The Avondster project: an integrated maritime heritage research project around the historic port city Galle in Sri Lanka

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Abstract

The Dutch East Indiaman Avondster sank on July 2, 1659 in the bay of Galle, which was the most important maritime centre in Sri Lanka until the nineteenth century. Avondster had been anchored near the Black Fort before slipping its anchor, and running aground northeast of the anchorage in the bay. A ship of 250 tons sailing primarily in Asian waters, Avondster was in the service of the Dutch East India Company (VOC) at the time of sinking, but had formerly belonged to the English East India Company. It was captured by the Dutch in Persian waters during the first Anglo-Dutch War in 1653. Begun in November 2001, the excavation of the shipwreck is scheduled to continue until 2004. The Avondster Project focuses not only on the archaeological excavation and conservation of the shipwreck itself, but also on the Dutch-Sri Lankan cultural heritage in Galle, the training of Sri Lankan underwater archaeologists and conservators, comprehensive archival research, and the building of a museum to display the finds from the excavation. The project is expected to yield new information regarding Dutch East Indiamen involved primarily in local maritime trade, seventeenth-century shipbuilding techniques, the nature of perhaps a mixed crew of Asians and Europeans aboard the ship, the organization and logistics of Dutch seafaring, as well as the development of Galle as a major port for the VOC. The results of the project will be presented in the renovated Dutch warehouse that serves as National Maritime Museum.

The paper will present the goals of the project and the results of the research to date. In my conclusions I will highlight the specific advantages and problems of an integrated archaeological-historical research on a maritime archaeological site in combination with remains of the organization in both the structure of a colonial city and an extensive archive.

1 Introduction

The port city of Galle in the southwest of Sri Lanka has a splendid natural harbour. The port was in use in pre-Christian times, but gained in importance after the 12th century. By the 14th century it was arguably the most important port in the country, and it retained this pre-eminence until 1873 when an artificial harbour was built in Colombo. The great Chinese admiral Zheng He commemorated his visit by leaving a trilingual inscription in 1411; the three languages were Chinese, Tamil, and Arabic, implying a cosmopolitan trading community. The Portuguese arrived in 1505, and later built a small fort; but it was after Galle was captured by the Dutch in 1640 that the city rose to its greatest prosperity. The Dutch rebuilt the town and strengthened the fortifications. The English took over in 1796 but made few changes to the infrastructure, and it is Dutch architecture of the 17th and 18th centuries which gives the town its present character and charm. Among the Asian ports of the United Dutch East India Company (*Verenigde Oost Indische Compagnie*, or VOC), Galle was second only to Batavia (now Jakarta).

Galle harbour has an impressive number of heritage sites, some dating back well before the Dutch. Several stone anchors of Indo-Arabian pattern have been discovered, one weighing almost a ton (so implying a ship of some size), made of stone probably from Oman, and with a wooden anchor stock around five hundred years old. (The wooden stocks would have been regularly replaced, so the anchor itself may be older.) Another anchor has been found of Mediterranean pattern, similar to those used in Roman times. A celadon bowl of the Southern Song dynasty (C13th) is one of our few relics of the early trade with China; later blue-and-white Chinese trade ware is abundant [1]. While Sri Lankan archaeology is rich in treasures from much earlier periods, it is the combination of several Dutch East India Company wrecks with the VOC's extensive historical archives that makes Galle Harbour so interesting. The Dutch administrative records and maps are helping us to identify the shipwrecks and to understand the historical context. In this paper I would like to present the excavation of the VOC-ship Avondster in the context of a broader field of research related to the roll of Galle as important port city in the Indian Ocean region

2 Galle and the Dutch East India Company

For the VOC, Galle was a key trading hub. The warehouses were packed with trade items from all parts of Asia. Fleets of ships came to Galle each year for trade, supplies, and repairs. Although the internal harbour of Galle was considered safe during most of the year, the entrance of the harbour was not. Reefs and submerged cliffs were a danger to the ships. To enter the bay safely, skippers needed the services of a local pilot. While ships were at anchor outside the bay, they could communicate with the shore with flags and guns. If the skipper required a pilot, a Dutch flag was hung on the mizzen yard and a gun fired three times. The flagstaff guard would indicate that the signal was

