

Sunken history: shipwreck Scheurrak SO1 in the late sixteenth-century Dutch maritime cultural landscape Burger, G.

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Introduction

Introduction

Some ten kilometres east of the Wadden island of Texel, in a tidal inlet of the Scheurrak Ommedraai tributary, lies a four hundred year old shipwreck (see image 0-1 and 0-2). At a depth of six to nine metres, it is preserved in a thick layer of sand. In 1984, a fisherman saw an unusual ripple in the water, which appeared to be caused by a *haft*, a protrusion below the water surface. In 1986, an exploratory investigation revealed the remains of a sixteenth-century Dutch ship. In the following years, professional excavations were carried out on the wreck site, which was named Scheurrak SO1 after its geographical location. It quickly became clear that the ship could reveal important information on Dutch shipbuilding in the early modern period. Archaeologists saw that the vessel appeared to be a precursor to the flute. Over three thousand objects were recovered from the site, which together offer a rare glimpse of society at the time. The value of the material culture of Scheurrak SO1 lies in the ordinariness of the ship, which allows us to get as close as possible to the life of the common man, more specifically the seafarer in the late sixteenth century and the shipping industry in which he was active during a crucial period in Dutch history.

One of the first objects recovered from the wreck was a lintstock with the year 1590 engraved in it, soon followed by an Italian trumpet carrying the year 1589 on its bell.² Several other dated objects are from before 1590. Dendrochronological research shows that the youngest dated wood in the ship is also from 1589 or 1590.³ With a *terminus post quem* of 1590 and, as will be argued later on in this study, a most likely *terminus ante quem* of 1600, the ship represents a transitional phase in Dutch maritime history. It was a period in which the first pen strokes of the seventeenth-century period of economic prosperity became visible, as new patterns, systems, and innovations occurred. At the same time, late medieval systems of trade, organization, and technology were still in use. This combination of the old and the new is especially true for the maritime sector.

The Dutch Revolt played a large role in the transformation of maritime trade and culture. Long-standing dissatisfaction with the Spanish authorities led to an outbreak of rebellion. Historian Jonathan Israel has shown that this discontent concerned primarily the organization of politics and religion, but also the economic and military

¹ Thijs Maarleveld, 'Het schip Scheurrak SO1. Een scheepsopgraving in de Waddenzee', Spiegel Historiael 25-12 (1990) 573.

² SO1-23222 (lintstock) and SO1-1365 (trumpet).

³ Petra Doeve, Dendrochronologisch onderzoek naar de houtmonsters uit het Scheurrak SO1, duikcampagne 2023. BAAC Rapport D-23.0356 (2023), see for a further study of this: Hendrik Lettany, New perspectives on the construction of the late sixteenth-century Scheurrak SO1 shipwreck (work title), in preparation and expected in 2024.

policies of Philip II.⁴ The trigger was the capture of Brill by the Sea-Beggars on 1 April 1572. After Brill, several other cities and towns in Zeeland and Holland were taken over by the rebels.⁵ Repercussions by governor Alva followed in late 1572, but the Revolt continued. Slowly but surely, the rebels gained ground in large parts of the Low Countries. In 1578, Amsterdam was taken and turned over to the Protestant fold, known as the *Alteratie*.⁶ In 1579, six provinces signed the Union of Utrecht, a collective agreement against Philip II. The issuing of the Act of Abjuration in 1581, in essence, was a declaration of independence. The Northern Low Countries had by now put itself on the map as significant political player.⁷ Spain, of course, did not accept the statement of independence, and struck back. After fourteen months of siege, the city of Antwerp fell into Spanish hands in August 1585 (see image 0-3).

For international trade, 1585 was a turning point. In the early years of the Revolt, the war paralyzed the economy but did not lead to an exodus to the Northern Low Countries. Many Flemish and Antwerp merchants moved to France and Germany, hoping to return in due course. The siege of 1584-1585 was the definitive end of Antwerp's seaborne trade. It resulted in an economic drain of the Southern Low Countries, and an exodus of Protestant merchants to the north. Israel argued that the exodus did not lead to Holland's and Amsterdam's rise immediately. The trade embargoes by Philip II prohibiting all trade with the Iberian territories that were in effect between 1585 and 1589 affected the maritime trade of Holland. According to Israel, it was after the lifting of the embargoes that from the 1590s onwards, Amsterdam developed into the commercial hub of northwestern Europe. The West Frisian towns of Hoorn and Enkhuizen would henceforth be in Amsterdam's shadow. From being independent traders with the Baltic, they became facilitating centres for the Amsterdam trade. Increasingly, the initiators of maritime ventures were based in Amsterdam, while the transporters were largely West Frisian skippers.

In the last quarter of the century, the Netherlandish started to sail new routes. One of them was the route to the Mediterranean, following the English example. Until that moment, the common routes to southern Europe ended in the Atlantic harbours of Spain and Portugal. In the late 1580s, crop failures and poor distribution of food in southern Europe led to a period of famine. The Dutch, already deeply involved in the Baltic grain trade since medieval times, started to re-export grains to the western part of the Mediterranean, mostly to the Italian ports. This branch of the trade, in Dutch

⁴ Jonathan Israel, The Dutch Republic. Its Rise, Greatness, and Fall, 1477-1806 (Oxford 1995) 169.

⁵ Idem, 172-174.

⁶ Idem, 193.

⁷ Idem, 211. Throughout this study, the term 'Netherlandish' refers to 'from the Low Countries', while Dutch refers to 'from the Dutch Republic', the United Provinces from 1588 onwards.

⁸ Jonathan Israel, Dutch Primacy in World Trade, 1585-1740 (Oxford 1989) 28.

⁹ Idem, 38.

referred to as the Straatvaart (after the Strait of Gibraltar), became highly lucrative in the 1590s. By 1595, the route to the Italian peninsula was fully integrated in the trading network. 10 The period in which Scheurrak SO1 was in operation, together with the presence of objects from southern Europe and a large grain cargo, indicate that the ship was active in the Straatvaart. With new routes and markets opening up, the quantities of commodities transported increased. More and larger ships were needed, and the shipbuilding sector could meet this demand by adopting quick and cheap construction methods, and by building ships with a large capacity (usually between 80 and 200 lasts¹¹) that could be sailed with small crews of around 12 to 25 men. By dividing the vessel's ownership over multiple parties (partenrederij, joint ownership) or dividing a cargo over multiple ships, the risks of economic loss could be spread. In this way, transport costs could be kept low and the flow of trading commodities high. The ventures were organized by individual businesses or small family companies based in Holland. The merchants hired skippers, who in turn recruited their crew using their network of family and acquaintances. The small crews were therefore characterized by sharing the same region of origin, family relations, and a relatively flat hierarchy. Ashore, the expanding maritime sector also left its traces in society. Although a maritime culture had existed ever since humans had started to settle in the Low Countries in prehistoric times, in the late sixteenth century in the Dutch Republic the 'marinisation' of society acquired unprecedented momentum. 12 The maritime world was no longer the world of those making a living from activities at sea directly (skippers, crews, shipowners, and merchants), but also of every person living in the coastal provinces of the Republic, and even beyond.

Changes to the maritime world continued at a rapid pace. In the mid-1590s, Dutch merchants entered the transoceanic trade, sailing to West Africa, South America, and the Caribbean. The explosive interest in the spice trade in Southeast Asia, initiated in 1595 with the *Eerste Schipvaart*, culminated in the establishment of the Dutch East India Company (VOC) in 1602. Although many merchants involved in the VOC trade were previously active in the *Straatvaart*, the ventures were different in many aspects, certainly also regarding everyday life on board. The number of crewmembers on East Indiamen could rise to two hundred men, which came with a strong shipboard hierarchy

¹⁰ The Italian peninsula was a patchwork of city states in the early modern period. Italy as a country did not exist until 1870. However, in Dutch sources on the *Straatvaart*, the toponym Italy is often used, referring to the Italian peninsula were the Italian language is spoken. Therefore, both toponyms are used throughout this study.

One last (the Amsterdam scheepslast) equals 3010,5 litres.

¹² Janiszweski introduced this concept in 1971 to describe the process in which maritime elements emerge in the material and spiritual culture of a society, see: A. Kolodziej, 'The Concept of Marinization by Ludwik Janiszewski: To Understand the Influence of the Sea', Cultural Interaction Studies of Sea Port Cities 20 (2019) 159-179.

and social segregation.¹³ Also the duration of the trips doubled or tripled, bringing a new set of challenges like the spoilage of foodstuffs and trading goods, new diseases, and social tensions. The studies on VOC shipboard life therefore cannot be applied to late sixteenth-century ships. Scheurrak SO1 offers a unique perspective on maritime culture in the 1590s. The central question in this research is what can Scheurrak SO1 tell us about the maritime cultural landscape of the Low Countries in the crucial period 1585-1602? Before delving deeper into what constitutes the maritime cultural landscape, it is necessary to look at the research history of Scheurrak SO1 and the fields of maritime history and maritime archaeology in which this research is embedded.

The Tesselschade disaster

Several studies on Scheurrak SO1 have been written in the past, but the majority focusses on single categories of finds, with the results mostly recorded in internal reports or journals. The few scholarly articles that have been published are either very technical and display a strong focus on the ship's construction, or are overview articles with few details. Moreover, all these studies have a strong archaeological approach, with the work of historian Milja van Tielhof from 1997 being the only exception.¹⁴ Commissioned by the Dutch National Maritime Museum, Van Tielhof attempted to identify the ship by means of archival documents. 15 Because Scheurrak SO1 most likely perished in a storm shortly after 1590, Van Tielhof connected the site to an event in 1593, when at Christmas Eve dozens of ships perished at once. During that night, a fleet of over one hundred ships lay anchored at the roadstead of Texel, waiting for a favourable wind to set sail. The majority of merchantmen were loaded with Baltic grain and destined for the Mediterranean. On the evening of 24 December, a great storm caused tens of ships to sink and many merchants to suffer substantial losses. One of them was the well-known poet and merchant Roemer Pieterszoon Visscher (1547-1620), whose wife gave birth to a daughter three months after the disastrous night. The girl was named Maria Tesselschade ('Texel's damage'), and the incident became known as the Tesselschade disaster. Whilst the sources that contain information of exactly what happened during that fatal night are scarce, the documentation on the aftermath is abundant. One of the sources Van Tielhof found was a request by the Amsterdam

¹³ Herman Ketting, Leven, werk en rebellie aan boord van Oost-Indiëvaarders (1595-1650) (Amsterdam 2002) 28 and 94.

