

GENEVER AND GIN CONSUMPTION IN THE AGE OF SAIL: THE NETHERLANDS  
AND THE UNITED KINGDOM

A Thesis

by

CHARLOTTE AMALIE KEATINGE JARVIS

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Chair of Committee,	Kevin Crisman
Committee Members,	Shelley Wachsmann
	Troy Bickham
Head of Department,	Darryl De Ruiter

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## ABSTRACT

This thesis analyzes the historical, pictorial, and archaeological evidence for genever (Dutch gin) and gin consumption among sailors in the Dutch Republic and the United Kingdom during the Age of Sail (1550-1850). While excessive alcohol consumption among mariners is a commonly cited stereotype, there has been surprisingly little critical scholarly work on this assertion. Gin's usage by the Dutch *Vereenigde Oost Indische Compagnie* (VOC) and Dutch Navy for medicinal purposes has been noted, but no thorough analysis of alcohol consumption broadly in a Dutch maritime context has been done to date.

Gin, or genever in English, was produced as early as the thirteenth century in Flanders. In its early form, it was a grain spirit closer to today's sweet, malted whiskey. By the late seventeenth century, genever was produced in large quantities in Holland under the term *jenever* (denoting the juniper berries used in its manufacture) and it appears for the first time in the Dutch National Dictionary in 1672.

As genever consumption increased on land, it also came into use on ships for medicinal purposes; it is this maritime usage that is the primary focus of the thesis. Genever starts appearing on ration lists as early as 1713, and this gives evidence for how much of the juniper liquor sailors and other passengers were consuming. By the nineteenth century, sailors' rations were 0.074 *kan* (75 ml) three times a day—nearly a full cup of neat alcohol.



The Royal Navy brought gin on its ships after it became popular in England during the eighteenth century. British usage differed from the Dutch, however, in that only officers drank gin at sea. Gin was also used in the Royal Navy for medicinal purposes because it masked the bad taste of many medicines.

This thesis reviews the scant existing scholarship on gin's existence onboard European vessels and surveys the archaeological record of Dutch shipwrecks for the presence of gin bottles and jugs. It incorporates primary archival research conducted in the Netherlands and provides new insight into use of juniper-based drink on voyages.

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### **Contributors**

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## NOMENCLATURE

AAINA	Archaeological and Anthropological Institute of the Netherlands Antilles
EIC	British East India Company
STIMANA	The Foundation for Maritime Archaeology of the Netherlands Antilles
VOC	East India Company ( <i>Vereenigde Oost Indische Compagnie</i> )
WIC	West India Company ( <i>Geoctrooieerde Westindische Compagnie</i> )

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## TERMINOLOGY

*Jenever* comes from the Dutch word for juniper berries, the defining flavoring agent of gin. In this thesis, *jenever* will be used in the context of original Dutch sources and translations, while ‘genever’ (the English translation) will be used when referring to the Dutch style of gin. The term ‘gin’ will be used when referring to British usage of the beverage and the subsequent Old Tom or London Dry styles that are recognizable today.



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## CHAPTER I

### INTRODUCTION

*Des zeemans allerbest compass is een gevuld genever-glas*: an old Dutch saying translates roughly into ‘a sailor’s best working compass is a glass full of genever’ (Dutch gin).<sup>1</sup> This aphorism underscores the centrality of alcohol generally, and genever specifically, as a key commodity aboard ships during the Age of Sail (1550-1850), both as a product for export and an essential beverage consumed by the sailors who transported it. Throughout the Middle Ages, beer, wine, and water were the traditional and predominant shipboard ration liquids for European sailors, but each had their drawbacks. Water was hard to keep fresh, beer spoiled quickly, and wine was expensive. Due to global exploration and expanded trade networks with Africa, the Americas, and the Indian and Pacific Oceans, European trade shifted from short haul Mediterranean or Western Atlantic coastal transits to long voyages that lasted months, or even years. Ship’s companies consequently required liquid rations that were both durable and concentrated, and distilled beverages met these requirements.<sup>2</sup> So-called ‘hard’ alcohol grew to be a significant economic commodity and its large-scale production, taxation, and transportation developed throughout the period.<sup>3</sup>

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<sup>1</sup> Solmonson, L. J., *Gin: A Global History* (London, 2012), 37.