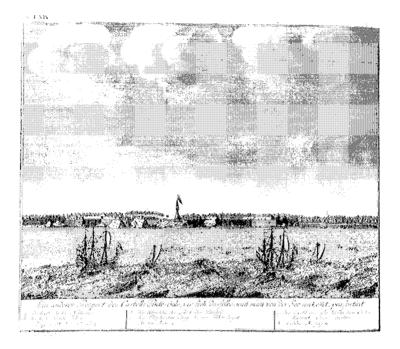


Figure 1. Sailing into Galle Bay. L.W. Heydt (1744) (Amsterdam Historical Museum).

understood by hanging the Dutch flag upside down. Local *dhoni* were used to bring the pilot to the ships and then to guide the ships into the harbour. When ships were piloted into the harbour, it was common practice to anchor small dhoni's as temporary buoys on the most dangerous spots.

Ships were unloaded, revictualled and loaded by smaller boats which operated from the jetties near the old town gate [2]. One of these jetties has recently been converted to serve as the diving base and conservation laboratory for the Maritime Archaeology Unit. Galle also had a small shipyard and skilled craftsmen, who could carry out necessary ship repairs. Drinking water came from a well at the east side of the bay. Water was shipped in barrels to the town and the ships. The water for the town was carried through a tunnel into the Black Fort (Schwartz Bastion), next to the great warehouse now the Maritime Museum. Important trade items included textiles, pepper and yarn from South India; cinnamon, cardamon, pearls, gems, and elephants from Sri Lanka. Some of the local products were exported only short distances (e.g. elephants from Sri Lanka to India); while others travelled further afield. Textiles were important in the trade to other parts of Asia, while most of the cinnamon was exported to Europe. The VOC was active in all of these trades, with an appropriate variety of ship types – as can be seen in the wrecks in Galle harbour.

2.1 Shipping

When the Dutch first came to Asia, all of their ships made the long and dangerous voyage from Europe and back, but this was soon replaced by a "huband-spoke" system. The Dutch captured Jakarta on Java in 1619, renamed it Batavia, and made it the hub of their Asian trade. Small ships were despatched to trading ports all over Asia, and the cargo they brought to the central storehouse was conveyed to Europe by large "return-ships". During the VOC's first fifty years, it developed types of ship suitable for the different trading areas, depending on the cargo, the ports involved, and sea conditions. A class of "yachts" was designed for Asia [3]. There are two wrecks in Galle of ships specially built for the Asian trade. The Hercules was wrecked in 1661 as she departed with a cargo for Batavia, and the Dolfijn was lost two years later on arrival from Surat. The Avondster, in contrast, was a modified English ship, and had made several trips between Europe and Asia before being "retired" to the Asian routes.

Smaller ships were required to transport goods from production areas to the trading hubs. Some local vessels such as dhoni were used, some smaller ships like sloops were built, and some older and less seaworthy yachts were moved to the shorter routes. At an even more local level, the Dutch built a network of canals in Sri Lanka for inland transport. The largest ships in service were the so-called "return-ships" (retourschepen), designed for the lengthy voyage between Europe and Asia. These ships were usually of 500–1100 tons. Some of these ships sailed directly from Galle to Europe with a cargo of goods such as cinnamon, cardamon coffee, and pepper from Sri Lanka, and textile, yarns and pepper from India. Other ships stopped at Galle on their way to and from Batavia. Two return-ships, the Barbesteijn (1735) and the Geinwens (1775), were wrecked in the bay of Galle [4].

3 The Avondster: the ship and her wrecking

3.1 The wrecking

The Avondster was wrecked on 2 July 1659. The ship had been anchored near the Black Fort. During the night, although the weather was fine, the vessel slipped her anchor and hit the shore northeast of the anchorage. The ship broke in two, and was soon submerged in the soft sand. An eye-witness account, found in the Dutch records of Colombo, tells how a sailor on deck discovered the vessel drifting and tried to wake the skipper. However, the skipper was slow in making his appearance, and by the time he ordered the warp anchor to be thrown out, it was already too late. After the disaster, the skipper and the first mate were arrested, convicted, and ordered to pay for the losses [5].