¹⁴ See for an overview of the studies until 2015: J.G.A. Bazelmans, T.J. Maarleveld, and A.B.M. Overmeer, 'Scheurrak SO1 Project', https://doi.org/10.17026/dans-zm3-nkk4, DANS Data Station Archaeology, V1 (2015).

Milja van Tielhof, 'Het wrak Scheurrak SO1: Verslag van een speurtocht'. Unpublished report of a research commissioned by the Dutch National Maritime Museum in 1997. Years later, Van Tielhof processed the results in a publication, see: Milja van Tielhof, 'Texel, kerstavond 1593. De ramp die Tesselschade haar naam gaf', in: Mario Damen and Louis Sicking (eds.), Bourgondië voorbij. De Nederlanden 1250-1650 (Hilversum 2010) 311-324.

Admiralty in name of the duped merchants, directed to the States-General. ¹⁶ The investors complained that they had paid the mandatory convoy money (an export tax), while the goods in question had never left Dutch waters. In the attachment of the claim, there was a list of freighters and skippers involved, and the cargo on which they had paid a tax. Van Tielhof was able to further complete this information with the help of notarial documents like the so-called freight contracts (agreements between skipper and freighter for a certain voyage) and eyewitness accounts of crewmembers of several ships. Finally, in the correspondence between two merchants, Daniël van der Meulen and his business relation Jacques della Faille, Van Tielhof found additional names of ships and skippers who were involved. In total, she traced 27 perished ships, listed in the report 'Het wrak Scheurrak SO1'.¹⁷

Nineteen ships on the list did indeed perish in the storm on or shortly after 24 December 1593 at Texel's roadstead: the combination of a freight contract with Amsterdam as the port of departure, a record in the letter to the States-General, and accounts after the disaster provide conclusive evidence. For the other eight ships, it is less straightforward. Van Tielhof mentions the ships of Pieter Groen and Geert Claesz Leyenaer, which are names deriving from a letter of merchant Hans de Schot to Daniël van der Meulen. A closer look shows that this did not concern two ships, but one: Pieter Groen was the skipper and Geert Claesz Leyenaer the freighter of the vessel. Six other ships were marked as having been wrecked during the Christmas storm, but the sources did not explicitly mention Texel as their location of wrecking. For the ships that were mentioned only in the request directed to the States-General, the port of departure remains unknown. The requesting merchants had paid their convoy money in Amsterdam, which makes Texel a plausible location of wrecking. It was not unusual, however, that ships picked up part of their cargo in Zeeland before setting sail to the Mediterranean, so some ships listed in the request might have perished in Zeeland,

¹⁶ Dutch National Archives (DNA), Archive of the States-General II (SGII), inv. 4877, Letter sent on 8 March 1594 by the Amsterdam Admiralty to the States-General (received 14 April) on request of the Tesselschade merchants, with attachments holding the evidence for the payment of convoy money, 1594 (no folio numbers, scans 53-68).

¹⁷ Van Tielhof, 'Het wrak Scheurrak SO1', 12-17.

¹⁸ This pertains tot he ships Sint Joris (80), Sint Pieter (?), Gans (55), Karsboom (40+), Sint Pieter (130), Melckmayt (120), Sint Joris (80), Hartshooft (70), Fortuijn (100), Vos van Enkhuizen (?), Moortcuyl (150), Indiaen (80), Sint Andries (150), Paradijs (106+), Sint Pieter (55), Griffioen (90), Swarte Arent (140), the ship of Pieter Groen, and the ship of Jan Brouwer from Alkmaar.

¹⁹ Erfgoed Leiden en Omstreken (ELO), Daniël van der Meulen Archives (DVM), inv. 622, no. 9, f. 22 (scan 21), Letter from Hans de Schot to Daniël van der Meulen, 30 December, 1594.

²⁰ The absence of a comma in the text (while the other listed ships are between comma's) indicates that the mentioned freighter and skipper concern one ship instead of two.

²¹ This concerns the ships *Huis van Vrede* (?), *Lybert* (56), *Zeeridder* (163+), the ship of Cornelis Cornelisz, the ship of Cornelis Remmetsz, and the ship of Meerten Westvalens.

which was also heavily hit by the December storms.²² This is true for at least one ship on Van Tielhof's list, the *Sint Christoffel*. The *Sint Christoffel* was an exceptionally large ship of 450 lasts, mostly loaded with rye. Although the first freight contract of 4 November 1593 indicates that the ship was leaving from Texel's roadstead, a second contract of 26 November reveals that the plans had been changed. Not only cargo and conditions were further specified, it is also mentioned that the ship lay in Zeeland for further loading.²³ In addition to the *Sint Christoffel*, a few other vessels picked up a second cargo in Zeeland and would join the fleet to southern Europe.²⁴ After the storm, Della Faille informed Van der Meulen that the *Sint Christoffel* had perished near Sluis.²⁵ It is possible that one of the six ships with an unknown wrecking location sank in Zeeland or even elsewhere. Unfortunately, there is no archival source that elaborates on this.

In Jacques della Faille's letter from 28 December 1593, two ships are explicitly marked as wrecked at Texel in the storm which probably have been overlooked by Van Tielhof. These vessels were freighted by Aert van Erp, a merchant from Brabant who had moved to Antwerp in the late 1580s. According to Della Faille, Van Erp's ships were the 'best of the fleet'.26 One could speculate what can be understood as 'best' in terms of ships: was it the largest or newest ship, or was it loaded with the richest cargo? In the notarial archives, one ship that was part of the Tesselschade fleet could be found that was freighted by Van Erp. This was the Sint Joris that carried a wheat cargo of 80 lasts destined for Genoa. However, neither the ship's size nor cargo can be considered exceptional, and it had no other remarkable features that stand out in the freight contract.²⁷ The identity of Van Erp's other freighted ship remains unknown. When including these two ships and the six ships with an uncertain wrecking location in a revised list, the total number of perished 'Tesselschade ships' that could be identified remains 27. In addition to this, thirteen more vessels that suffered substantial damage could be found in the notarial archives. In Appendix I, table 1, the forty ships are listed, with specifications on the associated skippers, crews, armament, freighters, cargo, and destination.

²² Austrian National Library (ANL), Collection Library of Philipp Fugger (LPF), code 8967, Seite 2021, Fuggerzeitung of 13 January 1594. Online accessible via https://fuggerzeitungen.univie.ac.at/en, last accessed on 15 December 2023.

²³ Stadsarchief Amsterdam, Notarial archives (NA), inv. 64, f. 38, First freight contract of the *Sint Christoffel*, 4 November 1593; Idem, f.61r, Second freight contract of the *Sint Christoffel*, 26 November 1593.

²⁴ ELO, DVM, inv. 558, f. 56-57 (scan 109), Letter from Peter Janssen, 5 February 1594.

²⁵ Idem, inv. 538, f. 121-122 (scan 582), Letter from Jacques della Faille to Daniël van der Meulen, 4 January 1594. Peter Janssen, Van der Meulen's cousin, confirmed the news a month later and stated that the ship perished at Wielingen, a part of the Scheldt river north of Sluis, see: idem, inv. 558, f. 56-57 (scan 109), Letter from Peter Janssen, 5 February 1594.

²⁶ Idem, inv. 538, f. 118-119 (scan 579), Letter from Jacques della Faille to Daniël van der Meulen, 29 December 1593.

²⁷ SA, NA, inv. 64, f. 36 (scan 38), Freight contract of the Sint Joris, 4 November 1593.

The dramatic circumstances of the Tesselschade disaster and the scale of destruction resulted in a stunning amount of details. One of the reasons why, despite the unusually rich information, no conclusive match between Scheurrak SO1 and one of the Tesselschade ships could be made is that the wreck site did not reveal the name of a skipper, freighter, or other high crewmember. It is their names that usually appear in the notarial accounts or in other documents on the aftermath of incidents at sea.²⁸ Scheurrak SO1 must have had a capacity of at least 100 lasts, but its exact size is unknown.²⁹ The wheat cargo also helps little as a selection criterion: the majority of the involved ships were grain carriers. A fragment of Scheurrak SO1 with two wheels carved out of the wood (see image 0-4) might have been part of the ship's hakkebord at the stern that usually carried a decoration referring to the name of the ship. Unfortunately, this did not lead to a match either.³⁰ At the same time, several ships on the list do fit the profile of Scheurrak SO1: the Fortuijn (100), Sint Pieter (130), and Swarte Arent (140), match in size, location of wrecking, and the type of cargo (see Appendix I, table 1). However, for six of the 27 perished ships the capacity is unknown, which makes them all plausible candidates for Scheurrak SO1 as well.³¹ No matter how unfortunate it is that the ship cannot be identified, it still has an important story to tell. The fleet of December 1593 consisted of many Scheurrak SO1-like vessels. The documentation on the Tesselschade disaster thus can lead to a better understanding of Scheurrak SO1, and provide a unique snapshot of the transformational period of the 1590s, for which the administration on shipping survived only in bits and pieces. Van Tielhof's research provides a basis for further historical research on the maritime culture of the 1590s: the sources she consulted for the identification of the ship also contain information on many aspects of the Straatvaart and the maritime world in general. The current historical research on Scheurrak SO1 also aims to be an overarching study that takes into account the full range of finds from the seabed. After years in which many scholars and experts carried out isolated studies on one specific category of finds, the site desperately calls for a more holistic approach. Applying the concept of the maritime cultural landscape is the perfect scholarly instrument, since this involves an interdisciplinary set of sources. The concept was introduced within the maritime archaeological discipline but will be now integrated for the first time in a historical approach.

²⁸ The steersman, helmsman or navigator was a more experienced sailor that was allowed to navigate the ship in absence of the skipper. The term 'first officer' does not apply to the sixteenth-century situation.

²⁹ See for this also paragraph 3.1.

³⁰ Van Tielhof suggested that the wheels might refer to a ship name with 'wagon' in it. However, none of the perished ships in the disaster could be connected to this.

³¹ Even for some of the ships with a capacity listed here, the size is not totally certain, for the capacity is based on the lasts over which the convoy money was paid. In theory it is possible that there were additional cargoes on on board, which results in a higher number of lasts.