<sup>2</sup> Standage, T., *A History of the World in 6 Glasses* (New York, 2005), 97.

<sup>3</sup> *Ibid.*

Although sailors are stereotypically hard drinkers, few scholars have studied this assumption with regards to gin.<sup>4</sup> Rations of straight rum and grog (watered-down rum) within the Royal Navy are an exception, for they are well researched—see A. J. Pak’s 1982 monograph, *Nelson’s Blood* for an exemplar. Similarly, popular histories of gin note that it was widely consumed by sailors in the *Vereenigde Oost Indische Compagnie* (VOC) and Dutch naval services for medicinal purposes, but this assertion has yet to be rigorously established through historical research. Anecdotal evidence of gin’s issue as a ration for sailors suggests that it was consumed in staggeringly high amounts, but we simply do not know when if this is true and if so, why or how this came about.

This thesis will first analyze the role of spirits in the daily lives of both common sailors and officers and compare the better studied rum rations of the British Royal Navy with the numerically equal, but largely unconsidered, Dutch genever rations issued between 1600 and the Dutch Navy’s abolition of alcohol at sea in 1905. By the eighteenth century, the two countries consumed different types of alcohol—the British drank rum, produced in their colonies in the West Indies, while the Dutch drank domestically distilled genever. The historical record shows how each nation’s merchant and naval shipboard rations developed over time. Thus, the two spirits can provide insights into life aboard ships and a measure of sociological status aboard different

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<sup>4</sup> For popular histories of gin see Coates, G., *Gin: The Essential Guide for Gin Afficionados* (London 2018), Jenkins, M., *Gin: A Short History* (Oxford, 2019), and Solmonson, L. J., *Gin: A Global History* (London, 2012).

vessels since gin was issued to all Dutch sailors, but only to British officers to differentiate them from common British sailors, who only had access to rum.

The third chapter looks at ways in which alcohol, primarily Dutch genever, was portrayed in contemporary images and the impressions that these popular images give about the popular perception of sailors, and the Dutch as a whole. The images show that artists, based on land often with little experience of the sea, regarded sailors as an alcohol-focused community of heavy drinkers. British artists often showed the Dutch with genever, not gin, highlighting both the known distinction between the two types of alcohol and the widely held stereotype of the Dutch as heavy drinkers.

In the fourth chapter, the archaeological evidence of genever's presence aboard vessels is discussed. Since the Dutch stored genever in a distinctive bottle (the British stored rum in barrels or a different-shaped bottle) the archaeological record is also helpful to examine Dutch genever consumption.<sup>5</sup> This thesis theorizes that material evidence of genever consumption and transport (in the form of case bottles) can be used to identify an unidentified shipwreck's nationality, and that hypothesis is tested through analysis of a sample of Dutch, British, French, and Portuguese wrecks excavated to date along the global shipping routes of Dutch commercial and naval sailing vessels.

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<sup>5</sup> Knight, R. and Wilcox, M., *Sustaining the Fleet, 1793-1815: War, the British Navy and the Contractor State* (Woodbridge, 2010), 62.

*Aqua vitae* and other spirits were consumed throughout Europe during the medieval period after the practice of distillation was adopted from Arab nations. In the thirteenth and fourteenth centuries, as distilling became more sophisticated and spread across Western Europe, different regions created their own unique beverages. ‘Whiskey’ emerged as the Gaelic term for Scandinavian *aqua vitae* while the Germans had their version of ‘brandywine’. The term *brandewijn* (burnt wine) became a term used generically for all types of distilled spirits.<sup>6</sup> The first mention of gin (in its original form *jenever*) dates to 1269 when Flemish poet Jacob van Maerlant described a nameless spirit mixed with juniper berries to denote a spirit resembling modern sweet, malted whiskey.<sup>7</sup> By the fifteenth century distilled spirits, especially brandy, were a staple in the Low Country region (*figure 1*), largely thanks to trade integration driven by the Hapsburg family’s inter-European commercial exchange networks.<sup>8</sup> This brandy was the predecessor of *jenever*, which later became the dominant drink throughout Holland.

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<sup>6</sup> Pak, *Nelson’s Blood*, 101 and Coates, *Gin*, 12.

<sup>7</sup> Solmonson, *Gin*, 18, Coates, *Gin*, 13 and 11.

