and the more recent the grave, the more serious is the crime (Nilsson 1995: 24).

Well then, how do we view dead individuals in a shipwreck? By tradition it has been accepted that people buried at sea, as well as sailors and fishermen who have drowned, are buried in a justifiable manner. For instance, after the sinking of the Titanic there were both burials at sea and interments at a cemetery (Wetterholm 1996: 137, 300). Thus the discussion about the salvage of the Estonia and its victims is quite a new phenomenon. This is related to the fact that it wasn't until the 20th century that the technology to salvage shipwrecks improved. We have also been forced to realise that the legal protection of the Estonia is quite fragile since the wreck is lying in international waters. Nor has the sediment cover protected the wreck from unwanted diving. However, in my opinion it would be unsuitable to cover the wreck with concrete since in the future it may be important to bring up samples of material or certain parts of the ship.

Some years ago we saw a similar case when the Russian nuclear submarine Kursk was salvaged after going down off the Kola Peninsula. Perhaps this salvage operation was not just a way of meeting the demands of the relatives, but also a result of considerations by the navy and the state. The closest parallel to this case in our area is the submarine Ulven, which collided with a mine on the 16th of April, 1943. The submarine, along with its crew, was

salvaged by the Swedish navy on the 1st of August that same year. The victims were buried with military honours.

Skeletons from large marine archaeological projects

To begin with, I will discuss the skeletal material from two large marine archaeological projects, namely the material from the warships *Vasa* and *Kronan*.

The *Vasa*: a case study Treatment, osteological analysis and burial

The warship *Vasa* was salvaged in 1961. During the salvage operation a number of skeletons were found *on board* the ship. These skeletons were analysed by Professor Nils-Gustaf Gejvall, but due to the hastily undertaken burial at the cemetery at Galärvarvet in 1963, Gejvall's results were never published. During the actual burial only skeletons found on board the ship were buried. They were sealed in plastic bags.

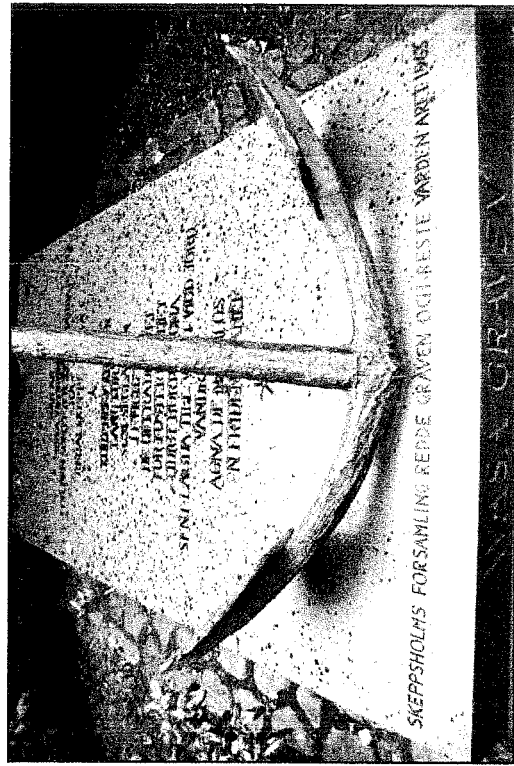


Fig. 1. The cemetery at Galärvarvet, Djurgården, Stockholm. The monument was erected in 1965, reminding us of the victims of the warship *Vasa*. Photo: Åsa Liljekvist, 2001.

In the old Vasa museum the skeleton of a young individual was exhibited. It was named "the sailor boy" and had been found during a marine archaeological survey of the bottom between 1963-67. Gejvall also examined this material.

The Vasa. New osteological analyses

In 1989 the grave of the victims of the Vasa was re-opened so that new osteological analyses could be carried out by Ebba Düring in connection with the work of the new Vasa museum (Düring 1994, 1997; Düring and Kvaal 2000). Düring has reported in detail on how the burial has affected the preservation of the skeletons. Many of the skeletons had suffered severe damage from mould attack and other destruction (Düring and Kvaal 2000: 49-50). The results of keeping these skeletons buried for 26 years show clearly how quickly bone material can suffer deterioration.