The Avondster had been loading cargo for India. After the ship was lost, there were no other vessels of the Dutch East India Company (VOC) available to transport the rest of the cargo, which was still on shore. VOC officials decided

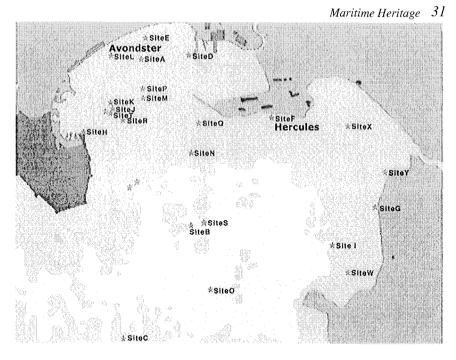


Figure 2. Maritime archaeological sites in Galle Bay.

that the burghers (free citizens) should be allowed to buy the cargo, but only on condition that it was sold for a fixed price; presumably they had existing contracts to meet with the Indian buyers [6]. We know that the cargo left on shore included areca nuts, and in April 1999 some were found on the wreck.

3.2 The ship's history

When she sank, the Avondster was in the service of the Dutch East India Company, but she was originally an English ship - first recorded as the John and Thomas, and bought by the English East India Company in 1641. She was then renamed the Blessing, and despatched to Java [7]. Reflecting the general fortunes of the East India Company, she made two relatively straightforward out-andback voyages (to Bantam in 1642-43, and to Surat and Bantam in 1644-45) but was then, due to weak demand and intensifying trade competition, deployed increasingly in the regional trade. She returned to England once more, in 1650. In 1652 the First Anglo-Dutch War broke out, and although this conflict was ostensibly about local trade issues in Europe, it gave the VOC an excuse to attack its major competitor. It took a year for news of the war to reach parts of Asia, and meanwhile Cromwell had refused a request from the English East India Company to send warships to Persia. The VOC promptly captured five English ships: the Duyf near Batavia and the ships Roebuck, Leonoret, Supply and Blessing in the waters around Persia. (The name Avondster first appears in a letter from Batavia reporting this success to the VOC's directors.)

In Persia, the Dutch lay in wait from February 1653 for unsuspecting English ships arriving from India. After a month the Supply arrived from Surat and the Blessing from Coromandel. The English factors at Gombroon were looking out for these ships, but could not warn them, and a battle ensued. The skipper of the Supply surrended, but not until he had managed to bring his cargo safely to shore, and negotiate terms: all officers and crew were to be housed comfortably and suffer no physical harm. At Gombroon the VOC allowed the officers to disembark with all their personal possessions and trade goods. The Blessing however defended itself vigorously, according to Dutch accounts as well as the master's. Most of the sailors were kept as prisoners; however it was thought inhumane to keep them below deck in the hot Persian climate, and a captured Portuguese ship was used as a prison, anchored in the open sea with eight guards. Many of the prisoners escaped, and the others were sent to Batavia, along with the captured ships [8]. The Avondster was then sent to the Netherlands, and stayed for several months; there was probably some refitting and modification at this stage [9]. (The galley of Dutch bricks which we have found on the wreck site is evidence of refitting; we have also found "hanging knees" - bracing timbers for the decks - which show the ship's English origin, as they were not used by Dutch shipbuilders.) In the English records she is listed as a ship of 250 or 260 tons, with a crew of about 65 for major voyages [10].

In 1655 the Avondster returned to Batavia, and in 1656 she made trips within Asia. In 1657 she sailed again for Europe, but returned to Batavia due to severe leaking. The cargo for Europe was transferred to another ship, and the Avondster never sailed to Europe again. It was normal practice for ageing ships to be transferred to regional routes once they were no longer fit for the long and arduous trip to Europe, and the VOC's directors discussed the condition and allocation of individual ships every year.