<sup>8</sup> *Ibid.*, 39, 44.



**Figure 1: The Low Country during the 80 Years War (1560 to 1648).**  
 © Arblaster, P., 2018, *A History of the Low Countries*, Red Globe Press,  
 used by permission of Bloomsbury Publishing Plc.

A mention of a specific ‘juniper berry water’ was first recorded in Antwerp in 1552 in *Een Constelijck Distilleerboec*.<sup>9</sup> Over the following decades, as the Little Ice Age changed Europe’s climate, grape vintners struggled to make wine and grape-based spirits

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<sup>9</sup> Coates, *Gin*, 44. This ‘water’ is different to van Merlant’s nameless spirit that was flavoured with juniper rather than using juniper as the main identifying feature.

such as brandy.<sup>10</sup> Flemish distillers moved into the Netherlands and brought with them their production knowledge of spirits. By the late seventeenth century, genever (made from grain) was being produced in large quantities in Holland under the term *jenever*, which appeared for the first time in the Dutch National Dictionary in 1672.<sup>11</sup> But, despite their low cost, it was not until the eighteenth century that genever exports reached a significant volume.<sup>12</sup> Since Dutch ports were grain import centers, distillers could make genever cheaply using surplus or spoiled grain stock and export it quickly because they were based in port cities.<sup>13</sup>

Genever became ubiquitous in Holland not only as a drink for the common people, but also as a staple on Dutch ships. The VOC used the spirit for daily health rations and the Bols company, established in 1575, became the supplier of these ‘fine waters’ to the company.<sup>14</sup> As the Netherlands’ largest genever producer, Bols had prime access to exotic spices coming in from the Far East on VOC ships and used them in their production. By 1730, genever was often shipped with *lepelblad* (scurvy grass) for its supposed antiscorbutic health benefits. Based on VOC ships’ success at preventing scurvy, a common health problem on the long voyages typical of the Company, in 1742

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<sup>10</sup> Coates, *Gin*, 44. A 1601 edict states the limitation on grain for bread only (Solmonson, *Gin*, 46).

<sup>11</sup> Solmonson, *Gin*, 46 and Nagelkerken, W., Hayes, R., *The Historical Anchorage of Kralendijk, Bonaire, Netherlands Antilles. Including the Wreckage of the Dutch Brigantine Sirene (1831)* (Stichting Marien Archeologisch Onderzoek Nederlandse Antillen, 2002), 77.

<sup>12</sup> Nagelkerken, *The Historic Anchorage*, 78.

<sup>13</sup> van Schoonenberghe, E., *Jenever in de Lage Landen* (Brugge, 1996), 70.

<sup>14</sup> Solmonson, *Gin*, 61.

the Dutch Navy ordered that genever replace *korenbrandewijn* (grain brandy) on all Dutch ships.<sup>15</sup>

Dutch consumption of genever is distinctive because it was drunk universally across all ranks of sailor. The British Royal Navy, by contrast, issued gin aboard its vessels, but reserved it for officers, while rum was given to common sailors. Although gin started as an uncouth, lower-class beverage domestically (seen in Britain's early eighteenth-century 'gin craze') the beverage remarkably transitioned up the social scale to the upper classes and sophisticated drinking venues and became a symbol of wealth.<sup>16</sup> This shift happened on vessels too as the British Empire expanded and this led to different interpretations of the drink in British society. Gin was seen as an upper-class beverage by the late eighteenth century, and contemporary perceptions of drunken behavior were dependent on status and rank. Regardless of the spirit, both seafaring nations issued a high volume of alcohol to their sailors. The Dutch maintained the high volume longer than the British, however, reflecting different national and cultural influences.

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<sup>15</sup> Solmonson, *Gin*, 50.

<sup>16</sup> This shift is well documented in the popular histories of gin, mentioned previously.



## CHAPTER II

### HISTORICAL OVERVIEW

#### **The Dutch Maritime Industry**

According to Dutch maritime historian Jaap Bruijn, seafaring enterprises in the Netherlands during the Age of Sail can be grouped into five branches: merchant shipping, whaling, fishing, East India Company shipping, and the navy.<sup>17</sup> Because of their small-scale, localized nature, whaling and fishing will not be discussed here. Archival sources and secondary literature tend to cover merchant shipping, both private and as part of corporations, and the navy. The latter is where the most details regarding the historic consumption of gin can be found.