Professor Ebba Düring has published the osteological results both in scientific journals (Düring 1997, Düring et al. 1994) and for a popular audience (Düring 1994, 1995), something that is worthy of imitation, and the results have awakened great interest.

How important is skeletal material from ships such as the Vasa and the Kronan from the point of view of research? Of course, it is necessary to investigate how representative one's research material is. When it comes to the Vasa, only a small number of individuals have been dealt with. They constitute a specific section of the population of their time: seamen and perhaps some of their relatives. Thus they are probably not representative of the population of Sweden-Finland during the 17th century. But they can of course throw light upon the life and conditions of seamen in the early 17th century. One can, for instance, draw conclusions about recruitment and the navy's physical demands on its personnel, as well as possible work-related injuries.

Düring and her co-authors (1994) have, for instance, pointed out elbow injuries on a man who had perhaps been standing at the helm. Their evaluations have also allowed Olof Pipping, expert on the rigging of the Vasa, to calculate the forces that load the rudder and the so-called "kollerstocken". In my opinion, this is a good example of how exciting results can inspire new research within adjacent fields, even though the interpretation in this particular case

has been criticised by some marine archaeologists (Andreas Olsson pers. comm.)

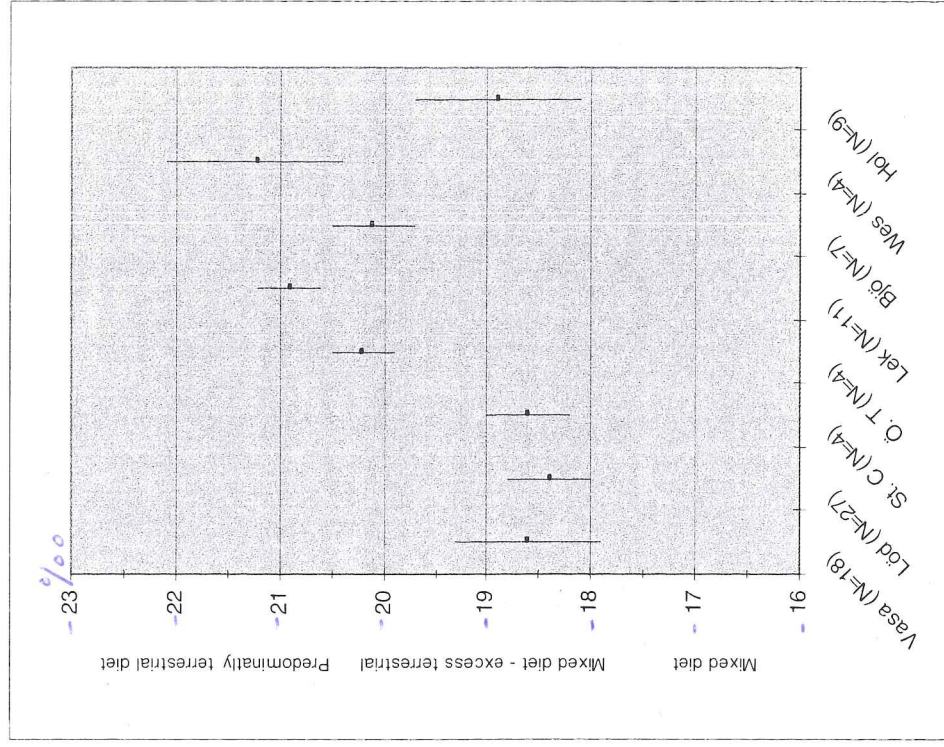


Fig. 2. Delta ^{13}C -values (‰ PDB) from medieval populations in Sweden and Denmark, as well as from the warship Vasa. The markings show average value and standard deviation. Designations and abbreviations used: Vasa=the warship Vasa; Löd=Löddeköpinge, Scania; St. C= St. Clemens, Lund; Ö. T=Ö. Tommarp, Scania; Lek=Leksand, Dalecarlia; Bjo=Björned, Torsäkers parish; Wes=Westerhus, Frösö parish, Jamtlia; Hol=Holbæk, Sjælland, Denmark. Delta ^{13}C -values from Iregren et al. 2002, and definitions of the content of the diet from Johansen et al. 1986. N=number of analysed individuals.