Maritime history and objects

Maritime history was recognized as an academic subfield in the late 1950s.³² In the early 1960s, historians focused mainly on the economic aspects of maritime history, and ships were mostly studied as transport vessels that facilitated commerce. From the late 1960s on, topics like shipbuilding, cartography, and navigation techniques also received scholarly attention, but a combination of these subjects assembled in a single study was still rare. Another characteristic of the field of maritime history that it focused strongly on single events that took place at sea, like naval wars, a popular research theme as early as in the nineteenth century. Like in archaeology, there was a sharp borderline drawn between the study of what happened on land and what happened at sea. The former was considered the field of history, the latter of maritime history. In the late 1980s, the field started to open up. Frank Broeze redefined the field of maritime history in 1989, stating that it should be as broad as possible. Not only the study of the use of the sea by humans, but also everything related to this use and everything that derives from it should be considered an integral part of the field.³³ This definition of maritime history crosses the borders of other fields, like that of cultural, economic, environmental, and political history.³⁴ When using Broeze's definition to conduct maritime historical research, the result is an interdisciplinary study. In the last decade of the twentieth century, more and more maritime historians adopted Broeze's view. Instead of focusing on battles and commerce, the 'new maritime historians' focus increasingly on people, and in doing so, they connect life at sea with life ashore.³⁵ When the Oxford Encyclopedia of Maritime History was published in 2007, the field was defined as covering the full range of mankind's relationships to the seas and the oceans of the world.³⁶

Broeze and his followers advocated an interdisciplinary approach, which involves a wide array of sources. This should also include material sources. Traditionally, historians have held a skeptical attitude towards studying material culture. Analyzing material culture, that is, objects and their meaning for people, was intended for those who studied the pre-historical or ancient past.³⁷ Since the 1960s and 1970s, among historians a new interest emerged that focused on marginalized groups in societies. These groups often

³² Francisco Domingues, 'Maritime History and Maritime Archaeology', in: Ben Ford, Donny L. Hamilton, and Alexis Catsambis (eds.), The Oxford Handbook of Maritime Archaeology (Oxford 2011) 907.

³³ Frank Broeze, 'From the Periphery to the Mainstream: the Challenge of Australia's Maritime History', *The Great Circle* 11 (1989) 2.

³⁴ Gelina Harlaftis, 'Forum Introduction: What is maritime history?', *International Journal of Maritime History* 32-2 (2020) 359-360.

³⁵ John Hattendorf, 'State of the Field: Maritime History Today' (online article), Perspectives on History. The Newsmagazine of the American Historical Association, 1 February 2012, https://www.historians.org/research-and-publications/perspectives-on-history/february-2012/maritime-history-today#Note5, last accessed on 10 June 2024.

³⁶ Domingues, 'Maritime History and Maritime Archaeology', 907.

³⁷ Anne Gerritsen and Giorgio Riello, 'Introduction: Material culture history: Methods, practices and disciplines', in: Anne Gerritsen and Giorgio Riello (eds.), Writing Material Culture History (London 2021) 3.

left no traces in written records, and if they did, these sources were often overlooked by scholars, who tended to focus on more powerful groups in society. To study these marginalized groups, historians had to look beyond the written sources and hence a new interest for material culture was born.³⁸ The study of material culture also provided an opportunity to examine the everyday activities of human beings across the breadth of society, which were taken so much for granted that they were not recorded in the past. Although in last decades of the twentieth century the 'material turn' took place,³⁹ Leora Auslander stated in 2005 that historians were still often suspicious of using objects as reliable and useful research entities. According to Auslander, objects were often used as an illustrative supplement in historical research, rather than a valuable and unique source.⁴⁰ Instead, Auslander pleaded for attributing agency to objects.

Objects are given agency in this study in two ways. Firstly, in seeing them as fullyfledged sources, to answer Auslander's call. To echo Giorgio Riello: 'Material objects have a fascinating power: they convey stories, raise unknown aspects, and lead us to ask open questions that defy easy disciplinary, thematic and chronological divides'.41 This is especially true for the material culture of shipwrecks. This has to do with the discrepancy of what was discussed or determined on land, and what actually happened on board the ships when being disconnected from land. In other words: there was an official world that can be studied through historical records, and there was a reality on board, of which the materials sometimes reveal a glimpse. The archaeologists Joe Flatman and Mark Staniforth have convincingly demonstrated this in a case study on smuggling goods aboard English and Dutch East India Company ships. 42 In other cases, excavation results complement or nuance the existing image of certain trading patterns - or raise new questions. The large grain cargo that was found in the late 1980s in Scheurrak SO1 was no surprise considering the historical knowledge on shipping patterns of the late sixteenth century. There were other finds, however, that puzzled researchers. One of them was a large batch of leather shoes, mostly scattered in fragments (see image 0-5). It was known that besides cereals there was also a flow of other commodities present in the Straatvaart: dried fish (mainly cod and herring) in the pioneering phase, but later also

³⁸ Leonie Hannan and Sarah Longair, History through material culture. IHR Research Guides (Manchester 2017) 29.

³⁹ Leonie Hannan and Sarah Longair place the 'material turn' in the 1980s and 1990s, while Anne Gerritsen and Giorgio Riello state in their book *Writing Material Culture History* (2021) that the material turn occurred in the early 2000s, see: Gerritsen and Riello, 'Introduction', 3.

⁴⁰ Leora Auslander, 'Beyond Words', The American Historical Review 110-4 (2005) 1015.

⁴¹ Giorgio Riello, 'The "Material Turn" in World and Global History', *Journal of World History* 33-2 (2022) 224.

⁴² Joe Flatman and Marc Staniforth, 'Historical maritime archaeology' in: Dan Hicks and Marty Beaudry (eds.), *The Cambridge Companion to Historical Archaeology* (Cambridge 2015) 183.

brined meat, pulses, and non-food products like metals and saltpeter.⁴³ There were also cheap English and Netherlandish textiles for the poor, and luxury articles like Moscovian hides for the wealthy. Nothing was known about a trade in shoes, but Scheurrak SO1's batch of 85 pairs seemed too large to be meant for the crew.⁴⁴ With a maximum crew of thirty men on board the ship and assuming that the crewmembers left the sinking ship with a pair of shoes on their feet, this means roughly three extra pairs each. Taking the lower limit of eighteen crewmembers aboard, this would mean four pairs per person. Both four and three extra pairs seems unrealistic. The circulation time of a shoe was around five months and the journey of a Straatvaarder usually took no longer than three months. 45 The presence of shoe repairing necessities, like two lasts (see image 0-6), 46 and a leather strap and apron (see image 0-7 and 0-8) confirms that shoes were mostly repaired on board.⁴⁷ For the current research, Roos van Oosten studied the distribution of shoes at the wreck site. One cluster with used shoes was found at the compartments were the crew slept. This was also the area where the apron and strap, the shoe lasts and a toolbox with shoe repairing tools and a sole were found. The other large cluster of shoes was found at the lowest deck where the victuals were stored, this concerned both used and brand new shoes. The hard evidence for the existence of a trade in shoes on the route between the Low Countries and the Mediterranean comes from a letter from Genoa of 21 June 1592 written by agent Jan Beukentop to his employer merchant Daniël van der Meulen in Leiden. In the letter, Beukentop asked Van der Meulen to ship a cargo to Genoa, and 'most importantly the cargo of mules, for due to the scarcity the price increased by half.48 Although no shoes of the mule-type were found in Scheurrak SO1, this letter proves that Dutch ships transported shoes to the Italian peninsula in the first half of the 1590s. This case shows how fruitful the combination of archaeological results

⁴³ Marie-Christine Engels, Merchants, interlopers, seamen and corsairs: The 'Flemish' Community in Livorno and Genoa (1615-1636) (Hilversum 1997) 74 and 87.

Olaf Goubitz, author of the standard work Stepping through Time: Archeological Footwear from Prehistoric Times until 1800 (2001), analyzed the shoes except for those recovered during the last diving campaign of 1997. Based on the front sheets, Goubitz counted 78 shoes, that originally belonged to 71 pairs, see: Olaf Goubitz, 'De schoenen uit het wrak SO1', unpublished report. A new count carried out by Roos van Oosten in 2021-2022 that included also the finds of the last diving campaign of 1997 lifts the number to 85 pairs. The remains of the knee-high boots are not included in this number. The results of Van Oosten's research were presented at an expert meeting on 23 June 2022 in Leiden.

⁴⁵ Olaf Goubitz, 'Schoeisel', in: J. Braat, J.H.G. Gawronski, J.B. Kist, A.E.D.M. van de Put, and J.P. Sigmond, Behouden uit het Behouden Huys. Catalogus van de voorwerpen van de Barentsexpeditie (1596) gevonden op Nova Zembla: De Rijksmuseumcollectie, aangevuld met Russische en Noorse vondsten (Amsterdam 1998) 258.

⁴⁶ SO1-23241 and SO1-23289. These finds contributed to Goubitz' statement that the majority of shoes on board were trading commodities.

⁴⁷ SO1-23377 (apron) and SO1-23378 (strap). This find, that was recovered after Goubitz research, was determined by Marquita Volken during an expert meeting on 19 October 2022 in the depot at Batavialand, Lelystad.

⁴⁸ ELO, DVM, inv. 153, f. 76 (scan 154), Letter by Jan Beukentop from Genoa to Daniël van der Meulen, 21 June 1592.

and historical sources can be: one of the mysteries of Scheurrak SO1 could be solved by a single archival document. In turn, the study of material culture was needed to have more complete picture of trading commodities connected to the *Straatvaart*. The second way by which objects have agency in this research, is that the materials of Scheurrak SO1 determine which topics are addressed in this research, and hence how the study is structured. The objects found at the wreck site are used as a vantage point. This approach leads to a non-traditional way of writing history, and therefore also results in a new perspective on a period in history that has already been intensively studied in the past.

Maritime archaeology and the maritime cultural landscape

Like the field of maritime history, maritime archaeology has undergone many developments since its conception. Underwater research incidentally took place prior to the Second World War, but experienced rapid development after the invention of scuba diving in the 1940s. From the 1950s to the 1970s, underwater research was mostly experimental in nature with a strong focus on technical improvement. Just as in the historical discipline, in archaeology there was a sharp line between the study of what happened on land and what at sea, the domains of terrestrial and underwater research respectively. In the late 1970s, the demand for concepts to build a maritime theoretical framework grew. In 1978, Keith Muckelroy set this in motion by introducing a definition of the new subfield which he called maritime archaeology, defined as 'the study of material remains of human activities on the seas and interconnected highways'. In the same year, Christer Westerdahl introduced a concept that impacted the new discipline to a great extent: the maritime cultural landscape. 50

Between 1975 and 1980, Westerdahl was surveying the archaeological remains of Norrland, a coastal area in Sweden. While the focus initially lay on the underwater remains of the area, Westerdahl argued that the remains on the nearby coast were strongly connected to the underwater structures. Therefore, he needed a scientific term that united both the remnants of maritime culture underwater as well as on land. In the process, Westerdahl defined maritime culture as: 'a comprehensive name for all those modes of thinking, customs, artefacts, and patterns of acting directly connected with a life at sea and dependent on the sea and its resources in a wide meaning'. The concept of the 'maritime cultural landscape' was defined as 'the network

⁴⁹ Keith Muckelroy, Maritime Archaeology: New Studies in Archaeology (Cambridge 1978) 4.

