



Re-examining the Rijksmuseum's Oldest Ship Model: A 44-Gun Directorate Ship?

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As the inheritor of the navy's ship model collection, the Rijksmuseum has one of the most elaborate and largest collections of its kind anywhere in the world. Many of the 1,800 or so models and objects in the collection were made for the navy in the nineteenth century, when models of ships, capstans, gun-turrets, lighthouses, dry docks, steam engines and detailed decorations such as figure-heads were used to showcase new technologies and techniques, educate officers and shipbuilders and show new procurement to officials. Beginning in the last quarter of the eighteenth century, full models of ships became more common, as they were made part of the acquisition and design process for new warships. The post-1795 Batavian navy regularly ordered models of these and of the new types of ships it was obliged to deploy for coastal defence.¹ Before the middle of the eighteenth century, Dutch ship models are much rarer. In the seventeen-forties, Charles Bentham, an Englishman who was shipwright to the Admiralty of Amsterdam, commissioned a series of models for the Amsterdam chamber of the East India Company. Most of the earlier ship models, however, were not technical models in the sense that their use was part of the design process of large sailing ships; they were

< Fig. 1
Dutch 44-Gun Model,
Netherlands, 1648.
Wood, rope, lead,
fabric and paint,
h. 117 x l. 113 x w. 52 cm.
Amsterdam,
Rijksmuseum,
inv. no. NG-NM-9358;
gift of H.F. Groen
van Waarder,
Amsterdam.

made for display, to be shown either in boardrooms or in church interiors.² Seventeenth-century ship models are very rare, and the Rijksmuseum holds only four examples: the East India-man *Prins Maurits* (1651), two models of warships (*William Rex* (1698) and *Salamander|Draak* (1660-72)) and one model of a 44-gun ship dated 1648 on the stern (fig. 1).

This article focuses on this final model. It is described on the Rijksmuseum's website catalogue as a warship, while Ab Hoving suggested that it might have been intended to represent a ship owned by one of the directorates, the urban convoy boards formed in several Dutch cities in the sixteen-thirties.³ If this last hypothesis is true, it would be the only known model of such a ship anywhere in the world. Questioning the identification of the model is of more than antiquarian interest. The role of the directorates in the protection of Dutch trade and fisheries during the final part of the Eighty Years' War has long been treated rather dismissively. Urban convoy organizations, as well as the naval roles for the Directorate of the Great Fisheries, and the East and West India Companies in European waters have been seen as a sign of the weakness of the admiralties of the Dutch fleet.⁴ More recent historiography, however, treats the Dutch admiralty

organization and the role played by lower levels of government in mobilizing resources for naval warfare much more positively. Jan Glete famously argued that the fragmented nature of Dutch naval organization was crucial in enabling the mobilization of local interests and (tax) resources behind the interests of the State.⁵ More recently, Pepijn Brandon studied the directorates as an important example of the Dutch Republic as a brokerage state.⁶ I have argued elsewhere that the kind of administrative ‘outsourcing’ by the Dutch State to the private sector should be seen as a fairly standard, rather than an exceptional response by the Dutch State to the pressures of the war on Dutch shipping, particularly in the sixteenth-thirties and forties. Rather than seeing the creation of these non-governmental bodies as a weakness, it shows ingenuity in mobilizing additional resources for the war at sea.⁷ This ongoing reinterpretation of the role of these organizations and their vessels makes the model especially interesting. If it is indeed a model of a directorate ship, it can tell us a great deal more not only about the ships employed by them, but also about the self-image of the those who ordered it. This article focuses on the question of whether we can describe the model as a one of these vessels with any degree of certainty. To test the hypothesis, I explore the idea that the model represents one of three different types of vessel: an armed merchantman, an (admiralty) warship, or a directorate vessel, and ask whether identification as a ship specifically equipped by one of the directorates (as opposed to a generic warship) is in fact likely. Although complete lists of the ships used by all the convoy boards are unavailable, the National Archives in The Hague and the resolutions of the Amsterdam city council do provide some details about the vessels acquired by the urban directorates.⁸

I argue that it is unlikely to be a model of a 44-gun ship owned by one of the urban directorates and theorize that it is more probably a generic representation of a warship. But first, let us examine the model itself.

The Model

The model itself is of a two-decked three-master with forty-four cannons. This is a model that did not end up in the museum’s collection by way of the navy’s model collection. It was gifted to the Rijksmuseum in 1891 by Herman Frederik Groen van Waarder (1846-1904), a ship builder and ship-owner in Amsterdam. From 1897 onwards he represented the second district of Amsterdam in parliament, as well as being a representative in the States of Holland between 1889 and 1904.⁹ He had bought *De Boot*, a shipyard at Wittenburg in Amsterdam in 1883. In that same year, he went on

Fig. 2
ANONYMOUS,
111 Grote Wittenburger-
straat, Entrance to
De Boot Shipyard,
c. March 1931.
Amsterdam,
Amsterdam City
Archives, image no.
OSIM00003002719.



to modernize the yard by adding such things as a new office building and a drawing office. The design for these, dated March 1883, has an interesting feature to the left of the new buildings: a gate. A photograph of this gate dated to 1931 shows a number of gable-stones (fig. 2). The central stone bears the image of a small vessel without a mast and the name *Int Scheep Boot*. Flanking this central stone are two with the legend 'Anno 1883'. But in the March 1883 design the legend reads 'Anno 1640' (fig. 3). The yard, which Groen van Waarder had bought in 1883, was the successor to an older yard, established in 1640, that moved to Wittenburg later in the seventeenth century. The model, in this interpretation, would have been in the possession of the yard before it was donated to the Rijksmuseum in 1891, and might have been a model of a specific ship built there.