In this context I would also like to mention During's research on the diet of the victims of the *Vasa* (During 1997). She examined the content of trace elements and carbon isotopes in the skeletons. As figure 2 shows, the *Vasa's* crew did not differ in any crucial way from medieval peasant communities in Sweden and Denmark at that time (data from Iregren et al. 2002: 189–92). The diet was primarily terrestrial in all the populations analysed. The definitions of the content of the diet follow the divisions of Johansen et al. (1986). In this case then, we can use the specific in this population to draw wider conclusions. Once again I would like to stress that it is seldom that we in Sweden get the opportunity to study post-Reformation materials.

The exhibition at the new *Vasa* museum

Both the old and the new *Vasa* museums have attracted a large number of visitors, and interest in the *Vasa* has been enormous. The preserved ship mediates a fantastic feeling of proximity to history.

In the old exhibition – as already mentioned – a skeleton was exhibited, but in the new museum one does not come so close to the dead victims. One can approach their material world in the form of, for instance, various games, clay pipes, dinner services, and clothes. In a section of the exhibition called “Life on board” the visitor is presented with information on the food eaten on board, but in this context the animal bones found are not exhibited. Why? They would have given the visitor some concrete knowledge!

The only human remain exhibited in the new *Vasa* museum is a cranium from the cemetery on Helgeandsholmen in Stockholm. It is shown within the framework of the exhibition theme “Ships in battle”, which focuses on battles, weapons and injuries from weapons. On the other hand, the theme does not throw light upon diseases in the navy via appropriate skeletal material, such as scurvy, an illness presented in the exhibition's information text.

During a closer examination of the exhibitions at the *Vasa* museum in July 2001, I found the exhibition of personal belongings to be quite confusing. Clothes are exhibited in three different showcases. One of these contains a “closed” find of items of equipment from a seaman's chest that belonged to a person “identified”

through his cross. In another exhibition case a mixed collection of clothing from a number of seamen is shown, including shoes, gloves and hats. In a third case clothes from a single individual – skeleton H – are presented. The text tells the visitor: “This is how he was dressed on the 10th of August 1628”, “He was c. 35 years old and c. 165 cm in length. He carried a knife and had coins in his pocket. When the catastrophe struck he was caught under a gun carriage on the battery deck”. The man is shown as a wooden figure – some decimetres in length – standing on top of the exhibition case. The textile finds in these three exhibition cases have different origins, represent different finds and find contexts, but despite these differences the finds are shown in a similar way. For the visitor these finds seem quite similar and thus repetitive.



Fig. 3. During the archaeological excavations of the *Vasa* a drowned seaman (individual H) was found under a gun carriage on the battery deck. The skeleton of this man is the most concrete evidence of the catastrophe. Photo: Vasamuseet.

Why don't the exhibitors focus on the victim? He is an individual – a fellow human being. The skeleton can tell a very exciting – and

distressing – story of a man crushed on the battery deck. I feel that the man is actually being dehumanised, since the wooden figure has been substituted for the skeleton, the real human being. I am well aware of the fact that this skeleton is today in a bad state of preservation. However, fig. 3 shows that it was quite well preserved when it was found. Why are we not allowed to be touched by his fate, to be shocked by the drowning on the lower battery deck when the water came streaming in?

As a museum curator one must also be prepared to rethink and to change. Thus in a pamphlet with the title “After the unexpected” one can read that the warship *Vasa* has partly received a new role after the sinking of the *Estonia* (Olsson and Nyberg 2000). The pamphlet contains documentation from the seminar “When the existence cracks” and includes the following:

After the sinking of the *Estonia* the guides at the *Vasa* museum encountered problems because many visitors had new questions about the ship, questions that nobody had asked before. The old interesting ship had transformed into a wreck – a place for a catastrophe. From being a wonderfully painted maritime historical artefact, it became something populated by human beings. After this the guides at the *Vasa* museum were forced to change the procedure in their guided tours (Olsson and Nyberg 2000: 30).