⁵⁰ Christer Westerdahl, 'The maritime cultural landscape', *The International Journal of Nautical Archaeology* 21-1 (1992) 5.

⁵¹ Christer Westerdahl, 'Maritime culture in an inland lake?', Built Environment 65 (2003) 19. See for further reading on maritime culture: Arkadiusz Kolodziej, 'On Maritime Culture: Interpretations, Scope of Impact, and Controversies', in: Agnieszka Kolodziej-Durnas, Frank Sowa, and Marie C. Grasmeier (eds.), Maritime Spaces and Society. International Studies in Maritime Sociology vol. 1 (Leiden/Boston 2022) 129-144.

of sea routes and harbours, indicated both above and underwater'. The introduction of the concept also stemmed from Westerdahl's criticism on the customary practice of archaeologists to carry out research along the sharp conceptual border between terrestrial and underwater archaeology, and to study shipwrecks as isolated finds. New insights by Westerdahl resulted in the refining of the concept, and when the maritime cultural landscape went international in 1992, he defined it as follows: 'the whole network of sailing routes, with ports, havens and harbours along the coast, and its related constructions and other remains of human activity, underwater as well as terrestrial'. In 2013, Westerdahl introduced a list of seven 'sublandscapes': of economy, transport and communications, power, outer resources, inner resources, cognition, and leisure. Lach of these sublandscapes focuses on a different component of the maritime cultural landscape, which helps to study and systematize the remains in the research area. Westerdahl has continued to refine and redefine the concept over the years, but most scholars use the definition that was published in 1992.

The landscape of the Low Countries played a crucial role in the development of economic growth through shipping and trade in the early modern period. The presence of rivers, lakes and other bodies of water facilitated the domestic transport that was necessary for the trade. Many of the waterways led to the Zuiderzee estuary, which became the most important traffic hub. Maritime archaeologist Yftinus van Popta wrote an extensive study on the archaeology of the Zuiderzee. He focused on the northeastern side of the basin, roughly what is now the reclaimed land of the Noordoostpolder. In this area, he studied the maritime culture during the period 1100-1400, when land reclamations and peat erosion shaped the Zuiderzee to a large extent.⁵⁵ In doing so, Van Popta used the concept of the maritime cultural landscape as a framework, and thematized this in an article he wrote in collaboration with Westerdahl and Brad Duncan in 2019.56 Although the period of study differs from that of the current research, much can be learned from their methodology and approach. The three authors applied all key concepts related to the maritime cultural landscape to the Zuiderzee region.⁵⁷ Following Westerdahl's categorization of different types of transport zones, the Zuiderzee region was labelled as an estuary lagoon zone, which connects the North

⁵² Christer Westerdahl, 'The Maritime Cultural Landscape', in: Ben Ford, Donny L. Hamilton and Alexis Catsambis (eds.), *The Oxford Handbook of Maritime Archaeology* (Oxford 2013) 735.

⁵³ Westerdahl, 'The maritime cultural landscape' (1992), 6.

⁵⁴ Westerdahl, 'The Maritime Cultural Landscape' (2013), 746.

⁵⁵ Yftinus van Popta, When the Shore becomes the Sea. New maritime archaeological insights on the dynamic development of the northeastern Zuyder Zee region (AD 1100 – 1400), the Netherlands (Dissertation, University of Groningen, 2020) 5.

⁵⁶ Yftinus van Popta, Christer Westerdahl, and Brad Duncan, 'Maritime Culture in the Netherlands: accessing the late medieval maritime cultural landscapes of the north-eastern Zuiderzee', *The International Journal of Nautical Archaeology* 48-1 (2019) 172-188.

⁵⁷ Idem, 177-181.

Sea to the Dutch, Belgian, and German hinterland. The estuary lagoon zone overlaps in the east with a river valley based zone, the IJssel river zone, in the north with the transport zone of the Baltic Sea, and in the northwest with the coastal transport zone of the North Sea. The coastal transport zone of the North Sea is where Scheurrak SO1 is located. The zone also plays an important role in the ship's maritime cultural landscape, for here the roadstead was situated, as well as the three islands of Texel, Vlieland, and Terschelling, whose communities were important facilitators of the shipping sector. The systematical analysis of the zone by the Van Popta, Westerdahl, and Duncan contributes to a better understanding of the meaning of the estuary for Scheurrak SO1 and other ships in the late sixteenth century.

A holistic study of an unidentified ship

All existing (archaeological) studies in which the maritime cultural landscape is used, are marked by a strong geographical focus. A specific area defined by a shared maritime culture is delimited and within its borders the landscape is mapped. This does not mean that there are no cultural phenomena that extend beyond the boundaries of the demarcated area, but in essence a chosen region is the starting point. The maritime cultural landscape also lends itself well as a research method for a historical study – something that has not been done before. What this dissertation aims to do, is to understand a maritime society and its culture by studying a shipwreck. Not as an isolated find, exactly what Westerdahl called his fellow maritime archeologists to step away from, but as a carrier of information that operated in a widespread network. Although a ship is never a closed time capsule, it is still a reflection of the culture of a specific time period, especially a ship like Scheurrak SO1 with its abundance of finds. Archaeologist Jerzy Gawronski stated it like this:

A ship is a complex carrier of information, not only literally saved in its material remnants, but also metaphorically present, turning a ship into an accumulation of messages. Each individual ship is a junction of information which circulated within an international communication system.⁶¹

⁵⁸ Idem, 180-181 (see figure 8, zone 1).

⁵⁹ See for example: Van Popta, When the Shore becomes the Sea, and: Brad Duncan, The Maritime Archaeology and Maritime Cultural Landscapes of Queenscliffe: A Nineteenth Century Australian Coastal Community (Dissertation, James Cook University, 2006).

⁶⁰ Christer Westerdahl, 'Ships for ship's sake? Flipping the label. From ships and landscapes to landscapes and ships (1997-2012)' in: Jerzy Gawronski, André van Holk, and Joost Schokkenbroek (eds.), Ships and Maritime Landscapes. Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology (Amsterdam 2012) 6.

⁶¹ Jerzy Gawronski, 'Cities and oceans. The urban development of 16th and 17th century Amsterdam and maritime culture', in: Jerzy Gawronski, André van Holk, and Joost Schokkenbroek (eds.), *Ships and*

Applying this definition to the current research, makes Scheurrak SO1 the 'junction of information' and the Dutch maritime trade network the 'international communication system'. The objects found in the vessel are information carriers, but so is the ship as a whole. When studying Scheurrak SO1 in this way, Auslander's call to give objects more agency in historical research is met on all fronts. By implementing the maritime cultural landscape in the research on Scheurrak SO1, the approach is not to study the landscape of a limited geographic region of – in this case – the Zuiderzee or Texel's roadstead. Instead, the idea is to draw up the (historical) network around the ship, which can also be seen as a landscape. Applying the maritime cultural landscape in this way, is also fleshing out Broeze's definition of maritime history. One of the examples of a broad approach to maritime history he gave in 1989 is the following:

For example, if one is dealing with merchant shipping, it should not only be about the construction of the ship and the navigation from port to port, but also about the shipowners and their business management and political activities, the commodities that are carried and the consumption and production these represent, the importers and exporters with their bankers, the port city industrialization these commodities and merchants stimulate, the seafarers with their living standards and trade unions, etc., etc. ⁶²

All the aspects Broeze mentioned make up the network or landscape around Scheurrak SO1, with the vessel itself being the core and vantage point of research. This landscape extended from the Baltic as the grain supplier, to the Mediterranean port cities as sales markets, and the Dutch Republic as the place were merchants and shipowners were managing their business and where seafarers came from. The places where materials for shipbuilding came from, by Westerdahl called the outer resources sublandscape,⁶³ are also included, in the case of Scheurrak SO1 Scandinavia and Germany. The sublandscape of transport and communication (sailing routes, beacons and buoys, light houses and ports etc.⁶⁴) stretches from the pilots living at the Wadden Sea islands to *La Lanterna*, the lighthouse of the Genoese harbour. Westerdahl also emphasizes the importance of rituals in the landscape.⁶⁵ Religious carvings to avert evil found on objects recovered from Scheurrak SO1 were also used by English and Swedish sailors. This shows the that the maritime cultural landscape mapped in the

Maritime Landscapes. Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology (Amsterdam 2012) 14.

⁶² Broeze, 'From the Periphery to the Mainstream', 2.

⁶³ Westerdahl, 'The Maritime Cultural Landscape' (2013), 746.

⁶⁴ Idem, 743.

⁶⁵ Christer Westerdahl, 'Seal on Land, Elk at Sea: Notes on and Applications of the Ritual Landscape at the Seaboard', The International Journal of Nautical Archaeology 34-1 (2005) 13.

current study goes beyond the borders of a 'national' area with a shared maritime culture. Scheurrak SO1's maritime cultural landscape instead covers large parts of late sixteenth and early seventeenth-century Europe, as is illustrated by image 0-9.

Westerdahl and other scholars working with the maritime cultural landscape emphasized the importance of using an interdisciplinary set of sources. 66 When applying the concept in historical research, this is just as important. What does and does not belong to the landscape is, on the one hand, determined by the finds at the wreck site. On the other hand, Scheurrak SO1 operated in a certain network of Dutch maritime trade, so all aspects that were involved in organizing this trade are also part of the landscape. Many of these aspects do not come into focus when solely studying the wreck site, so here historical sources provide an additional layer. The European seaborne trade of the late sixteenth century has been mostly studied from the field of economic history, with less attention for cultural aspects. The historians Heeringa and Kernkamp published economic studies on the Low Countries' trade with the Mediterranean in the 1930s.⁶⁷ Fernand Braudel stated in La Méditerranée that in the beginning of the seventeenth century, the Dutch, English and French took over the trade in the region, described by him as the 'northern invasion'.68 In the 1950s and 1960s, the Belgian historian Wilfrid Brulez worked on the Low Countries trade in the Mediterranean, with a focus on the Antwerp and Flemish merchants in particular. 69 The first to focus on the Dutch trade with Italy specifically was Simon Hart, 'De Italië-vaart' (1978), which also gave rise to qualitative research on the theme. 70 Several studies followed on specific routes of this trade. Maartje van Gelder and Marie-Christine Engels have shed light on the Netherlandish trade with Venice and Livorno respectively.⁷¹ Milja van Tielhof, already mentioned in relation to her search on Scheurrak SO1, included the Straatvaart in her

⁶⁶ Van Popta, Westerdahl, and Duncan, 'Maritime Culture in the Netherlands', 176.