The ship could conceivably be a warship, an East or West Indiaman, or a large armed merchantman.¹⁰ The large number of guns makes the final identification problematic, as they would have taken up valuable space in a merchant vessel, and the large crew required to man them would also have been uneconomical. Given that there were no ships with 44 cannon in service with the Dutch admiralties in 1648, Hoving argued that it might be a vessel belonging to one of the directorates. One unexplored option was whether the vessel was built for export rather than for Dutch service, as Dutch yards regularly built large ships for foreign navies in this period.¹¹ The model's lower and upper gun decks have ten gun ports each. The upper deck ports are decorated with ornamental round wreaths, a feature also found on the model of the *Prins Willem* (fig. 4). Comparison with the

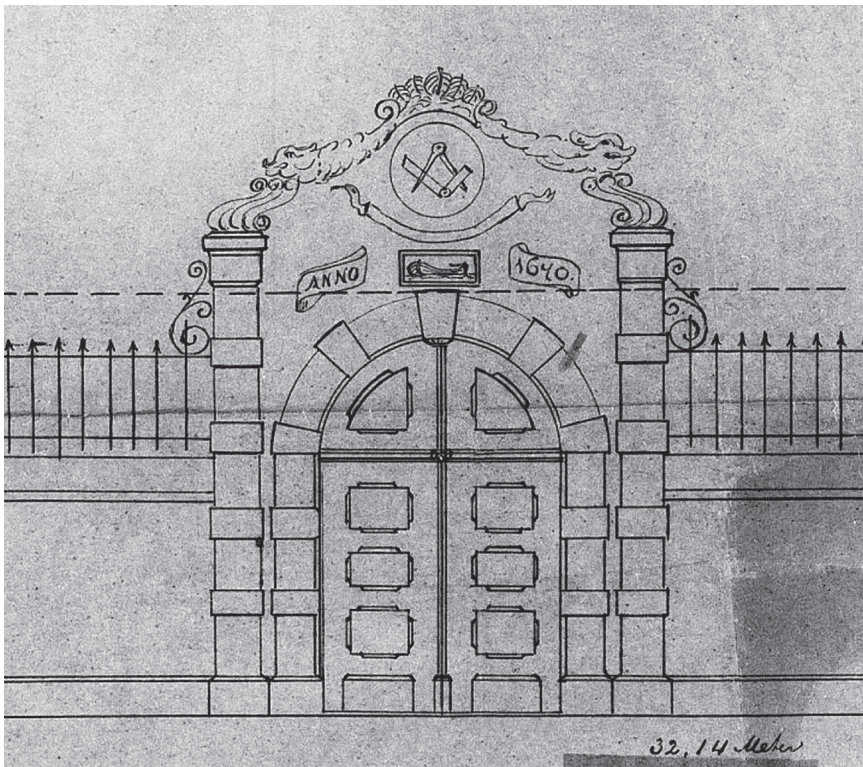


Fig. 3
ANONYMOUS,
'De Boot' Shipyard
(detail showing
the gate), 1883.
Amsterdam City
Archives, Archief
van de Dienst Bouw-
en Woningtoezicht:
blueprints, 5221.BT,
inv. no. 900156.



< Fig. 4
Indiaman
'Prins Willem',
 Netherlands, 1651.
 Wood, rope, metal,
 fabric and paint,
 h. 115 x l. 142 x
 w. 60 cm.
 Amsterdam, Rijks-
 museum, inv. no.
 NG-NM-11911; gift of
 A.W.M. Mensing.
 Note in particular
 the disposition
 of the gun ports
 (with wreaths) on
 the upper deck and
 in the gun room aft.

latter can indeed yield some valuable clues as to the type of vessel the model is intended to represent, since the *Prins Willem* is known to be a model of a large East Indiaman fitted out for naval service in the First Anglo-Dutch War (1652-54).¹² This comparison will focus on details of the hull, since the rigging of the model was extensively restored during conservation work in the twentieth century.¹³ The model itself is a hollowed-out block model with two continuous decks.

A first notable difference between the two vessels is the disposition of the gun ports. Here, the *Prins Willem* betrays its mercantile background. On the upper gun deck, the first five gun ports are regularly placed between the lower deck ports. This would have better spread the load of the battery throughout the frame of the ship. Between the fifth and sixth ports, however, there is a 'missing gun port'. Gun ports six through eight are again regularly placed between the lower deck ports, but the ninth upper deck port is placed seemingly at random, right above the tenth port on the lower deck. The placement of this port was likely determined by that of the chain plates for the main mast rigging. The internal disposition of decks in the stern of the *Prins Willem* is also visible by the two lower-placed gun ports in

the gunroom aft, with two very small ports imposed above them.¹⁴ On the *Prins Willem*, the disposition of the gun ports shows that they were not central to the design. Rather, the battery was fitted in between other elements where possible.

In this respect, the model of the 44-gun ship presents a stark contrast. Here, all the gun ports are regularly divided over the decks, with the upper deck guns fitted above and between the lower deck guns to spread the weight of the battery (figs. 1, 5). The chain plates are attached below the line of the upper gun ports, so they do not inhibit their placement. The ship the model was supposed to represent, it is clear, was built with a keen eye on the demands of the battery, making identification as an armed merchantman unlikely. However, there are other characteristics of the model that cast doubt on a firm identification of the model as a specific warship from the late sixteenth forties. For although the distribution of the gun ports fits in well with the hypothesis that this could be a warship, the curve of the gun deck does not. A comparison of the model to the starboard profile of the *Beurs van Amsterdam*, a Dutch East India Company vessel, but built as a warship during the First-Anglo Dutch war, illustrates this. The drawing of

Fig. 5
 Reconstruction of
 the starboard-side
 view of the Dutch
 44-Gun Model (fig. 1).
 Source: author, 2020.