Merchant shipping, outside the VOC, took place in the North Sea, the Baltic, along the Atlantic European Coast, the Mediterranean, and in the West Indies.<sup>18</sup> During the seventeenth and eighteenth centuries, the Dutch operated roughly 2,000 merchant vessels in any given year, at a conservative estimate. Crews on the larger West Indies traders numbered about 40, while smaller vessels employed 18-25.<sup>19</sup> During times of war (which were frequent during this period) the Dutch Navy employed between 10,000 and 20,000 men, and even during peacetime it maintained a large force to protect merchant convoys.<sup>20</sup> Overall Bruijn estimated a total of 35,000 Dutch men were sailors

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<sup>17</sup> Bruijn, J. R. and van Eyck and Heslinga, E. S., 'Seamen's Employment in the Netherlands, 1600-1800', *Mariner's Mirror*, 70 (1984), 7.

<sup>18</sup> *Ibid.*

<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*, 10.

in 1610 across all maritime disciplines, which grew to 59,500 by 1770.<sup>21</sup> That is a lot of Dutch *zeemannen* consuming genever.

### *The Dutch East India Company*

In 1595, three ships sailed for the Spice Islands (a small group of islands to the north-east of Indonesia) and returned with cargos that turned a 500 per cent profit, launching arguably the most important maritime venture undertaken by the Dutch: The East India Company (VOC).<sup>22</sup> The company was chartered by the Estates General in 1602 and given a monopoly on all trade east of the Cape of Good Hope.<sup>23</sup> The VOC functioned as a state within a state until it was dissolved in 1799. Sailors were recruited for fixed terms of three years until 1658, after which the VOC increased enlistment to five years.<sup>24</sup> Although the pay was lower than whaling, fishing, and naval voyages, the VOC offered more job security. In fact, the company, desperate for men, became known for targeting struggling or impoverished men and trapping them into lengthy terms of service. The crews were notoriously poorly behaved; punishment aboard the vessels was harsh and mutiny attempts were frequent.<sup>25</sup> These complaints about poor crew quality began as early as 1614 and worsened over time.<sup>26</sup> Maritime historian Charles Boxer

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<sup>21</sup> Bruijn, 'Seamen's Employment', 10.

<sup>22</sup> Tracy, J. D. (ed.), *True Ocean Found: Paludanus's Letters on Dutch Voyages to the Kara Sea, 1595-1596* (Minneapolis, 1980), 21.

<sup>23</sup> Boxer, C. R., *The Dutch Seaborne Empire, 1600-1800* (London, 1965), 26.

<sup>24</sup> Bruijn, J. R., Gaastra, F. S., Schöffer, I., *Dutch-Asiatic Shipping in the seventeenth and eighteenth Centuries*, Vol 1: Introductory Volume (The Hague, 1987), 147.

<sup>25</sup> *Ibid.*, 153.

<sup>26</sup> Boxer, C. R., 'Annual Lecture 1962: The Dutch East-Indiamen: Their Sailors, Their Navigators, and Life Onboard, 1602-1795', *Mariner's Mirror*, 49 (1962), 84.

estimated that, overall, only one-third of the men who left Holland returned at the end of their VOC voyage due to the harsh conditions that awaited them at sea.<sup>27</sup>

Nevertheless, the VOC provided stable employment since ships left for the East regularly. The early period (1602-1650) saw 13 outbound ships per year and that number grew to 22 between 1650 and 1700. At its zenith, between 1700 and 1750, the company sent 33 outbound ships per year, but in its final decades only 28 ships made the journey each year.<sup>28</sup> In the seventeenth century, a ship's crews numbered around 180 and by the eighteenth century, larger more heavily built ships employed 230 men at a time.<sup>29</sup> In the extensive records kept by the company, the term *schipper* denotes the masters and *stierlieden* for the mates.<sup>30</sup> This is important to note later in this paper when the alcohol rations distributed by rank are discussed. The sheer volume of men employed by the VOC, numbering more than 6,000, represented a large portion of Dutch sailors (and genever drinkers).