K. Heeringa, Bronnen tot de geschiedenis van den Levantschen handel, 1590-1826. Rijks geschiedkundige publicatiën, uitgegeven in opdracht van z. exc. den Minister van Binnenlandsche Zaken (The Hague 1910); J.H. Kernkamp, De handel op den vijand 1572-1609, II (Utrecht 1934); J.H. Kernkamp, 'Scheepvaart- en handelsbetrekkingen met Italië tijdens de opkomst der Republiek', Mededeelingen van het Nederlandsch Historisch Instituut te Rome, tweede reeks, deel VI (The Hague 1936).

⁶⁸ Fernand Braudel, *The Mediterranean and the Mediterranean world in the age of Philip II*, vol. 1 (New York 1972) 634. The original text was published in French in 1949.

W. Brulez, 'La navigation flamande vers la Méditerranée à fin du 16° siècle', Revue Belge de Philologie et d' Histoire XXXVI (1958) 1210-1242; Idem, De firma Della Faille en de internationale handel van de Vlaamse firma's in de 16° eeuw (Brussels 1959); Idem, 'L'exportation des Pays-Bas vers l'Italie par voie de terre au milieu du XVIe siècle', Annales. Economies, sociétés, civilisations XVI (1959) 461-491; Idem, 'De diaspora der Antwerpse kooplui op het einde van de 16° eeuw', Bijdragen voor de Geschiedenis der Nederlanden 15 (1960) 279-306.

⁷⁰ Simon Hart, 'De Italië-vaart (1590-1620)', Zeventigste jaarboek van het genootschap Amstelodamum. Liber amicorum I.H. van Eeghen (Amsterdam 1978) 42-60.

⁷¹ Maartje van Gelder, Trading Places. The Netherlandish Merchants in Early Modern Venice (Leiden 2009); Engels, Merchants.

book on the Baltic trade.⁷² The current research is innovative because it not only uses material culture as a starting point, but also includes archival sources which until now were only consulted for answering questions in economic-historical studies instead of using them to study the culture of the European trade in the late sixteenth century.

The evolution of Scheurrak SO1

Maritime archaeologist Michael Schiffer was one of the first scholars to point to the discrepancy between original deposition of the wreck and the state in which archaeologists encounter the remains of the ship: various factors, both caused by humans and by natural processes, can affect a wreck site over time.⁷³ This theory overturns the oft-heard concept of a shipwreck as a closed time capsule. Muckelroy further developed Schiffer's ideas and introduced a system to study underwater site depositional processes.⁷⁴ His wreck formation process theory pertains to a flow diagram of five steps: the process of wrecking, salvage operations, the disintegration of perishables, seabed movement, and the characteristics of excavation methodologies (see image 0-10). Together, these steps are the 'evolution of a shipwreck'.75 Although Thijs Maarleveld has shown that Muckelroy's scheme does not fit seamlessly on the Wadden Sea wrecks due to the environment's particularly dynamic nature, ⁷⁶ all aspects addressed in the scheme have somehow impacted Scheurrak SO1. The turbulent weather, the tidal effects increasing the currents, and the shallow waters that characterize the Wadden Sea, were as much a threat for the ships back then, as they are for the wrecks today.⁷⁷ In such a dynamic environment, large quantities of sediments are being moved. Paradoxically, moving sediments can lead to the discovery of a new wreck, but also to destabilization and erosion of wrecks, and to objects and fragments being washed away from archaeological sites. Scheurrak SO1 sunk in a storm. The hypothesis is that it landed on the seabed on its starboard side, causing the bottom and port side to be up in the water. The presence of axe marks on the port side - traces of salvaging attempts - underline this. Possibly

⁷² Milja van Tielhof, The 'Mother of all trades': The Baltic grain trade in Amsterdam from the late 16th to the early 19th century (Leiden 2002).

⁷³ See for more on this: Michael Schiffer, 'Archaeological context and systemic context', American Antiquity 37 (1972) 156-165 and: Michael Schiffer, Behavioral Archaeology (1976).

⁷⁴ Ian Oxley and Matthew E. Keith, 'Introduction: Site Formation Processes of Submerged Shipwrecks', in: Matthew E. Keith (ed.), Site Formation Processes of Submerged Shipwrecks (Gainesville 2016) 3.

⁷⁵ Keith Muckelroy, 'The integration of historical and archaeological data concerning an historic wreck site: The Kennemerland', *World Archaeology* 7-3 (1976) 282. The theory is further elaborated on in: Muckelroy, *Maritime Archaeology*.

⁷⁶ The seabed movement that Muckelroy describes as the last step before what the archaeologists see on the seabed, is an ongoing process in the Wadden Sea. Also the shallowness, the state of the bottom and the water temperature influence the Dutch wrecks, see: Thijs Maarleveld, *Archaeological heritage management in Dutch waters: exploratory studies* (ROB/NISA 1998) 63.

⁷⁷ Martijn Manders, Preserving a layered history of the Western Wadden Sea. Managing an underwater cultural heritage resource (dissertation, Leiden University, 2017) 68-69. See this study for a full overview of all the cultural and natural threats affecting the wrecks in the western Wadden Sea.

disrupted by the axe impacts, the port side broke down first, whereafter the bottom got separated from the starboard side at the bilge, the transition from bottom to board. With the port side gone, the decks ended up free in the water. Due to the current and the pressure of the water, the decks were partly broken off from the construction, and partly deposited on the starboard side, covering the layer of finds there.⁷⁸ The starboard side eventually sunk deeper into the sediments, meaning that the objects and the ship's timber were preserved there from an early stage due to the lack of oxygen. When the wreck was discovered in the 1980s, the starboard side was found well preserved, but from the port side planking only small fragments were found; objects located closer to the port side of the ship must have flushed away. Over the centuries, it is possible that at certain moments parts of the site were exposed due to the changing seabed.⁷⁹ Even under the sediments the degradation of a site continues. A variety of organisms can affect the remains, like bacteria, fungi, crustaceans, and wood eating organisms like the shipworm. Also chemical processes can affect a wreck site. The presence of metals in an underwater environment inherently leads to heavy corrosion, and hence the majority of the metal finds of Scheurrak SO1 are heavily impacted.

No less threatening than nature is human intervention. Around the turn of the century, academic interest emerged for the cultural factors that influence an underwater cultural heritage site. The salvaging of wrecks is the best-known example of this. Salvaging can be layered, including primary salvage, referring to the aforementioned recovery of materials by those involved at the time of wrecking, and secondary salvage, referring to the recovery of materials by professional or sports divers in modern times. Traces of primary salvaging operations are visible on Scheurrak SO1. It is not clear whether these were successful, but when examining Scheurrak SO1's material culture, it must be taken into account that objects could have been deliberately removed from the ship shortly after the wrecking. Maybe this specifically concerned the most valuable items, or maybe it was just the materials and commodities that could be easily accessed. Getting a grip on secondary salvaging is just as difficult. The professional excavation of Scheurrak SO1 is well recorded, but sports divers have visited and maybe even looted the wreck. When scuba equipment became widely available in the 1970s, recreative diving

⁷⁸ For a plausible scenario of the deposition of the ship on the seabed, see also: Alice Overmeer, Schipbreuk op het wad. Een onderzoek naar de inrichting van het Scheurrak SO1-wrak (master thesis, Leiden University, 2000) 8.

⁷⁹ The Texelstroom, of which Scheurrak Ommedraai is a tidal channel, has been moved southwards in the past decades.

⁸⁰ Martin Gibbs, 'Cultural Site Formation Processes in Maritime Archaeology: Disaster Response, Salvage and Muckelroy 30 Years on', The International Journal of Nautical Archaeology 35-1 (2006) 4-6.

⁸¹ Martin Gibbs and Brad Duncan, 'Cultural Site Formation Processes Affecting Shipwrecks and Shipping Mishap Sites', in: Matthew E. Keith (ed.), Site Formation Processes of Submerged Shipwrecks (Gainesville 2016) 187, after Michael McCarthy, Iron and Steamship Archaeology: Success and Failure on the SS Xantho (New York 2001) 93.

became popular and the salvaging of underwater archaeological sites increased, also in the Wadden Sea.⁸² Gibbs and Duncan have pointed to the social aspects of modern day salvaging, stating that many coastal communities have integrated it into their daily lives.83 A long tradition of wreck diving on the islands of Texel and Terschelling is an example of this. Other human threats can be fishing, due to the dragging of nets over the seabed, and, in case of the environment of Scheurrak SO1, the placing of installations for mussel farming. Even archaeology itself can be a threat for wrecks, when not carried out properly. During the pioneering excavations on Scheurrak SO1 in the 1980s and 1990s, trial and error sometimes also led to situations that were detrimental. The winning of information sometimes comes at the expense of preserving material and vice versa: archaeological fieldwork in general is inherently destructive. The natural and human threats mostly cause disappearance of structures and objects. At the same time, at the Scheurrak SO1 site objects have been encountered that did not originally belong to the ship. The most obvious ones are modern fishing weights and aluminium parts. More difficult to distinguish from the original inventory are early modern flushed-in objects.⁸⁴ Among them is a seventeenth- or eighteenth-century glass bottle (see image 0-11), four tobacco pipe heads (three clay and one wooden), and a fragment of a clay pipe stem (see image 0-12).85 The clay pipe fragments were dated to the eighteenth century, and the wooden exemplar even to the nineteenth century. 86 In any case, the evolution of the wreck site has to be kept in mind when studying Scheurrak SO1.

Excavating, interpreting, and preserving Scheurrak SO1

Scheurrak SO1 was the first ship professionally excavated underwater in the Netherlands. Simultaneously, the site 'Aanloop Molengat' was being excavated, with the remains of a large seventeenth-century merchantman. §7 The excavations were enabled by an emerging

⁸² Arthur B. Cohn and Joanne M. Dennis, 'Maritime Archaeology, the Dive Community, and Heritage Tourism', in: Ben Ford, Donny L. Hamilton, and Alexis Catsambis (eds.), *The Oxford Handbook of Maritime Archaeology* (Oxford 2011) 1056.