By 1659, after eighteen years in the service of the English and Dutch East India Companies and an undetermined prior history, VOC officials reported the loss of the Avondster as that of an "old yacht". She may already have been considered quite an old ship when captured in 1653. In 1645–6, the English East India Company had spent six months undecided whether to proceed with repairs, and then determined that her life could be economically extended for a further seven or eight years – which would have finished at around the time of her capture. It is possible that the name Avondster, which means "Evening Star", refers to the ship's age, as ships were often given names appropriate to their function or qualities. The Duyfken, or "Little Dove", was a yacht used for communication and survey.

By late 1657 the Avondster was in South India, where Commissar Rijckloff van Goens was campaigning against the Portuguese. In a letter from Van Goens to the Governor-General and the Council for India in Batavia, he expressed his disappointment about her condition:

"Honourable, valiant, wise, prudent, and very generous Sirs,

We seize the first opportunity to inform you that after a perilous voyage we only reached Goa on 19th November [1657]. We were disappointed in finding things

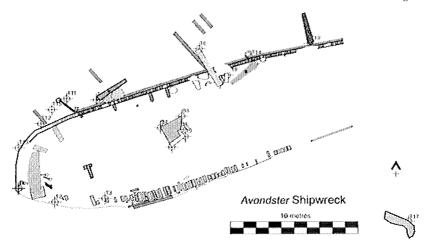


Figure 3. The ship's remains cover an area about 40m long and 10m wide. The shape of the hull is outlined; with timber frames and planking protruding on average 50cm above the sea bed. (The extent of exposure had been increasing year-by-year, and the timbers most exposed were eroding at a similar pace, until protective sandbags were laid in 1999.) A section of the stern is broken away from the main wreckage – corresponding with contemporary accounts of the ship breaking in two – and protrudes 2–2.5m above the seabed, with significant scouring around it.

very different from what we were led to expect. Instead of the vessels we had hoped to find ready to join our intended expedition to Dui, we were obliged to exchange our strong war-yacht Vlielandt against the unseaworthy Avondster." [11]

Goens decided that the Dutch were too weak to attack the Portuguese immediately. A defeat would have left Ceylon unprotected, and he wanted first to assemble a larger fleet. He left several ships near Goa under the command of Adrian Roothaes. The guns of the Avondster and three other ships were transferred to bolster their firepower, and the fleet which stayed behind comprised 9 ships with 352 heavy guns and 1100 soldiers. The Avondster was sent to Ceylon, to inform Governor Van der Meijden about plans to attack the north coast, but could not reach her destination due to unfavourable weather. The Avondster accordingly waited off Cape Comorin for the arrival of Van Goens and further instructions. Eventually a small fleet under the command of Van Goens reached Colombo in early 1658. From here they successfully attacked the Portuguese in Jaffna, and by the summer Van Goens had captured all the most important settlements on the northwest coast of Ceylon. It is not certain whether the Avondster took part in these actions, but later that year she was to transport the Portuguese prisoners to Batavia, and was evidently deemed seaworthy

enough for this task. We do not yet know whether the Avondster actually made this voyage. We next hear of her a few months later, finding her last resting place in Galle harbour in June 1659.

3.3 The Avondster site today

The Avondster lies in the very heart of Galle harbour, 50 metres from the rocky shoreline of Marine Drive, near the market. Contemporary records mention that the Avondster sank in the mouth of a river. In an irritated report naming all those who might be held responsible, the VOC's officials recorded:

"... the old yacht Avondster in Gallons Bay, after slipping her anchor rope... because of bad supervision was wrecked... struck ground and broke immediately in front of the garden of Marcus Lasseres, and the outcoming river on the side of the mountain." [12]

The soft sediment in the river outlet made the Avondster submerge deep in an anaerobic climate which kept the wreck in a good state of preservation for more then 350 years The now partially buried wreck lies in 5 metres of water, on a gently shelving sea bed composed of sand and finer sediments covered by organic detritus.