Jarl Nordbladh has formulated the following in the same pamphlet:

Are there differences between items and items when it comes to their ability to touch our feelings? /.../ Those who work in museums must also be prepared to handle the traces of catastrophes, and to carry out this work in a form that is not similar to news or monuments, but that instead focuses upon understanding and perhaps also upon sympathy or indignation, and that ultimately touches upon the difficulty of being a human being (Olsson and Nyberg 2000: 7).

After the sinking of the *Estonia*, the Maritime Historical Museum in Stockholm employed two ethnologists to “document the incident and interview survivors and relatives of the victims /.../ the response was

significant” (Olsson and Nyberg 2000: 10). *Estonia*’s bow door had been salvaged and was to undergo technical examinations. In 1997 the Maritime Historical Museum was contacted by one of the organisations for relatives of the victims who wanted the bow door to be handed down to posterity. After solving various technical problems to do with preservation, the museum now has responsibility for the bow door (although it is not kept at the museum). Anders Björklund concludes:

The bow door of the *Estonia* did not become a commercial collector’s item, nor did it become a strong attraction in an obscure horror show. Instead it became a museum specimen. (Olsson and Nyberg 2000: 12-13)

The warship *Kronan*

The warship *Kronan*, wrecked off the island of Öland, has not been salvaged, but documented diving and the collection of items and skeletons has taken place since 1981.

Handling and analysis of the skeletal material

Professor Ebba During has also examined the victims of the *Kronan* within the framework of a significant research project. During estimates that parts of 150-200 individuals have been studied (pers. comm. 1998). She presented the results of the examination at an anthropological meeting in Copenhagen (During 1998). One interpretation that created discussion during the meeting was During’s assertion – supported by forensic scientist Jan Lindberg – that many of the skeletons from the *Kronan* show traces of injuries made by cutting weapons. During painted a picture of a situation with the crew in panic, officers with drawn weapons, and turmoil. This interpretation was criticised by forensic scientists attending the meeting, who suggested that a more probable explanation was that the injuries were the result of metal splinters flying around after an explosion on board. Regardless of which of these interpretations is more plausible, the discussion does illustrate the value of being able to return to the material. Being able to check up results, use new

methods, and ask new questions, using material that has already been studied, is a fundamental component of scientific research.

So far only a few skeletal parts from the Kronan have been buried, during a military ceremony (the Museum of National Antiquities' osteological archive). The osteological examination is ongoing, with economical support from the Swedish Research Council. When asked, Ebba Düring formulated the hypothesis that in the future there may be wishes concerning the burial of the skeletal material (Düring, by email).

The exhibition on the Kronan at the County Museum of Kalmar

As is the case in the Vasa museum, the visitor at the Kronan exhibition is not confronted by any skeletons. It seems as if the museum curators are reluctant to let the visitors meet the individuals. In the Kronan exhibition there is even a plastic mould – in the shape of a torso – as a substitute for authentic skeletal parts. What stops the museum from showing skeletal remains together with artefacts and items from the ship?

Other ships and other exhibitions

It is hard to find good examples of exhibitions that in detail deal with or exhibit human remains from shipwrecks. However, based on information I received from participants at the seminar in Mariehamn, I did find some interesting examples.

Difficult things – Dangerous things

In 2000 a bus containing a travelling exhibition organised by Swedish Travelling Exhibitions went on tour in Sweden. In cooperation with the Nordic Museum, Stockholm, and the museum organisation SAMDOK, Swedish Travelling Exhibitions put together material from many museums in an exhibition entitled "Difficult things. Objects and narratives that disturb and affect". The County Museum of Bohuslän contributed to this travelling exhibition with items, but the museum also produced an exhibition in its own locations,

showing regional cultural historical material from the museum and various local folklore societies in Bohuslän.

Due to the benevolence of curator Christine Fredriksen, I have had the opportunity to look at the exhibition texts. The focus is on themes such as "The threatening sea", "The World Wars" and "Victims of war". Personal items such as clothes, boots, helmets and gifts belonging to victims were exhibited, along with items found by divers on the German troopship *Westfalen*. However, no remains of victims were shown.