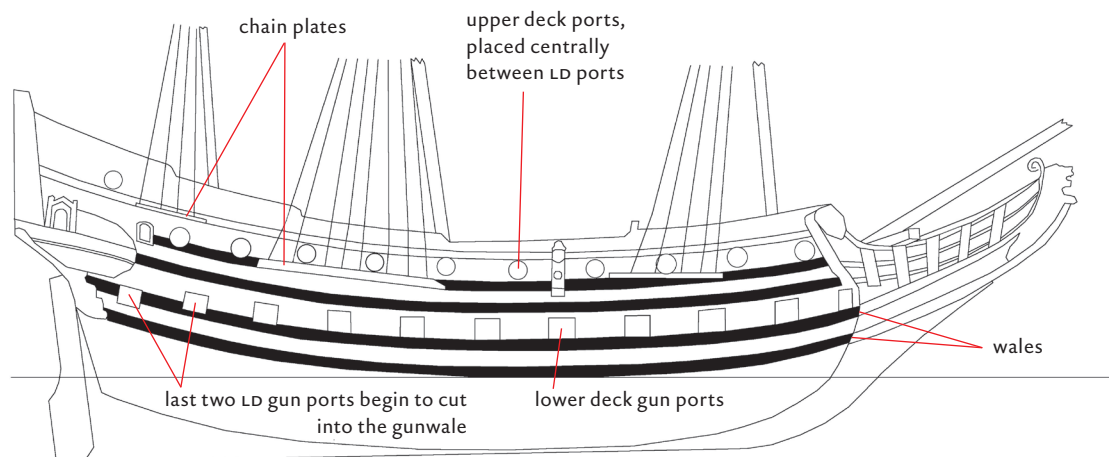




Fig. 6
WILLEM VAN DE VELDE,
Portrait of the 'Beurs van Amsterdam',
1665 (?).
Graphite,
402 x 320 mm.
London, Greenwich,
National Maritime
Museum (Caird
Collection),
inv. no. PAH3864.

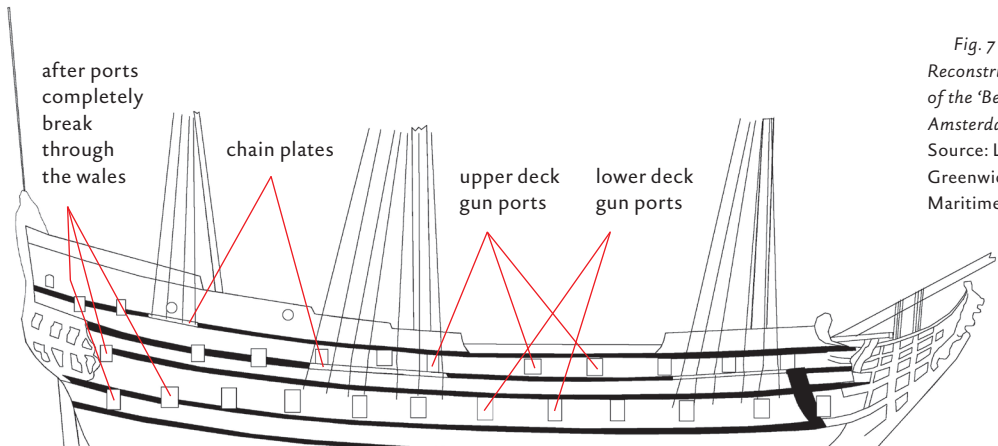


Fig. 7
Reconstruction
of the 'Beurs van
Amsterdam'.
Source: London,
Greenwich, National
Maritime Museum.

the *Beurs van Amsterdam* is a relatively rare example of a nearly straight-on side view of a ship by Van de Velde, making it a good comparison with the model (figs. 6, 7).

Compared to the 44-gun model the gun ports, and hence the gun decks, of the *Beurs van Amsterdam* are flush. The last two gun ports on the *Beurs* completely pierce the line of the lower gunwale, while the upper-deck ports also break through the wale. Since the wales were inserted to improve longitudinal strength of the hull, breaking the line of the wales had significant consequences and had to be compensated by a specially strengthened hull. The only reason to choose to do so was to improve the layout of the battery deck and improve command and control over a flush gun deck. This only made sense for warships. Armed merchantmen would rather let the decks curve along with the wales than break the line of the wales altogether. This is well illustrated in Hendrik Cornelisz Vroom's painting of a number of East Indiamen leaving the Marsdiep in the Rijksmuseum's collection (fig. 8).

In this painting, the eight gun ports on the gun deck of the *Indiaman* fall completely between the lines of the gunwales. The drawing of the *Princesse Royale* (or *Princesse Royale Louise*), also in the Rijksmuseum collection, shows the difference clearly: here the gun ports are (more or less) spread horizontally, with the three ports aft cutting through the lower two wales (fig. 9).

Flush gun decks without the step aft into the gun room were a feature of purpose-built warships from the sixteen-thirties onwards. In England the gun room aft had been abandoned as early as 1618.¹⁵ When the States-General stipulated new charters for warships intended for service against Dunkirk, a flush gun deck was one of the characteristics specified. This would improve the placement of the cannon and would make command and control on the gun deck easier.¹⁶ All the same, ships described as warships with the pronounced step back aft are still seen in some pictorial sources. The National Maritime Museum in Greenwich has a Van de Velde portrait of a Dutch frigate tentatively dated to

Fig. 8
HENDRIK CORNELISZ VROOM, *A Number of East-Indiamen off the Coast*, c. 1600-30. Oil on canvas, 104 x 199 cm. Amsterdam, Rijksmuseum, inv. no. SK-A-3108; gift of J.W. IJzerman, The Hague.