⁸³ Gibbs and Duncan, 'Cultural Site Formation Processes', 201.

⁸⁴ Flushed-in objects (*inspoelingen*) refer to objects that did not belong to the wreck site at the time of wrecking but have been translocated and ended up at the site in a later stage.

⁸⁵ Glass bottle: SO1-300, pipe fragments: SO1-1002, SO1-32036, SO1-32523, SO1-9001, and SO1-24003.

⁸⁶ The clay tobacco pipes were determined by Bert van Lingen from the PKN (Pijpologische Kring Nederland), the association for research on historical tobacco pipes in the Netherlands. For all other objects recovered from Scheurrak SO1 it is assumed that they belonged to the ship in operation, although, Muckelroy's and Gibbs' work show that there is always a small chance that their presence in the wreck is the result of salvage operations or translocations from other ships during the storm. In any cases, the covering with sediments must have happened soon after the wrecking so the translocations cannot be modern.

⁸⁷ For an overview article on this wreck, see: Thijs Maarleveld, 'Aanloop Molengat. Maritime archaeology and intermediate trade during the Thirty Years' War', *Journal of Archaeology in the Low Countries* (2012) 95-149.

interest of the government in underwater cultural heritage, and a growing demand for a public policy for the matter. In turn, this interest was for a large part driven by the increasing level of (illegal) salvaging of the Wadden Sea wrecks.⁸⁸ The small professional diving unit of the Department of Archaeology Underwater (AAO) established under the supervision of the former Ministry of Welfare, Public Health and Culture (WVC) and led by Thijs Maarleveld started the research on Scheurrak SO1 in 1986.89 The 1986 diving campaign was an exploratory research. Between 1987 and 1997, with the exception of the year 1995, every summer excavations took place on Scheurrak SO1. There were two main pillars in the pioneering research: the development of a method of underwater research, and the study of the ship's construction. When a rich layer of objects was found, material culture was added as the third pillar. Scheurrak SO1's construction was mapped and thousands of objects were excavated. There were also plans to excavate the ship it its entirety, but this proved unfeasible due to financial reasons. Reorganizations led to the establishment of the Netherlands Institute for Ship- and underwater Archaeology (NISA) in 1994, that from then onwards, carried out all professional excavations including that of Scheurrak SO1. During the excavations, thousands of pages of diving reports and find registration lists were produced. Further documenting and research was carried out during the excavations, and continued after the last campaign of 1997. Despite the comprehensive documentation on Scheurrak SO1, it never came to a synthesis of all the information. Everything was collected for a deposition at the Data Archiving and Network Services (DANS) in 2015, this dataset largely forms the starting point of the Scheurrak SO1 2020-2024 project.90

Although the establishment of the NISA was a big step towards a healthy discipline of maritime archaeology, it had not yet put the preservation of underwater heritage on the political agenda. In 1988, the Monuments Law of 1969 was extended to also cover underwater cultural heritage, but in practice the government had little eye for the underwater sites. In the early 2000s, Maarleveld addressed this issue in founding an underwater heritage management unit at the Rijksdienst voor Oudheidkundig Bodemonderzoek (ROB), that, by then, had incorporated the NISA. Also internationally, legislation pertaining underwater cultural heritage started to emerge in the 1980s, starting with the 1982 Law of the Sea Convention that, among others, redefined the borders of maritime zones and allocated responsibilities and rights

⁸⁸ Manders, Preserving a layered history, 16.

⁸⁹ Ministerie van Welzijn, Volksgezondheid en Cultuur. This ministry was established in 1982 and was incorporated in the Ministry of Public Health, Well-being and Sports (VWS) in 1994. The field of culture was not covered by the VWS, so this was put under the authority of the Ministry of Education, Culture and Science (OCW).

⁹⁰ J.G.A. Bazelmans, T.J. Maarleveld, and A.B.M. Overmeer, 'Scheurrak SO1 Project', https://doi. org/10.17026/dans-zm3-nkk4, DANS Data Station Archaeology, V1 (2015).

⁹¹ Jens Auer and Martijn Manders, 'Obituary: Thijs Jakob Maarleveld, 21 October 1953 – 11 March 2021', International Journal of Nautical Archaeology 50-1 (2021) 214-216.

to coastal states.⁹² It also obligated the subscribing states to protect their underwater cultural heritage and to seek international cooperation in doing so.⁹³ Another gamechanger was the 2001 UNESCO Convention on the Protection of Underwater Cultural Heritage that provided the obligations of the Law of the Sea Convention with a framework of heritage ethics and legislation, which can be seen as a major step forward to a decent international policy on heritage management.⁹⁴ In 2016, the Monuments Law was replaced by the Heritage Act (*Erfgoedwet*). From now on, illegal excavations that before could only be proved by witnessing the act itself, could now be reported based on traces of disturbance of the site.

A series of financial cutbacks and a change in prioritisation resulted in the dissolving of the NISA diving team in 2006. In that same year, the ROB became the Rijksdienst voor Archeologie, Cultuurlandschap en Monumenten (RACM) after a fusion with the Rijksdienst voor Monumentenzorg (RDMZ). A period of stagnation in terms of research and conservation of underwater heritage followed. In 2007, the 1992 Valetta Treaty (also known as the Malta Convention⁹⁵) was implemented in Dutch law. One of the consequences was the decentralization of heritage management: the responsibility of archaeology and heritage was given to the Dutch municipalities. The municipalities lacked both awareness for the water basins in the region as well as capacity to intervene when heritage was at risk. The result was that maritime sites were more or less unprotected against human and natural threats. Among maritime archaeologists, the demand grew for a national policy and steady basis for the preservation of wrecks and other maritime finds. Between 2007 and 2010, a group of maritime archaeologists led by Martiin Manders worked on a policy. This accumulated in the Maritime Programme established at the Rijksdienst voor het Cultureel Erfgoed (RCE, the successor of the RACM) that started in 2012. In 2021, the programme was terminated and the underwater research and heritage management became part of the standard policy of the RCE.

Five years after the last diving campaign on Scheurrak SO1, an inspection dive was organized in 2002. In the spring of 2023, a combined team of RCE-divers and (international) commercial divers carried out excavations on the wreck with the aim to obtain more information on the ship's construction. In between the inspection visit of 2002 and the excavations of 2023, Scheurrak SO1 was monitored by help of a multibeam

⁹² Thijs Maarleveld, 'Ethics, Underwater Cultural Heritage, and International Law', in: Ben Ford, Donny L. Hamilton, and Alexis Catsambis (eds.), The Oxford Handbook of Maritime Archaeology (Oxford 2011) 927.

⁹³ Idem, 935.

⁹⁴ Patrick J. O'Keefe, Shipwrecked heritage: A commentary on the UNESCO Convention on Underwater Cultural Heritage (Leicester 2002).

⁹⁵ Fully the European Convention on the Protection of the Archaeological Heritage.

⁹⁶ Since 2006, also commercial parties that are licensed carry out excavations on request of the RCE, see: Manders, Preserving a layered history, 18-19. See for a report on the 2023 excavations: 'Onderzoek naar Scheurrak SO1 van start', weblog on the website of the RCE, https://www.cultureelerfgoed.nl/

sonar sounding system. In 2003, the ship was fully covered with sediments, but the currents rapidly deepened the area round the wreck and the layer of sediments on the construction started to disappear. In 2017, the ship was almost completely washed free (see image 0-13) and quick intervention was required. In 2018, large sections of the site were covered with debris netting.⁹⁷ In the space between the nets and the wreck, the sediments washed along by the current were deposited on the wreck, creating a burial mound on the seabed in order for the ship to be covered again (see image 0-14).⁹⁸ Although the covering technique works properly, worrying is that around the wreck, the seabed has deepened so much that prehistoric ice wedges appear on the most recent multibeam footage (see image 0-15). The layer that has disappeared, is the dynamic sand layer in which wrecks and other archaeological remains rest. If this process continues at this rate, it would mean the end of Scheurrak SO1 in the short term.⁹⁹

Sources

The Scheurrak SO1 2020-2024 research project results in two dissertations. The work by Hendrik Lettany is an archaeological study focusing on the ship's construction, 100 while the current study is a historical study which uses material culture as its vantage point. Within the two subprojects, the aim is to use both archaeological and historical sources, which distinguishes the project from the majority of other historical and archaeological publications on maritime cultural themes. The material sources consulted for this study are largely defined as the finds at the Scheurrak SO1 site, more than six thousand in total.¹⁰¹ This number includes also the smallest fragments and unrecognizable specimens. After examination, different parts appeared to belong to one object, for example the staves of a barrel, and one find appeared to contain multiple objects, such as the toolboxes. This reduces the usable sources to about three thousand (complete and incomplete) objects. Finds at shipwreck sites have been traditionally classified in order to structure the data and examine the completeness of the site. The limitations and disadvantages of such classifications aside, for now it helps to briefly summarize the finds. Archaeologist Alice Overmeer applies the shipwreck classification developed by Reinder Reinders to the site, which, in turn, is based on Muckelroy's classification:

actueel/weblogs/archeologie/2023/scheurrakso1, last accessed on 11 July 2024. The official excavation report is in preparation. As was expected, apart from some ropework no objects were encountered.

⁹⁷ Johan Opdebeeck and Thijs Coenen, In zand gevangen II: Verkenning, onderhoud en monitoring van veertien scheepswrakken in de westelijke Waddenzee in de periode 2018-2022. Rapportage Archeologische Monumentenzorg 277 (Amersfoort 2023) 21-25 and 49-50.

⁹⁸ Manders, Preserving a layered history, 124.

⁹⁹ Personal comment by Seger van den Brenk, soil expert at Periplus Archeomare.

¹⁰⁰ Lettany, New perspectives.

¹⁰¹ The majority finds of Scheurrak SO1 are kept in the national depot for ship archaeology (Nationaal Scheepsarcheologisch Depot, NSD) of Batavialand (Lelystad) and part of the 'maritieme-archeologische Rijkscollectie'.

Table 0.1: Classification scheme for shipwrecks.