Antares

In 1940 another German troopship, the *Antares*, was sunk off the west coast of Sweden by an allied submarine. Many divers have visited this wreck and have collected both parts of the ship and smaller items. It is said that some years ago a shop in Lysekil displayed a macabre find from the *Antares* in its shop window: a boot with a human bone sticking out (Andreas Olsson pers. comm.) With this the shop tried to attract people to their diving courses. Whether this tale is true or just a cock-and-bull story is not confirmed, but the story is interesting from an ethnological point of view; that someone could think of abusing drowned individuals in this way, while others condemn it as "macabre".

When it was torpedoed there were c. 300 German soldiers and a large number of horses onboard the ship. A pilot boat from Lysekil managed to rescue 20 soldiers and 14 members of the crew. Drowned victims from the *Antares* were transferred and buried at the cemetery in Kvišberg in Gothenburg. The wreck was located in 1965 and – as already mentioned above – a number of personal belongings and parts of the ship have been salvaged by divers. Items such as water bottles, belts, boots and binoculars, as well as porcelain, glasses and the ship's bell have been brought up. However, the cargo hold still contains a large number of skeletons of both humans and horses (www.gbg.bonet.se/vrak/2vk/antares.htm). Modern day wrecks – including this one and many others – as I see it, bring to the fore both legal and ethical questions.

The 'Strandningsmuseum St. George' in Thorsminde, Denmark

In December 1811 two British naval ships, the HMS *St. George* and *Defence*, stranded on the west coast of Jutland, Denmark. Over 1300 men were lost during a hurricane that Christmas Eve. The drowned sailors that were washed ashore were buried at, amongst other places, the cemetery at Søndre Nissum. Salvage operations were carried out early on, but marine archaeological investigations did not take place until the 1970s on the *St. George*. During diving operations in 1996 and 1997 the skeletons of three seamen emerged unexpectedly (Sylvester, by email).

The Strandningsmuseum (Shipwreck Museum) was created in Thorsminde, and since 1992 it exhibits parts and items from the *St. George*, including the anchor, the ship's bell and weapons. The skeleton of the ship's cat is also exhibited (fig. 4) as well as the crew's personal belongings, instruments, navigation instruments etc. (Normann 1993; Myrthøj 1999).

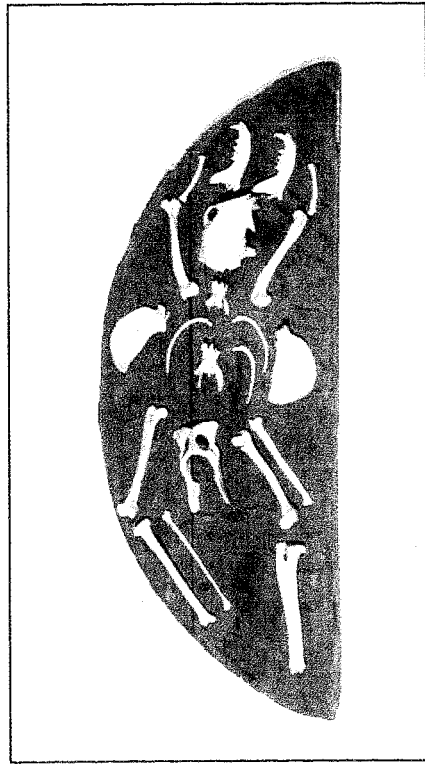


Fig. 4. The remains of the ship's cat from the *St. George*. It was trapped by the water on the lower crew deck. The photograph is from the Strandningsmuseum (Normann 1993). Photo: Jørgen Borg.

One of the skeletons found was also exhibited at the museum, in a serious way, with explanatory texts. The osteological analysis was carried out by the forensic scientist and anthropologist Niels Lynnerup in Copenhagen. The museum mentions both the sex and

the age at death of the individual, and the height and build had been calculated. The man did not show any injuries, either from the time of the shipwreck or before. From damage to the teeth it could be concluded that he had been a pipe smoker. Through this description he became an individual, a human being who had been dramatically killed during a terrible naval catastrophe.