### *The Dutch West India Company*

Compared to the VOC, Dutch scholars view merchant ventures in the Atlantic and West Indies as considerably less impressive. Jan de Vries notes, however, that even though modern historians may have ignored Holland's seventeenth- and eighteenth-

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<sup>27</sup> Bruijn, 'Seamen's Employment', 9.

<sup>28</sup> Ibid.

<sup>29</sup> Ibid.

<sup>30</sup> Boxer, 'The Dutch East-Indiamen', 87.

century adventures in this region, the Dutch at the time did not.<sup>31</sup> Their involvement in trans-Atlantic trade can be grouped into several economic stages. Before the West India Company (WIC) was chartered in 1621, individual Dutch merchants sent private expeditions to the West Indies, but as early as 1600 there were government discussions about consolidating these interests.<sup>32</sup> The WIC was chartered in 1621 after the eleven-year truce with Spain expired, and the Dutch increased their efforts at Caribbean privateering and colonization.<sup>33</sup> Danny Noorlander argues that this marks the first period of the Dutch Atlantic Economy, which lasted until 1678.<sup>34</sup>

WIC operations were modelled after the VOC, a public-supported confederation of investors, with chambers in different cities.<sup>35</sup> Their first ventures were military in motive and concentrated on Brazil and the Gold Coast.<sup>36</sup> Their new trading system began with attention to the monopoly on African trade goods and issued credit to private individuals to focus on sugar plantations and food production.<sup>37</sup> Curaçao emerged as the trading headquarters and a port for privateering.<sup>38</sup> These locations are crucial for the

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<sup>31</sup> De Vries, J., 'The Dutch Atlantic Economies', in Coclanis, (ed), *The Atlantic Economy During the Seventeenth and Eighteenth Centuries: Organisation, Operation, Practice, and Personnel* (Columbia, 2005), 1.

<sup>32</sup> *Ibid.*, 2.

<sup>33</sup> *Ibid.*, 3.

<sup>34</sup> Noorlander, D. L., 'The Dutch Atlantic World, 1585-1815: Recent Themes and Developments in the Field', *History Compass*, 18 (2020), 2.

<sup>35</sup> *Ibid.*

<sup>36</sup> De Vries, 'The Dutch Atlantic Economies', 4.

<sup>37</sup> *Ibid.*, 6.

<sup>38</sup> *Ibid.*, 7.

later archaeological analysis of Dutch genever because of the high volume of Dutch trade that was occurring.

Throughout the seventeenth century, Dutch smuggling havens in the Caribbean developed, such as Sint Eustatius.<sup>39</sup> Additionally, the Dutch slave trade grew at this time, second only to Portugal in scale, though the Dutch prioritized sale to Spain and their own plantations suffered.<sup>40</sup> In 1674, however, the West India Company declared bankruptcy due to enormous losses sustained in Brazil and the three wars with England. It was rechartered and shifted towards an Atlantic economy based on West Indies plantations, though they struggled due to a lack of support from the government.<sup>41</sup> This began the second period of the Dutch Atlantic Economy, built on imperial foundations.<sup>42</sup>

Historians consider the seventeenth century to be the Dutch Golden Age.<sup>43</sup> Dutch seaports developed as global trade hubs and a center for European grain trade, which aided their production of distilled spirits.<sup>44</sup> Transportation of goods, both imported grain and exported liquor, was crucial to expanding the nation's economy. Given its ubiquitous nature in Dutch culture and its massive consumption by sailors, genever was an important economic sector worth studying.

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<sup>39</sup> De Vries, 'The Dutch Atlantic Economies', 8.

<sup>40</sup> Ibid., 7, 10.

<sup>41</sup> Ibid., 10.

<sup>42</sup> Noorlander, 'The Dutch Atlantic World', 5.

<sup>43</sup> van Schoonenberghe, *Jenever*, 70.

<sup>44</sup> Ibid.

## **Dutch Jenever Consumption**

### *Origins and Non-Maritime Consumption*

Genever production grew enormously along with the expansion of the global Dutch economy. In the 1680s, the Netherlands exported 10 million gallons (45 million liters) of genever, mostly to England (as will be discussed later).<sup>45</sup> By the eighteenth and nineteenth centuries, both Dutch domestic consumption and exports were increasing.<sup>46</sup> The drink was exported in ‘case bottles’—square glass bottles for which both the Dutch, and gin would become known by.<sup>47</sup> They were called *kelderfles* and were usually packed 12 to a case for transport.<sup>48</sup> Genever exports and, therefore, demand for the bottles, rose to such a high level that hundreds of European glass blowers moved to the Netherlands. English, Belgian, and German distillers tried to imitate genever by putting their gin in square bottles, but they lagged far behind Dutch production.<sup>49</sup> Archaeologically, case bottles are an indication of a Dutch occupation site overseas.