A ship and rigging	
B equipment	1 ship's equipment
	2 business equipment
	3 military equipment
C inventory	4 documentation
	5 navigation
	6 tools
	7 household items
	8 kitchenware
	9 eating and drinking utensils
	10 victuals
D personal belongings and human remains	
E cargo, commodities, and catch (fish)	
F non-related artefacts (flushed in)	

Reinder Reinders, 'The inventory of a cargo vessel wrecked in 1888', in: C.O. Cederlund (ed.), Postmedieval Boat and Ship Archaeology. BAR International Series 256 (Oxford 1985) 88, based on: Muckelroy, Maritime Archaeology, 216.

Overmeer states that all of the categories are highly represented in Scheurrak SO1, especially in comparison to other wrecks. Moreover, all types of materials – like wood, bones, ropes, textile, leather, ceramics, and metal – are preserved, which testifies to exceptional conservation conditions. ¹⁰²

No one has ever seen Scheurrak SO1 in its entirety. Due to the constant current and large amounts of sediment on the ship, only small sections could be examined each time during the excavations. By surveying and mapping these small areas, a detailed survey map or site plan could be created (see image 0-2). This map and the dive reports with the underwater observations drawn up by the divers of the AAO/ NISA are the main sources on the ship's construction, layout, and distribution of finds. In addition to Scheurrak SO1's finds, the archaeological sources include parallel finds from other shipwrecks or terrestrial sites. Objects from archaeological contexts that, according the historical sources, once must have been on board Scheurrak SO1 but were not recovered, are also studied. Of great importance here are the finds from the English warship the Mary Rose (sunk in 1545) and the archaeological site of the Dutch wintering at Nova Zembla (1596-1597). Unlike Scheurrak SO1, the Mary Rose was a warship. It differs from Scheurrak SO1 in terms of dating, but in terms of material culture of everyday shipboard life (for example tools and utensils) little had changed in fifty years. Moreover, it is one of the few sixteenth-century ships that sunk while in operation and on which a holistic (historical and archaeological) study has been

¹⁰² Overmeer, Schipbreuk op het wad, 41.

conducted. 103 The Nova Zembla site was anything but a ship in operation, but here the dating is so close to Scheurrak SO1 that for this reason its finds lend themselves very well to comparative research. 104

The corpus of historical sources used in this study is multifaceted in nature. Archival sources on the Straatvaart include archives of merchant businesses, correspondence between merchants, freight contracts, eyewitness accounts by seafarers, news tidings, and chronicles. But historical sources also come in other variations, like charts, pilot guides, and weather reports, and visual sources like prints and paintings, and even architecture. They all explain different components of Scheurrak SO1's landscape and will be used throughout this study. Despite the wide variety of sources, some entries need to be discussed in further detail here. The notarial archives are of considerable importance, with those of Amsterdam making up the largest share, followed by Hoorn and Enkhuizen. 105 It was at the notary where maritime ventures between skipper and merchants could be made legally effecting by means of a freight contract. These contracts have been frequently studied by economic historians, but since they contain information on skippers, merchants, cargo, ship size, the planned itinerary, and sometimes even on crew and armament, they have value for cultural historians as well. It was also at the notary where people testified, filed complaints, and sued others in case of trouble at sea. In the 1590s, Amsterdam even had a maritime specialist among the notaries: Jan Franssen Bruijningh. The documents from his hand offer a rare glimpse into the cultural world of traders and seafarers, and can be considered a true goldmine for maritime historians. 106

Other sources of major importance are the archives of two merchants: Claes Adriaensz van Adrichem and Daniël van der Meulen. The Van Adrichem archives are the records from the family business of Adriaen Claesz van Adrichem (1508-1560) and his son Claes Adriaensz van Adrichem (1538-1607), both merchants and burgomasters of the city of Delft. The Van Adrichems were mainly trading in texiles, but Claes Adriaensz was active in the grain trade as well. He lived in the house *Het*

¹⁰³ See for the volumes on the Mary Rose: Peter Marsden (ed.), Sealed by Time: The Loss and Recovery of the Mary Rose. The archaeology of the Mary Rose vol. 1 (Oxford 2003); Peter Marsden (ed.), Your Noblest Shippe: Anatomy of a Tudor Warship. The archaeology of the Mary Rose vol. 2 (Oxford 2009); Alexandra Hildred, (ed.), Weapons of Warre: The Armaments of the Mary Rose. The archaeology of the Mary Rose vol. 3 (Oxford 2011); Julie Gardiner and Michael J. Allen (eds.), Before the mast. Life and death aboard the Mary Rose. The archaeology of the Mary Rose vol. 4 (Oxford 2013); Mark Jones (ed.), For Future Generations: Conservation of a Tudor Maritime Collection. The archaeology of the Mary Rose vol. 5 (Oxford 2011).

¹⁰⁴ See for study of the Nova Zembla site: Braat, Gawronski, Kist, Van de Put, and Sigmond, Behouden uit het Behouden Huys.

¹⁰⁵ Stadsarchief Amsterdam (SA), 5075, Archief van de Notarissen ter Standplaats Amsterdam (NA); Westfries Archief (WFA), 1685, Notarissen in West-Friesland tot 1843, Hoorn (NAH) and Enkhuizen (NAE).

¹⁰⁶ SA, NA, inv. 63-170, minute records and transcripts, 1593-1624.

Dubbele Kruis at the Koornmarkt. 107 His part of the archive contains a large number of valuable documents on late sixteenth-century maritime trade, but most relevant for the current study are seventy accounts of expenses (onkostenrekeningen) over the period 1569-1599, see for an overview Appendix I, table 2.108 In the accounts, the skippers hired by the Van Adrichem company kept a record of all their expenses related to the venture, from preparing the ship to selling the return cargo back in the Low Countries. The accounts have been studied by economic historians since the early twentieth century, with a focus on the functioning of the company and the profits of trade. 109 Information on the cultural aspects of the trade has been left untouched for the most part. Even more so, Hendrik Enno van Gelder, who first explored the accounts and published excerpts in 1917, stated that 'the effort for noting down all the small expenses on equipment and provisioning did not equal the benefits'. 110 However, it is exactly this detailed information that shows the complete range of operations involved in organizing a journey. The accounts in their entirety give an overview of what was on board in terms of victuals, trading commodities, and equipment, and offer a glimpse of shipboard life and the world of the seafarers.

Whereas for the Van Adrichem accounts the focus is on the destinations before the Strait (mostly Baltic and Portuguese ports), the archive of Daniël van der Meulen and his wife Hester della Faille (see image 0-16) contains many documents on voyages to Italy and other Mediterranean destinations. Daniël van der Meulen (1554-1600) was a merchant from Antwerp who had settled in Leiden after 1585, where he lived in a house at the Rapenburg. He was married into the Antwerp-based Della Faille family and kept a strong business relation with his brother-in-law Jacques della Faille (see image 0-17), who eventually settled in Haarlem. Although Van der Meulen and Della Faille never started a joint company, they organized countless ventures to the

¹⁰⁷ Now Koornmarkt 97. Also the brewery behind the houses at the Koornmarkt, with the entrance on the Oude Delft, was called 'Het Dubbele Kruis'.

¹⁰⁸ DNA, Van Adrichem archives (VAA), inv. 43-101, Accounts kept by skippers for voyages of several shipping companies (*rederijen*), 1569-1598.

H.E. van Gelder, 'Zestiende-eeuwsche vrachtvaart-bescheiden', Economisch-Historisch Jaarboek. Bijdragen tot de Geschiedenis van Nederland 3 (1917) 124-290; H.E. van Gelder, 'Zestiende-eeuwsche koopmansbrieven', Economisch-Historisch Jaarboek. Bijdragen tot de Geschiedenis van Nederland 5 (1919) 136-191; P.H. Winkelman, Bronnen voor de geschiedenis van de Nederlandse Oostzeehandel in de zeventiende eeuw, deel III: Acten uit de notariële archieven van Amsterdam en het noorderkwartier van Holland 1585-1600 en het koopmansarchief van Claes van Adrichem 1585-1597 (The Hague 1981); Clé Lesger, 'Schepen en schippers in Amsterdam tijdens het laatste kwart van de zestiende eeuw', Tijdschrift voor Zeegeschiedenis 23-1 (2004) 3-16.

¹¹⁰ Van Gelder, 'Zestiende-eeuwsche vrachtvaart-bescheiden', 133.

¹¹¹ Before settling in Leiden, Van der Meulen had another business, 'De Oude Compagnie', a company that mostly shipped commodities to Cologne and the large markets of Southern Germany, and from there on to cities in Northern Italy, see: Z.W. Sneller, 'De drie cargasoenen rogge van Daniël van der Meulen c.s., anno 1592, en hun verzekering', *Twee en dertigste jaarboek van het genootschap Amstelodamum* (Amsterdam 1935) 91. The house where Van der Meulen lived is now Rapenburg no. 19.

Baltic and the Mediterranean together.¹¹² Like the Van Adrichems, the partnership Van der Meulen – Della Faille started as textile merchants, but engaged with the grain trade from the 1580s onwards. The archive of Van der Meulen consists of thousands of business letters and accounts, bookkeeping papers, private correspondence, and domestic administration. Just like the Van Adrichem documents, the Van der Meulen archive has been consulted mainly by economic historians.¹¹³ Compared to the Van Adrichem archive, the added value of the Van der Meulen archive is that it covers the sales markets of the Mediterranean, and in doing so it offers a view on the far-reaching maritime cultural landscape of the 1590s. This is mainly because the letters of the partnership's agent based in Genoa, Jan Beukentop, were preserved in the archive.¹¹⁴ Beukentop gathered information on the situation in Genoa, but also in other ports in the western part of the Mediterranean. Through a combination of these letters and Italian sources like those of the Genovese magistrate of the grain (*Abbondanza*), and traces of Netherlandish merchants in the governmental archives of Genoa, a vivid image of the Italian trade can be obtained.

Structure of this study

The objects retrieved from the wreck site are the starting point of this research and determine its structure. Connected to aspects of the maritime venture, they are the backbone of this research and are both symbols and components of the network surrounding Scheurrak SO1. The grain reflects the trading patterns. The administrative finds reflect the merchant community. The ship, tools, equipment, and victuals are the starting point for studying the world of labourers, craftsmen, and suppliers for the maritime sector. The personal belongings tell the story of the seafarers and their culture. The complete catalogue of finds attests to the overseas journey itself.

Chapter 1 starts off with a historical account of the Baltic trade, mostly based on existing literature. The grain procurement market will be discussed, from the farmlands on which the grains were produced, to port cities like Danzig (Gdańsk), Riga, and Koningsbergen (Kaliningrad) as key locations in the landscape. From there, the focus moves from the Baltic imports to the re-exportation of grains to southern Europe.