< Fig. 9
WILLEM VAN DE VELDE (I) AND WILLEM VAN DE VELDE (II), 'Princesse Royale' of Vice-Admiral Witte de With, 1643-1707. Pencil and ink, 463 x 371 mm. Amsterdam, Rijksmuseum, inv. no. RP-T-1895-A-3080B.

> Fig. 10
WILLEM VAN DE VELDE (I), Portrait of a Dutch Frigate, 1655? Graphite, grey wash, 300 x 500 mm (mount). London, Greenwich, National Maritime Museum, inv. no. PAH3830.

1655 (fig. 10), which still has this pronounced step back, while the grisaille in The National Maritime Museum in Amsterdam of the Dunkirk privateer *Vergulde Sonne*, by the same artist and dated to the early sixteen-forties, shows a completely flush deck (fig. 11). The flush gun deck, with the gun ports breaking through the lines of the wales is also illustrated in the Rijksmuseum's painting by Van de Velde of the 36-gun *Princesse Royale* built in 1646 for the admiralty of the Meuse (fig. 9). It does seem likely that

purpose-built warships would have been built with flush gun decks by the late sixteen-forties.

The curved gun deck of the model seems at odds with this feature. But there was some leeway in the imposition of the new rules, and as late as 1650 Lieutenant-Admiral Maarten Harpertsz Tromp was insisting on the desirability of flush gun decks. In 1653, Witte Corneliszoon de With, then commanding the Dutch fleet, complained that the sheer of the lower deck of the *Brederode* meant that her

> Fig. 11
WILLEM VAN DE VELDE (I), *The Dunkirk Privateer 'De Vergulde Sonne'*, 1640-45. Ink on canvas, 74 x 104.5 cm. Amsterdam, The National Maritime Museum, inv. no. s.1374.



central ports took in water with the slightest movement of the ship.¹⁷ The pronounced curve of the disposition of the gun ports on the model thus suggest that either the ship on which the model was based was not built to naval regulations, or the model maker took some artistic liberties in depicting a *type* of vessel, rather than a specific ship. So how does this compare to the known characteristics of directorate ships? To understand what types of vessels the directorates ordered, it is first necessary to take a look at their organization and history, before turning to the specific vessels.

The Directorates

We need to examine the directorates themselves in more detail in order to explain the reasoning behind ascribing the ship to one of the urban directorates and the arguments as to why this may or may not be a directorate ship. From the resumption of war with Habsburg Spain in 1621 onwards, the Dutch republic was forced to wage a quarter-century long naval campaign on its doorstep. Spanish warships and privateers operating out of Dunkirk wreaked havoc amongst Dutch shipping and the fleets of fishing boats that sailed in close proximity to them. The aim of these ships was the destruction of Dutch commerce, rather than the Dutch warships sent to blockade these ports.¹⁸ To mitigate the risk of loss of ships, the structure of Dutch sea power changed over the course of the sixteen-twenties. The admiralty boards of the Dutch Republic had invested significantly in the construction of a small force of large warships during the late sixteen-tens, designed for raids on Spanish and Portuguese coasts or colonies. These ships were part of the ambitious but ultimately unsuccessful 'Nassau fleet' of 1622-26.¹⁹ The admiralty boards did not procure such large vessels again to replace them, instead focusing all

their attention on the narrow areas of the North Sea, the straits of Dover and the Channel. Smaller ships with less draught, better suited to shallow waters and capable of withstanding rough weather, agile enough to pursue privateers and sufficiently well-armed to stand up to royal warships were procured.²⁰ This process was by no means unproblematic or uncontentious and the boards differed amongst themselves on the best ships to procure. But the general trend is clear: towards ships described as yachts in the sixteen-twenties, to the new frigate type in the late sixteen-twenties and the sixteen-thirties.²¹

Organizationally, the fleet was forced to change as well. The mainstay of the fleet was to become its blockading force, keeping a close eye on the port of Dunkirk itself and intended to intercept any ships that dared come out or attempt to enter the port (fig. 12). In practice, the blockade proved leaky, as southerly or easterly winds kept the squadron offshore and moonless nights afforded blacked-out blockade-breakers the cover of darkness.²² So in addition to this blockading fleet, set at thirty-two ships, the admiralty boards deployed small groups of ships as cruiser forces, roaming prescribed areas and stopping any ships deemed suspicious. Organization of small groups of cruising warships to operate in set zones also suited the federalized admiralty model well. In 1630, the States-General drafted orders for the squadrons of cruisers operating in the North Sea and the English Channel. The different admiralty boards were assigned their own distinct cruising grounds; the southern North Sea and the Channel were divided into sectors for the different admiralty boards.²³ These squadrons of cruisers were intended to intercept any Dunkirk vessels that might have slipped past the blockading squadron.

The final measure was to escort outgoing and incoming merchantmen



Fig. 12
 JACOB DIRCX
 VANDER VEER,
*States Fleet Lying
 off Dunkirk, 1628.*
 Etching and
 engraving,
 382 x 356 mm.
 Amsterdam,
 Rijksmuseum, inv. no.
 RP-P-08-81.173.

and fishing fleets. The Directorate of the Great Fisheries equipped escorts for the herring fisheries every year, to which the admiralties of the Meuse and North Holland also contributed, and convoying was applied to merchantmen as well.²⁴ Convoys of merchantmen bound for France and the Mediterranean were escorted past Dunkirk and through the Channel, and incoming ships were escorted on

their way back. East and West India-men, although well-armed themselves were also given protection. Nevertheless, the admiralty boards were hard-pressed to provide adequate protection for the convoys. In some years, tardy payment of subsidies due from the provinces meant that not all the available ships could be sent to sea for lack of funds. Even when the admiralties could maintain their

ships on blockade at Dunkirk, moonless winter nights proved ideal opportunities for vessels from Dunkirk to slip out to sea.²⁵ From the late sixteenth-century onwards, therefore, other organizations started to provide protection at sea.