After an application from the British Navy through the Naval Attaché in Denmark, the three skeletons have now been buried at the cemetery at Søndre Nissum. The embassy ".../ requested that the skeleton be removed (from the exhibition) and interred in consecrated earth. In accordance with the desire to maintain a good and flexible relationship with the British authorities in the future, the museum chose to comply with this request." A delay in the interment ceremony led to a further "exchange of letters between the museum and the Defence Attaché." (Sylvester, by email). Commodore Andrew Gordon Lennox, British Defence Attaché in Denmark, supervised the interment of the seamen on the 27th of October, 2000. A. G. Lennox has also approached the Strandningsmuseum and requested that any potential future skeletal finds from the *St. George* not to be salvaged. Morten Sylvester says that "we will probably comply with this request since we have so many interesting finds from the wreck that in a splendid manner throw light upon daily life on board. Of course, the skeleton was an important part of our telling of the story, and having to remove it was a disappointment to us. However, we can live with it, and we have nothing to win from a confrontation with the Royal Navy" (Sylvester, by email).

Thus, the curators of the museum valued the chance to illustrate this terrible military and human catastrophe by exhibiting the skeleton of one of the victims. "It is our impression that the visitors to the Strandningsmuseum have been positive to this contribution (the skeleton of a seaman) to the exhibition, and the personnel at the museum have never received any negative feedback from the many visitors to this direct way of illuminating the catastrophe." (J. Aarup Jensen, Newsletter). Today the burial and this foreign political "affair" in the making, are often referred to by the guides when they give tours of the museum (Sylvester, by email).

Considerations

In this presentation only limited knowledge about osteological research has been mediated, since this has not been the main purpose. However, it is the osteological research that throws light on the lives of past populations, their activities and their health. It is research that can give the skeletons a huge societal value.

If one knows the exact date of death for the victims in a shipwreck, the opportunities for research are broadened. A study of, for instance, the arrest of growth in bones and teeth among the individuals from the *Vasa* could potentially provide detailed information on climate, years of bad harvest or epidemics during the late 16th and early 17th centuries. Thus, osteology can provide both specific and general knowledge.

From my presentation it is obvious that finds of human remains in or in association with shipwrecks highlight a number of problems. Regardless of the age of the wreck, one must make decisions on how to take care of, store, and scientifically document the skeletal material. When it comes to modern day wrecks, the cooperation between scuba diving clubs and other organisations, such as various cultural institutions, should be improved. The purpose should not just be an exchange of information between cultural institutions and these clubs; heritage management must develop ethical attitudes when it comes to scuba divers. Heritage managers must also, as soon as possible, consider how the legal protection for modern day wrecks should be formulated. In 1988 the National Heritage Board was given the commission, on orders of the responsible cabinet minister, to analyse the protection of modern day wrecks and to come up with some concrete proposals (Underrättelse 1990:1: 7-8).

Older shipwrecks are protected by the Swedish cultural heritage law. However, it appears that there are several parties interested in determining how the human skeletal remains are treated and stored. There is an obvious risk that research material, i.e. skeletons, are left at marine archaeological excavations so that they will not "stir up" negative opinions within the navy, the church or amongst the local population. It is the cultural heritage authority who makes the decisions when it comes to these questions, and such decisions ought to be taken in cooperation with osteological experts, as is the case

when it comes to the same kinds of finds from churches, cemeteries or crypts.

The current guidelines on skeletal material are around 20 years old and they ought to be revised by the National Heritage Board and the Swedish Museum of National Antiquities. Just as with earlier guidelines, the new ones should be written in cooperation with osteological experts. In 2000 the current guidelines were criticised at a meeting on Sámi cultural heritage, which took place at the Swedish Fjeld and Sámi Museum, Arje. The guidelines do not consider finds of Sámi skeletal remains in any depth, nor are marine finds considered to an adequate extent. The new guidelines should also consider the responsibility for, and care and supervision of finds deposited in churches.