¹¹² This was due to al sorts of inheritance issues caused by the fact that Della Faille's sister was married to Van der Meulen, see: J.H. Kernkamp, A.J. Klaassen-Meyer, and F. Nauta, 'Rekeningen betreffende de exploratietocht van den Swerten Ruyter naar het Middellandse Zeegebied in 1589/1590', in: J.B. Wolters, *Bijdragen en Mededelingen van het Historisch Genootschap. Deel 73* (Groningen 1959) 5. Throughout this study the word 'partnership' is used.

¹¹³ Kernkamp, Klaassen-Meyer, and Nauta, 'Rekeningen', and Sneller, 'De drie cargasoenen rogge'.

¹¹⁴ ELO, DVM, inv. 153, Accounts and documents by Jan Beukentop sent from Genoa, 1589-1598; Idem, inv. 532, Letters by Jan Beukentop sent from Genoa, 1595-1598.

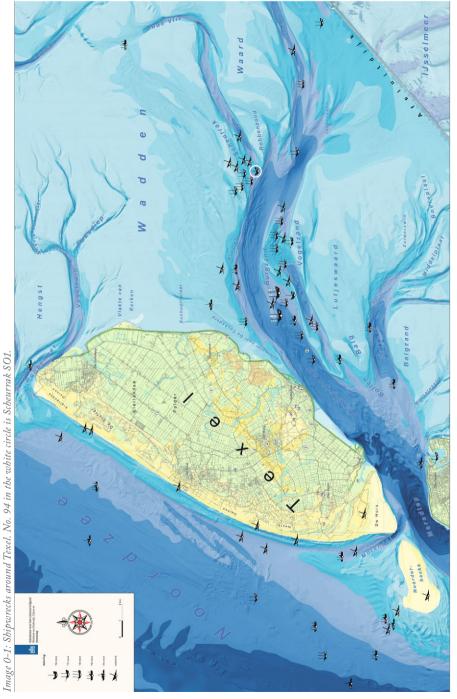
¹¹⁵ Gdańsk was called Danzig until 1945. This study opts to use the old designation to stay close to the sixteenth-century sources. For Koningsbergen (Kaliningrad) Melvingen (Elbląg), Elseneur (Helsingør), and Reval (Tallinn) goes the same.

This new route in the Low Countries network can only be understood when looking at the larger context of the Netherlandish expansion in the second half of the sixteenth century, which will be addressed too. Since Scheurrak SO1 operated in the early years of the *Straatvaart*, this initial period of the late 1580s and early 1590s will be discussed in detail. Although a variety of Italian ports were popular, Genoa is chosen as a case study of a sales market. This is due to the appearance of a Genoese trumpet in Scheurrak SO1, but also because the influx of grains generated a shock to the system there, and because Jan Beukentop was on site to report on the situation and pass it on to Van der Meulen and Della Faille – and to us.

The initiators of the trade were the Dutch merchants. Chapter 2 focusses on their cultural world. The rise of Amsterdam in late sixteenth century was heavily impacted by newcomers who brought their international business and knowledge networks along. The expanding maritime trade was also visible in the spatial organization of the city, so part of the chapter draws attention to key locations and meeting places of the trading community. The growing shipping sector required good administration, which will be studied in the chapter's concluding paragraph. How far the maritime cultural landscape of a ship like Scheurrak SO1 stretches, becomes most clear in Chapter 3 that deals with the craft and supply network of the ships. Through a combination of material finds and historical sources this network of suppliers will be studied. Important actors were, of course, the shipbuilders, but also a wide range of other craftsmen, like mastmakers, ropemakers, and sailmakers. More indirectly connected but no less important are the people and infrastructure related to the loading and unloading of the grain cargoes. Due to the vast amount of data on the ship's armament, this part of the equipment deserves a separate examination. Indispensable is also the provisioning of the ship, that was based on an intricate network of all kinds of professions. Only after all these preparations of building, equipping, loading, arming, and provisioning were done, the crews could embark.

The blue collar workers of the trade are the centre of attention in Chapter 4. Themes like recruitment, payment, and working conditions are addressed. Since in the late sixteenth century, West Frisian skippers and crews increasingly became the transporters for Amsterdam-initiated ventures, this region deserves special attention. Objects found in Scheurrak SO1 indicate that this vessel's crew, too, came from West Frisia. The last two paragraphs deal with (maritime) cultural expressions of the seafarers in relation to the rest of society. Chapter 5 is titled 'Seascape' to symbolize the unique nature of life at sea compared to life on land. Seascape is meant here as the component of Scheurrak SO1's maritime cultural landscape that involves the sea passage, the part of the venture at which the ship is untied from land and its people are left to themselves and each other. At the transition from land to water lies the estuary, a fascinating area within the maritime cultural landscape that will be discussed

in the first paragraph. A section on the work on board follows, which focusses on navigation, handling the rigging and maintenance, and then the domestic work of running a floating household. In the last paragraph disaster at sea will be addressed, where questions on risk management, the rescue system, and the legal settlement of cases of damage and casualties will be answered. This study ends with a reflection on Scheurrak SO1 and its maritime cultural landscape, followed by concluding remarks on the role of material culture in historical research, and the role of historical sources in the study of shipwrecks.



Courtesy Rijksdienst voor het Cultureel Erfgoed/Dutch Cultural Heritage Agency (hereafter RCE).



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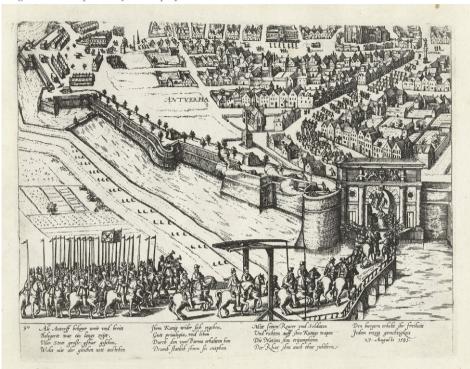


Image 0-3: Antwerp taken by the troops of Farnese in 1585.

Print by Frans Hogenberg, 1585-1587. Rijksmuseum, RP-P-OB-78.784-247.



Image 0-4: A decorated wood fragment of Scheurrak SO1 with two wagon wheels or rosettes.



 $Nationaal\ Scheepsarcheologisch\ Depot\ Batavial and/Maritiem-archeologische\ Rijkscollectie\ (hereafter\ NSD$ Batavialand), SO1-24123. Photo by Ton Penders.

Image 0-5: Shoe fragments found in Scheurrak SO1.

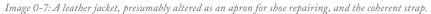


NSD Batavialand, SO1-14724. Photo by Ton Penders.

Image 0-6: One of the two wooden shoe lasts.



NSD Batavialand, SO1-23289. Photo by Ton Penders.





NSD Batavialand, SO1-23377 and SO1-23378. Photo by Ton Penders.

Image 0-8: A cobbler making or repairing a shoe, using an apron and a strap to hold the shoe in place.



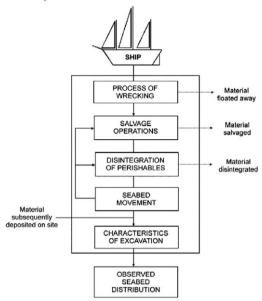
Print by Jan Gillisz van Vliet, 1635. Rijksmuseum, RP-P-OB-33.379.

Reval (Elseneur see detailed map Danzig Koningsbergen Melvingen Antwerp ATLANTICOCEAN La Rochelle Lisbon Civitavecchia Sanlúcar Strait of Gibraltar 25 km TERSCHELLING × Vlie roadstead VLIELAND TEXEL Scheurrak SO1 (location shipwreck) X Texel's roadstead WIERINGEN WEST FRISIA Enkhuizen Hoorn $Z_{UIDERZEE}$ © UvA-K 1224 Amsterdam

Image 0-9: Map of Scheurrak SO1's maritime cultural landscape.

Map by UvA-Kaartenmakers.

Image 0-10: The evolution of a shipwreck according Keith Muckelroy.



Keith Muckelroy, 'The integration of historical and archaeological data' 282.

Image 0-11: One of the 'flushed in' objects recovered from the wreck site, a eighteenth-century glass bottle.



NSD Batavialand, SO1-300. Photo by Ton Penders.





 $NSD\ Batavialand,\ SO1-1002,\ SO1-32036,\ SO1-32523,\ SO1-9001,\ and\ SO1-24003.\ Photo\ by\ Eric\ van\ der\ Vliet/Joran\ Smale.$

Image 0-13: Multibeam shot of the site in 2017.

Periplus Archeomare/RCE, footage provided by Seger van den Brenk (Periplus Archeomare).

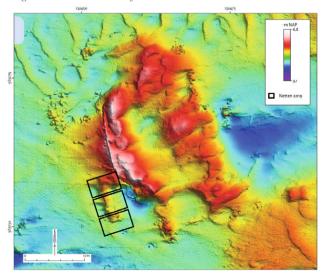


Image 0-14: Multibeam shot of the site in 2020.

Periplus Archeomare/RCE, footage provided by Seger van den Brenk (Periplus Archeomare).

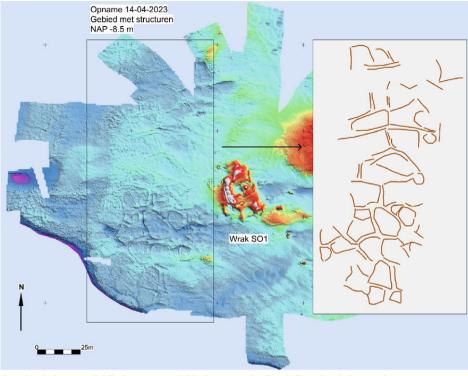
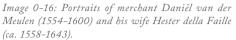


Image 0-15: Multibeam shot of the site in 2023, with the ice wedges visible on the left.

Periplus Archeomare/RCE, footage provided by Seger van den Brenk (Periplus Archeomare).

Meulen (1554-1600) and his wife Hester della Faille (ca. 1558-1643).







Paintings by Bernaert de Rijckere, 1583. The Phoebus Foundation Antwerp, B1337 and B1338. Photo's by Museum De Lakenhal Leiden.

Image 0-17: Portraits of merchant Jacques della Faille, here depicted in his role as colonel of the Antwerp city militia, and his wife Josina Hamels.





Prints by Hendrick Goltzius, 1580. Rijksmuseum, RP-P-OB-10.186 and RP-P-OB-10.189.