By the late sixteen-twenties, the East India Company had been given the right to equip four ships of its own to intercept its incoming East India fleets and escort them home.²⁶ The effectiveness of the campaign against Dutch commerce made additional measures necessary,²⁷ and from 1631 onwards, they were also taken at a local level. Merchants were allowed to equip convoy escorts themselves. These vessels were paid for by a levy imposed on ships sailing from these ports.²⁸ The funds were administered by directors, appointed by the municipalities and the organizations derived their name from this form of management: directorates.

The stopgap nature of these measures is reflected in the names the dif-

ferent directorates gave themselves. In Amsterdam, for example, the urban convoy board was sometimes referred to as 'the directors of the extraordinary convoy to the North and the Baltic'. Crucially, these convoy boards were local organizations, rather than branches of the Generality, so they were thus under local control and supervision. Proponents of the system of directorates argued that the merchant interests were much better able to efficiently and cheaply organize defence at sea than the admiralty boards, which were described as corrupt and inefficient. In Amsterdam, the convoy board was under direct supervision of the City Council and the Burgomasters. The local interests behind the directorates were not entirely altruistic, of course. The same period saw a conflict between the Generality and the stadholder on the one hand, and the local interests, particularly in the northern admiralty cities, on the other over the basing of ships in Hellevoetsluis, the operation-

Fig. 13

JAN ABRAHAMSZ
BEERSTRATEN,
The Battle of Terheide,
10 August 1653,
1653-66.
Oil on canvas,
176 x 281.5 cm.
Amsterdam,
Rijksmuseum,
inv. no. SK-A-22.



al base of the admiralty of the Meuse. Local interests, especially in West-Friesland and Amsterdam, were fiercely opposed to this idea, as they would then stand to lose out on lucrative provisioning and repair contracts for the ships of 'their' admiralty boards.²⁹ In the case of Amsterdam in 1644, the argument to protect trade was put as follows: '... without which we cannot obtain the grain we eat, the wines we drink nor the wool or silks with which we clothe ourselves.'³⁰ The directors could be notable men in the cities involved. In 1644, both Jan and Henrick Bicker were amongst the 'Directors of the extra-ordinary convoy'.³¹

The directorate system quickly became popular and was taken up in Rotterdam, Amsterdam, Hoorn, Enkhuizen, Edam, Monnikendam, and Harlingen. In Zeeland and on the Meuse, the prevalent form of organizing local naval power was that of a privateering directorate, with ships devoted to taking vessels from Dunkirk and recapturing Dutch ships. Though the goals were similar, protection of Dutch shipping, the means and the financing were quite different and they will be left out of consideration here.³² In each of the towns where directorates were present, the local directors required warehousing, recruited crews, bought, hired or built ships and needed to acquire weapons, most problematic of which was the heavy ordnance. In some cases, privateering firms could simply hire admiralty warships in the off-season or even in the main fighting season as the admiralties did not always have the funds required to send all the ships in their inventories to sea.³³ The defensive directorates of the north may have used their good connections with local merchant communities to hire suitable ships and up-arm them. This is why a closer look at the ships of the directorates is required to judge whether the model

of a 1648 warship with forty-four guns might actually represent the types of vessels which we know served with the directorates.

Directorate Ships

The nature of the urban directorates meant that they could employ a variety of ships. They could conceivably use either purpose-built warships, or heavily armed merchantmen. There are several sources to turn to in answering the question as to whether the 1648 model of a 44-gun ship represents a ship of one of the directorates. There are a number of archival collections which shed some light on the types of ships that were equipped by the directorates in the period spanning nearly a quarter century from the early sixteen-thirties to the mid-sixteen-fifties. Minutes of the meeting of the Amsterdam *vroedschap* provide information about how ships were procured and at what cost, while collections in the National Archives in The Hague give some insight into the workings of the directorates and sources for ships mobilized for war during the First Anglo-Dutch war in 1652-54, when the boards were ordered to equip one hundred ships for the Dutch fleet (fig. 13). Care must be taken in interpreting this information, however, as the 1652 mobilization might not be indicative of the types of ships employed just a couple of years earlier. Finally, fleet lists for the Battle of the Downs in 1639 (fig. 14) and Witte de With's fleet in the Baltic in 1644-45 provide information on at least the armament of ships employed by the directorates as compared to Admiralty ships.³⁴

On 31 March 1631, eighteen directors from Amsterdam (6), Hoorn (2), Enkhuizen (3), Edam (2), Medemblik (3) and Harlingen (2) met in Amsterdam to discuss the joint plan of action of their directorates and how the different urban boards would cooperate. It was agreed to split responsibility



Fig. 14
WILLEM VAN DE
VELDE (I), *The
Battle of the Downs*,
21 October 1639, 1659.
Ink on canvas,
124 x 190 cm.
Amsterdam,
Rijksmuseum,
inv. no. SK-A-1363.

for equipping ships. Amsterdam would equip half of them, and the other towns would together equip the rest.³⁵ Agreements were made regarding the payment of bills and the transfer of funds from members who had received more, but spent less, to members who had spent more. Also stipulated was the armament of the ships which the directors envisioned they would equip. It was proposed that ten 'ships fit for war, armed at least with twenty to twenty-four or twenty-six cannon, the least of which mounted on the gun deck is to fire no less than six pound iron shot'.³⁶ These ships were to be manned by forty-five sailors and officers, as well as twenty-five to thirty musketeers. In addition to these larger ships, two smaller cruisers with ten or twelve cannon and fifty men were to be equipped to act as escorts for merchantmen bound for Hamburg and Bremen.³⁷ The minutes make clear that the directors did not envision building these ships themselves, as the agreement firmly listed

the requirements of ships which could be rented by the directorates.³⁸ The accounts of the Hoorn board reveal that ships and crews were hired and employed for single voyages.³⁹