I would like to stress that all future heritage managers and curators should be educated in ethics within the framework of the so called 'museum disciplines' at universities and university colleges. For those already employed at museums, ethical issues ought to receive greater attention at seminars and other meetings, and the Society of Swedish Archaeologists has therefore taken the initiative to organise such meetings. Universities, cultural heritage authorities and the Organisation of Swedish Museum Curators can all cooperate in such a program.

I am also of the opinion that whatever the age of a skeleton/cranium or its origin, it should be integrated into museum exhibitions. It would tell an interesting and relevant story and be a natural part of a context including other finds exhibited within a chosen theme. However, the use of human remains for sensationalist purposes should not be tolerated. Anyway, museum curators also have the responsibility to show tough and depressing events since museums are the collective memory of society. There we should also bear the extremely difficult, not just the cheerful, the amusing and the easily accessible.

Until May 2002 the Cultural Historical Museum in Lund showed a good example of such an exhibition: "Wonderful, terrible human. Who has the right to live?" In this exhibition the curators had chosen to display the skeletons and craniums of three individuals: a Roma, a Sámi and a Jew. All three of them died in Scania under tragic circumstances during the 19th century, and they had been kept in the anatomical collection at the University of Lund. Those of us

who participated in the creation of this part of the exhibition wanted to indicate that to hide, forget or bury these individuals would be like renouncing them once again. By telling the stories of their lives we are reminded of the outlook on mankind that predominated when they lived. This outlook is sometimes also expressed in present day Scandinavian society and it has to be opposed. The individuals were shown in a contextualised manner in the exhibition, and hopefully they contributed to an understanding and sympathy with the oppressed of that time – an understanding and a sympathy that helps us to see the parallels in present day Scandinavia. This is why we chose to exhibit these individuals.

Acknowledgement!

I would like to direct a warm thanks to a lot of people who have contributed with their knowledge and their material to this paper. Antiquarian/osteologist Leena Drenzel at the Swedish Museum of National Antiquities in Stockholm. Professor Ebba During at the Archaeoosteological Research Laboratory, University of Stockholm. Curator Christine Fredriksen at the County Museum of Bohuslän in Uddevalla. Curator Jacob Johansson at the Department of Documentation at the Vasa museum, Stockholm. Photographer Åsa Liljekvist in Stockholm. Marine Archaeologist Hanne Marie Myrthøj at the Danish National Museum's Department of Marine Archaeology, Copenhagen. Marine Archaeologist Andreas Olsson at the Department of Archaeology, Göteborg University. Museum manager Morten Sylvester and Curator Lars Froberg Mortensen at the Strandingsmuseum, Thorsminde, Denmark.

References

Published material

- During, E. 1994. *De dog på Vasa. Skelettfyndet och vad de berättar*. Vasastudier 16. Stockholm.
 During, E. 1995. Hon get Vasas besättning nytt liv. *Forskning och framsteg* 4, 30-33.