4 Research and historical-archaeological value

The Avondster Project is an integrated historical-archaeological investigation. The combination of the archaeological assemblage of the *Avondster*, contemporary archival information about the ship and the organisation it was part of, will provide us with a dynamic set of research questions. The archival information will pose questions answered by the archaeological record and at the same time it is anticipated that archaeological results will create questions clarified by historical research. Questions will be asked about the various ship types in service, the material culture on board of a VOC ship, the technical development during the relevant period and the organisation of shipping.

The Galle situation, in which archaeological material can be linked directly to the Dutch records in the National Archives of Sri Lanka and the VOC archives in the Netherlands, will enable us to conduct a multi-disciplinary research programme

4.1 Ship construction techniques

From a historical-technical perspective, the visible use of double-planking plus sheathing is an example of a building technique in practice during the late 16th and early 17th centuries, similar to that of the VOC ships *Mauritius*, 1609, and *Batavia*, 1629, and a recently found ship in the Waddenzee (Netherlands, dated around 1585). It has been suggested that in the case of VOC ships, this

construction is an adaptation for the specific conditions encountered sailing between Europe and Asia, and within Asia. Both the *Mauritius* and the *Batavia* have minimal hull remains to work with. The *Avondster*, with its extensive structure, could reveal the overall concept of this building technique [13].

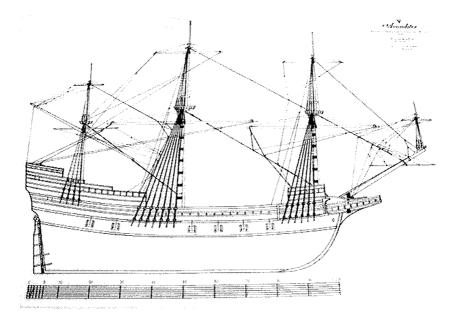


Figure 4. First reconstruction of the Avondster.

4.2 Logistics of operating a ship in Asia

Maintenance was one of the main issues for European ships operating in Asia for extended periods. Since the *Avondster* stayed in Asia for many years without returning to Europe for major repairs, this site will therefore give us information on repair methods in Asia, possibly revealing the integration of local materials and building techniques. There is evidence of this already, with the existing stock on one of the Avondster anchors being made from an Asian wood species. The possible presence of workshops and stores on board of the *Avondster* will provide information about the organisational practise of the VOC to keep its ships sailing.

During the 2001/2002 season large quantities of spare rope and some blocks were found in the bow section of the Avondster. From archival sources we know that many spare parts were shipped from Europe to Asia in order to guarantee a quality standard. In some cases the VOC used local products. Analyses of the materials will cast more light on this practise.

4.3 European-Asian community on sea

The Avondster was a European vessel sailing under a European company in the regional Asian trade. Historical sources provide much information about the logistics of shipping (food, crew, armaments etc) for the ships sailing to or from Asia. To date, most wrecks of VOC ships were either outwards or home bound vessels, sailing between Asia and Europe. Little, however, is known about the organisation of logistics on board ships involved in the regional Asian trade. In preliminary archival research into the administration of the VOC, a list of supplies, with partly Asian products, is shown for shipping in Asia. It is also known that the VOC employed Asian sailors. Due to the complete nature of the site, the Avondster is expected to make a valuable contribution to our understanding of this important aspect of maritime history. To date remains have been found of standard VOC equipment and packing materials, side by side with Asian jars like the big Martavans used for the storage of water and food.

Conclusion

The Dutch East Indiaman *Avondster* is a world-class site. The ship is in an extraordinary state of preservation, complete on one side up to the main deck. The site promises new insights into ship construction techniques of the day and the daily practise of a maritime community operating in Asia. The first results of the excavation suggest that the site will be a rich source of finds and historical knowledge. The integrated research of the Avondster project has the potential to give an important contribution to knowledge in the field of maritime history, shipping, trade and political organisation during the period of European expansion in Asia. Equally important is the establishment of a professional Maritime Archaeological Unit in Sri Lanka. The final result of this project will be to safeguard this important heritage into the future.

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