This leads us to another reason why the model of a two-decked warship with forty-four cannon is unlikely to be a directorate vessel: personnel costs. In what seems a somewhat enigmatic general account for the Hoorn directorate for the 1636-38 period, salaries make up nearly forty-five percent of total expenses (38,564:18:6 guilders out of 83,682:12:4), while ship rents only account for 2.77 percent (2,321:3:8 guilders).⁴⁰ The total expenditure on manpower is even more apparent when we realize that provisions for the crews amounted to another 29,102:12:8 guilders (almost thirty-five percent). So while they were probably well able to afford to hire a large two-decked warship for a season, the expense of manning such large vessels would most likely have been crippling.

Fleet lists on which ships equipped by the directorates appear confirm their focus on medium-sized warships. When Witte de With was sent to the Baltic in 1645 to escort Dutch merchantmen through the Sound in defiance of higher Danish Sound tolls, twenty-six of the forty-five ships he took north had been equipped by the directorates of Amsterdam and Enkhuizen.⁴¹ The most lightly armed of these was the 22-gun *Kleinen Jupiter* under the command of Hendrik Christiaenszoon, while the most heavily armed ship was the 36-gun *Wapen Genua* under Claes Corstiaenszoon. Altogether, the average number of cannon on the directorate vessels in the Sound in 1645 was 27.12, while the norm was 26, the same as for the ships equipped by the Admiralties.⁴²

The fall of Dunkirk to the French in October 1646 meant that the admiralties and the directorates could all reduce their fleets and expenses.

On 26 August 1647, Amsterdam council decided that the ships of the *directie op het Oosten ende Noorwegen* could be sold, if the organization were to cease to exist.⁴³ When the fleet mobilized again in preparation for war with England in 1652, the directorates were given an important role in acquiring ships. Again, they opted to rent suitable – and sometimes not so suitable – ships and arm them for naval service.⁴⁴ In the spring of that year, the Amsterdam directorate had contracted twenty-four ships. The fleet list presented in the minutes of the meeting of the directors provides detailed information about armament for seven of them, shown in table 1.

Of the ships listed, the armament of *De Groote Liefde* comes closest to matching that of the 44-gun model, but still falls short. For the size of the ships, however, the thirty-eight guns constituted light armament.

Table 1
Armament of Ships
Contracted by
the Amsterdam
Directorate,
Spring 1652.
Source:
NL-HaNA, 1.03.02,
inv. no. 3,
resolutieregister
directie Amsterdam.

SHIP	MASTER	DIMENSIONS IN AMSTERDAM FEET ⁴⁵	OWNERS	ARMAMENT
<i>Prins Maurits</i>	Nicolaes de Witt	130 x 30 x 13 x 7 (36.8 x 8.4 x 3.7 x 1.9 m)	Messrs De Haes and Cruysvelt	34 (18 x 12, 6 x 6, 6 x 4, 4 x 3)
<i>Arcke Troyane</i>	Abraham van Campen	116 x 25.75 x 12 x 6.25 (32.8 x 7.3 x 3.4 x 1.8 m)	Mr Jaerisvelt	14 pieces, caliber undefined
<i>Croon Imperiael</i>	Cornelis Jansspoort	130 x 30 x 12.25 x 7 (36.8 x 8.4 x 3.5 x 1.9 m)	Mr Coijmans	34 (2 x 24p, 16 x 12, 12 x 6, 4 x 3)
<i>St. Francisco</i>	Stoffel Juriaensz	133 x 28.25 x 13.25 x 6.5 (37.7 x 8 x 3.8 x 1.8 m)	Messrs Munter and Goyken Elberts	28 (4 x ?, 8 x 12p, 6 x 8p, 8 x 6p, 2 x 4p)
<i>De Neptunus</i>	Gerrit van Limmen	138 x 38 x 13 x 7 (39 x 10.8 x 3.7 x 1.9 m)	Henri Momber	34 (18 x 12, 8 x 8, 4 x 6, 4 x 3)
<i>De Groote Liefde</i>	Bruijn van Seelst	132 x 29 x 13.5 x 6.5 (37.4 x 8.2 x 3.8 x 1.8 m)	?	38 (2 x 24p, 18 x 12p, 14 x 6p, 4 x 3p)
<i>De Groot Gulde Fortuijn</i>	Frederick de Coninck	141 x 31 x 14.5 x 7 (39.9 x 8.8 x 4.1 x 1.9 m)	?	35 (4 x 24p, 16 x 12p, 11 x 6p, 4 x 3p)

As a point of comparison, the fleet flagship *Brederode* (fig. 15) also measured 132 feet on the gun deck, but mounted fifty-four cannon on two continuous gun decks as well as an armed quarter-deck and poop. It is likely, therefore, that *De Grootte Liefde* was a large vessel with a single gun deck and additional cannon on the quarter-deck, suitable for mounting a heavy battery (24-pound cannon being rare in Dutch service), but not a purpose-built two-decked warship.

The results of all this are not encouraging for the identification of our model as a ship of one of the directorates. There is not a single vessel equipped by the directorates that is known to have mounted forty-four guns in the period represented by the model. Even if we take the whole of the sixteen-forties as our period, rather than 1648 alone, there is no instance of a ship being

as heavily armed as this. There are some that come close, both in 1644 and in 1652, but even there the upper limit is thirty-eight guns. The fleet sent to the Sound and the vessels assembled before the First War with England did not reflect the usual tasks of the directorates, and may have been larger and more heavily armed than the usual small cruisers. It is, in other words, highly unlikely that the model represents a ship owned by one of the directorates.