- During, E. 1997. The skeletal remains from the Swedish man-of-war Vasa: a survey. *HOMO* 48 (2), 135-60.
 During, E. 1998. Det mänskliga skelletmaterialet från regalskeppet Kronan - en kulturhistorisk tolkning med frågetecken. Abstract. 20-1. 3. Nordiske Seminar om Biologisk antropologi, Clara Lachmann symposium 1998. Antropologisk Laboratorium, Retsmedicinsk Institut, Københavns Universitet.
 During, E. and Kvaal, S. I. 2000. Tafonomiska aspekter på osteologisk och odontologisk åldersbedömning. *Tandläkartidningen* 10, 48-56.
 During, E., Zimmermann, M.R., Kricun, M.E. and Rydberg, J. 1994. Helmsman's elbow: an occupational disease of the 17th century. *Journal of Paleopathology* 6(1), 19-27.
 Fornvännen 1999, 108-10. The EAA Code of Practice.
 Gjallarhornet 2000 (2), 1-3. Svenska arkeologiska samfundets principer för god arkeologisk praxis.
 Iregren, E. and Redin, L. 1995. *I Adams barn ... En diskussion om etiska aspekter på museiförvaring och återbegravning av medeltida skelletmaterial*. University of Lund, Institute of Archaeology, Report series no. 55.
 Iregren, E., Jungner, H., Räsänen, J. and Alexandersen, V. 2002. Diäten hos barn och vuxna i Westrehus. Data från spårämnen, kollisotoper och odontologi. *Hkuin* 27 (2000), 179-202.
 Johansen, O. S., Gulliksen, S. and Nydal, R. 1986 $\delta^{13}C$ and diet: analysis of Norwegian human skeletons. *Radiocarbon* 28, 754-61.
 Kulturmiljölagen SFS 1988:950 (RAÄ 1990).
 Kulturmiljölagen. Skeppsvrak. Underrättelser från riksantikvarieämbetet och statens historiska museer 1990: 1. Stockholm.
 Myrthøj, H. M. 1999. *Marinarkeologisk Nyhedsbrev fra Roskilde* 12, 38-40.
 Nilsson, B. 1995. Kristna begravningar i ett historiskt perspektiv. In: Iregren, E. and Redin, L. (ed) *I Adams barn ... En diskussion om etiska aspekter på museiförvaring och återbegravning av medeltida skelletmaterial*. University of Lund, Institute of Archaeology, Report series no. 55, 21-27.
 Normann, G. 1993. *Dykningen ved vraket af St. George*. Holstebro: Jydsk Dykkerfirma.
 Olsson, T. and Nyberg, I. 2000. *Efter det oväntade*. En dokumentation av seminarier När tillvaron rämnar, Göteborgs Stadsmuseum, våren 2000.
 Petersson, B. 1995. Forskningsstulleglighet kontra pietet: Eiska problem i samband med undersökningar av upprädda människoben. In: Iregren, E. and Redin, L. (ed) *I Adams barn ... En diskussion om etiska aspekter på museiförvaring och återbegravning av medeltida skelletmaterial*. University of Lund, Institute of Archaeology, Report series no. 55, 11-20.

- Redin, L. 1991. Människan i medeltid - och hennes kvarlevor i nutid. In: Lagerlöf, A. (ed) *Gravfälsundersökningar och Gravvarkeologi. Forskning för kulturmiljövård* 3. Riksantikvarieämbetet, 88-101.
- Underrättelse (1983:7) från Riksantikvarieämbetet och Statens historiska museer. Omhändertagande, förvaring och återbegravning av forntida och medeltida skelettmaterial. Stockholm.
- Underrättelse (1990:1) från Riksantikvarieämbetet och Statens historiska museer. Kulturminneslagen. Skeppsvrak. Stockholm.
- Wetterholm, C-G. 1996. *Titanic*. Stockholm: Rabén Prisma.
- Ålands författningssamling, 1974. Nr 65, Landskapslag om fredning av skeppsvrak.

Unpublished material

- Antares. Internet: www.gbg.bonet.se/vrak/2vk/antares.htm
- Aarup Jensen, J. Manus til Nyhedsbrev 2000-12-12. Arkivet vid Strandingsmuseet, Thorsminde.
- During, E. Email message, January 2002.
- Fredriksen, C. Email message, January 2002.
- LUHM:s arkiv, Bonderups k:a, Skåne, dnr KU 91/5691 K.
- Lövgren, K. 1994. Kränker arkeologerna gravfriden? Seminarieuppsats i Medeltidsarkeologi, Lunds universitet.
- Olsson, A. E-postmeddelande samt telefonsamtal februari 2002.
- Paulsson, T. 1995. Om poulationsanalyser av medeltida gravmaterial: Metodologisk problemdiskussion kring skelettmaterialet från Helgeandsholmens kyrkogård. ARK 004. Seminarieuppsats i Arkeologi, Lunds universitet.
- Prata, S. 1997. En arkeoosteologisk analys av ett postmedeltida, humant skelettmaterial från S:t Johannes kyrkogård, kv Landskyrkan i Norrköping, Seminarieuppsats i Arkeoosteologi, Stockholms universitet.
- SHM:s osteologiska arkiv, regalskeppet Kronan.
- Sylvester, M. Several email messages, December 2001 – January 2002.