Conclusion

This article has examined the possibility that the model of a 44-gun warship dated to 1648 in the Rijksmuseum's collection is of a specific ship operated by one of the urban directorates. Based on an analysis of the sources available for these organizations, it is doubtful that the model is of a specific vessel used by

Fig. 15
SIMON DE VLIÉGER,
*The Brederode off
Hellevoetsluis*, c. 1650.
Oil on panel,
76.2 x 106.7 cm.
London, Greenwich,
National Maritime
Museum, inv. no.
BHC4158.



one of the convoy boards. For the regular convoy duties that were the main task of these ships, smaller vessels, mounting twenty to twenty-six cannon were stipulated. The directorates would develop into an important complement of the States' fleet whenever a battle fleet was required. But even on the occasions when the directorates sent ships as part of a fleet, they never seem to have mounted more than thirty-eight cannon, which makes it hard to imagine that they ever equipped ships with two continuous gun decks.

So where does that leave the model? Since none of the admiralty boards possessed ships with forty-four guns in 1648, it cannot be positively identified as one of theirs. I have argued that identification as a vessel of one of the directorates is unlikely and that it most probably does not represent an armed merchantman, as the ship is clearly optimized for broadside artillery, though there are some anachronistic aspects. This leaves two options open: either it is a generic representation of a type of vessel, rather than a specific ship, intended to enliven the premises of *De Boot* shipyard in the seventeenth century or it does actually represent a specific ship, one built for export at a private yard in the Dutch Republic that we have not yet encountered in the sources. The Dutch Republic was a shipbuilding centre and large (war)

ships were regularly built in its shipyards for export. Building at a private yard more accustomed to commercial orders might explain why the model, if it does faithfully represent a specific ship, contains some anomalies we would not expect in Dutch naval vessels. So what is the value of studying objects like this in terms of our understanding of the maritime and naval history of the Dutch Republic? Besides the unicity of the model and its intrinsic value as a work of art, models like the 44-gun ship force the maritime historian to test what we think we know, come up with new hypotheses and test these in the archives and by looking at other objects. The *Dutch 44-Gun Model* has not yet revealed all its secrets, and will inspire new research, perhaps into the commercial shipyards of Amsterdam and their export of ships in the seventeenth century.

ABSTRACT

The oldest ship model in the Rijksmuseum's collection is of a Dutch warship with forty-four cannon. It has been suggested in the past that the model represents a ship that once belonged to one of the urban directorates which provided warships to escort merchant convoys in the first half of the seventeenth century. By combining archival and pictorial information, the article concludes that it is in fact improbable that the model depicts a specific ship belonging to one of the urban directorates. It is more likely that it is of an as yet unknown vessel, perhaps built for export, or that it is a generic model, designed to decorate the premises of the Amsterdam shipyard *De Boot*, whose owner ultimately donated the model to the museum in the nineteenth century, but which dates back to the sixteen-forties, the period in which the model was built.

- 1 Ab Hoving, *Modellen vertellen. Bijzondere verhalen uit de Marinemodellenkamer van het Rijksmuseum*, Franeker 2012, pp. 116-19. Published in English as *Message in a Model: Stories from the Navy Model Room of the Rijksmuseum*, Florence (OR) 2013.
- 2 The nucleus of the Rijksmuseum's Maritime Collection is still the navy model collection, but it has been expanded over the years with private donations and acquisitions by the Rijksmuseum itself.
- 3 Rijksmuseum digital catalogue: <https://www.rijksmuseum.nl/en/collection/NG-NM-9358>; Hoving 2012 (note 1), pp. 26-29 is the most recent and most easily accessible publication presenting the hypothesis of the identification of the ship. Following Pepijn Brandon, *War, Capital, and the Dutch State (1588-1795)*, Leiden 2015, I will use the term directorate in the remainder of the article.
- 4 Jaap R. Bruijn, *The Dutch Navy of the Seventeenth and Eighteenth Centuries*, Columbia 1990, p. 27.
- 5 Jan Glete, *War and the State in Early Modern Europe: Spain, the Dutch Republic and Sweden as Fiscal-Military States, 1500-1660*, London 2001, pp. 140-73.
- 6 Brandon 2015 (note 3), pp. 87-93.
- 7 Erik Odegard, 'Convoys and Companies: Privatising Economic Warfare at Sea in the Dutch Republic, 1580-1800', in David Morgan-Owen and Louis Halewood (eds.), *Economic Warfare and the Sea*, Liverpool 2020, pp. 63-84.
- 8 For example The Hague, National Archives of the Netherlands (hereafter referred to as NL-HaNA), I.03.02, Equiperings Oorlogsschepen; Amsterdam City Archives (ACA), 5025, Archief van de vroedschap, inv. nos. 18-20.
- 9 See https://www.parlement.com/id/vgo9llt8bmv8/h_f_groen_van_waarder (consulted March 2020). Hoving refers to him as Groen van Maarder. I would like to thank Jeroen ter Brugge for pointing out the correct name to me.
- 10 East Indiamen would not regularly have carried such a heavy armament, although the VOC would acquire large warships in the sixteen-fifties and sixties, see E. Odegard, 'The Sixth Admiralty: The Dutch East India Company and the Military Revolution at Sea, c. 1639-1667', *International Journal of Maritime History* 26 (2014), no. 4, pp. 669-84, esp. pp. 677-83. The West India Company had equipped ships as heavily armed as this occasionally in the sixteen-twenties and thirties. Piet Heyn's flagship at Matanzas in 1628, for example, was the 50-gun *Amsterdam*; Johannes de Laet, *Iaerlijck Verhael der verrichtinghen der Geoctrooieerde Westindische Compagnie, vijfde deel*, Leiden 1644, p. 157.
- 11 David Parrott, *The Business of War: Military Enterprise and Military Revolution in Early Modern Europe*, Cambridge 2012, pp. 85-86, gives examples of Dutch ships for Venetian, French and Swedish service in the sixteenth, seventeenth and eighteenth centuries. Later examples include the building of Indiamen and warships for Genoa in the sixteen-forties and fifties; Thomas Allison Kirk, *Genoa and the Sea: Policy and Power in an Early Modern Maritime Republic*, Baltimore 2005, pp. 130-42; Wilma Gijsbers, 'Erven van scheepstimmerwerven in zeventiende-eeuws Amsterdam', *Scheepshistorie* 26 (2019), pp. 41-53.
- 12 Hoving 2012 (note 1), pp. 38-39.
- 13 *Ibid.*, p. 27.
- 14 A similar feature is shown in the National Maritime Museum, Greenwich, London, inv. no. PAH3830, see fig. 10 in this article.
- 15 Brian Lavery, *The Ship of the Line. Volume 1: The Development of the Battlefleet 1650-1850*, London 1983, p. 14.
- 16 J.E. Elias, *De vlootbouw in Nederland, 1596-1655*, Amsterdam 1933, pp. 53-54, 97.
- 17 *Ibid.*, pp. 62-63.
- 18 R.A. Stradling, *The Armada of Flanders: Spanish Maritime Policy and European War, 1568-1668*, Cambridge 1992, p. 26.
- 19 Elias 1933 (note 16), pp. 36-37.
- 20 *Ibid.*, pp. 49-58.
- 21 *Ibid.*
- 22 Jaap R. Bruijn, *Varend verleden: de Nederlandse oorlogsvloot in de zeventiende en achttiende eeuw*, Amsterdam 1998, p. 33; A.P. van Vliet, *Vissers en kapers: de zeevisserij vanuit het Maasmondgebied en de Duinkerker kapers (ca. 1580-1648)*, The Hague 1994 (Hollandse Historische Reeks, vol. 20), pp. 234-40.
- 23 Friedrich Graefe, *De kapiteinsjaren van Maerten Harpertszoon Tromp*, Amsterdam 1936, pp. 142-43 (appendix II: *Instructie voor de commandeurs over de cruïssende esquadres*).
- 24 Van Vliet 1994 (note 22), p. 215.
- 25 Stradling 1992 (note 18), p. 56.
- 26 F.W. Stapel, *Pieter van Dam's beschrijvinge van de Oostindische Compagnie, eerste boek, deel II*, The Hague 1929, pp. 561-62.
- 27 Richard J. Blakemore and Elaine Murphy, *The British Civil Wars at Sea, 1638-1653*, Suffolk 2018, p. 32.
- 28 Bruijn 1998 (note 22), p. 36.

- 29 Ibid., p. 37.
- 30 '... als sonder dewelcke wij niet connen becomen het coorn dat wij eeten, de wijnen die wij drincken, de wolle ende sijde daer wij ons mede beceden', ACA (note 8), inv. no. 18, fol. 10r, 8 January 1644.
- 31 ACA, 5026, Missives to burgomasters, inv. no. 57, letters from the directors, 23 and 26 September 1644.
- 32 One such firm was the Zeeland privateering firm which shifted its operations to Recife after the fall of Dunkirk: Franz Binder, 'Die Zeeländische Kaperfahrt', *Archief: Mededelingen van het koninklijk Zeeuws genootschap van wetenschappen* (1976), pp. 37-90; Rotterdam City Archives, Notariële Akten, 18_481 Johan van Weel de Oude te Rotterdam, 01-Jan-1645 t/m 31-Dec-1647, akte 120.
- 33 Elias 1933 (note 16), pp. 51-52.
- 34 Odegard 2020 (note 7), p. 70; Gerhard Wilhelm Kernkamp, *De sleutels van de Sont. Het aandeel van de Republiek in den Deensch Zweedschen oorlog van 1644-1645*, The Hague 1890, pp. 323-25.
- 35 NL-HANA (note 8), inv. no. 29, piece 1, p. 1.
- 36 'cloecke en bequaeme schepen omme den oirloge te gebruijcken ten minsten gemonteert met 20 tot vier a 26 stucken, de lichtste vande welcke inde laech leggende, niet minder en sullen mogen schieten als ses ponts ijsers, daer bij dan eenige van 8 eenige van 12 offe 18 ponden ijsers.' Ibid., p. 3.
- 37 Ibid., p. 5.
- 38 Ibid., p. 4.
- 39 NL-HANA (note 8), inv. no. 31, Rekening vande Directeurs vant Veijlgelt tot Hoorn tsedert 1645 tot 1646, pp. 115-25.
- 40 Ibid., inv. no. 30, loose sheet appended after the last page of the bound volume. The 2,321:3:8 guilders seems low and the compiler of the list may not have tallied all the costs properly, as another item of 724 guilders was not added into the accounts. Even so, ship rents make up only a small proportion of the costs.
- 41 James Bender, *Dutch Warships in the Age of Sail, 1600-1714: Design, Construction, Careers and Fates*, Barnsley 2014, pp. 59-60.
- 42 Ibid.; see also Kernkamp 1890 (note 34), pp. 323-25.
- 43 ACA (note 8), inv. no. 18, fol. 158r, 26 August 1647.
- 44 The ships were generally criticized as not being fit for service: Lieuwe van Aitzema, *Saken van staet en oorlogh, twee-en dertigste boek*, p. 761; see also Bruijn 1990 (note 4), p. 27.
- 45 Measured in Amsterdam feet in the Dutch way as: length on the gun deck, inside planking, width of the gun deck, inside planking, depth of hold and height between decks. One Amsterdam foot measured 0.283 m.