By the end of the eighteenth century, the Dutch were producing 14 million gallons (63 million liters) annually with 250 distilleries in Schiedam, where there had been only 37 in 1700.<sup>50</sup> Weesp and Amsterdam were the original production sites, but

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<sup>45</sup> Maples, T., ‘Gin and Georgian London’, *History Today*, 41 (1991), 42.

<sup>46</sup> Solmonson, *Gin*, 59.

<sup>47</sup> As early as 1656 these square glass bottles were called case bottles and used for the transportation of alcohol on ships. McNulty, R. H., ‘Common Beverage Bottles: Their Production, Use, and forms in Seventeenth- and Eighteenth-Century Netherlands: Part I’, *Journal of Glass Studies*, 13 (1971), 105.

<sup>48</sup> Vermeulen, ‘J. F. Nagel- Genever-Flaschen’, *Pressglas-Korrespondenz*, 2013-2/18-01, 2.

<sup>49</sup> *Ibid.*

<sup>50</sup> Vermeulen, ‘J. F. Nagel- Genever-Flaschen’, 2 and Nagelkerken, *The Historical Anchorage*, 78.

Schiedam took over in importance by 1800 and is the location of the National Jenever Museum today.<sup>51</sup>

By the nineteenth century, genever consumption was impressively high in the Netherlands and it was known as the drink of the common man.<sup>52</sup> At the start of the century, the Dutch drank twice as much alcohol per capita as Britain, Germany, and France.<sup>53</sup> In the 1830s this equated to 10 liters (2.2 gallons) of genever annually, at 50 per cent strength, for every man, woman, and child. By 1889 the number of distilleries in Schiedam had again doubled to 476.<sup>54</sup> Maritime demand and overseas markets were a major driving-factor in genever's rise.

#### *Dutch Sailors and Alcohol*

The rise of genever in the Netherlands went hand in hand with an increase in Dutch maritime activity globally. Flemish distillers moved into the Netherlands around the same time that the VOC and WIC received their charters.<sup>55</sup> As the Dutch were colonizing overseas and imposing their economic imperialism worldwide, genever spread along with it in every ship, both as a trade commodity and as a drink for sailors.

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<sup>51</sup> Vermeulen, 'J. F. Nagel- Genever-Flaschen', 2.

<sup>52</sup> Solmonson, *Gin*, 65.

<sup>53</sup> Wintle, M., *An Economic and Social History of the Netherlands, 1800-1920: Demographic, Economic and Social Transition* (Cambridge, 2000), 62.

<sup>54</sup> Nagelkerken, *The Historical Anchorage*, 78.

<sup>55</sup> Solmonson, *Gin*, 49.

Aboard its ships, the VOC issued fixed rations of food and drink.<sup>56</sup> In the early period (seventeenth and eighteenth centuries), ships were provisioned for 20 to 30 months at sea but later, as more intermediate ports of call developed, the provisioning interval fell to nine months.<sup>57</sup> Rationing varied widely on different ships, and in different time periods, so each voyage should be considered on a case-by-case basis.<sup>58</sup> Some general trends do appear, however. Junior officers (boatswains and above) were allotted double drink rations while senior officers (captains and mates) and passengers were exempt from any restrictions and ate separately.<sup>59</sup> The regular crew was divided into *bakken* (messes) of seven and ate together. Their drinks were meant to be handed out in small measures to prevent drunkenness, but in practice this does not seem to have happened.<sup>60</sup>

Alcohol, in general, was not issued in uniform quantities on Dutch ships, but in a high volume overall, and Dutch sailors had a reputation for being drunk more often than their counterparts of other nations (see *figure 2*). The Dutch were far more generous in their naval rations and especially in the Indies the local word for Dutch became synonymous with the word for drunk.<sup>61</sup> A 1677 account of a Dutch vessel stated that the Hollanders ‘behave like wild boars. They rob, steal, and get drunk’.<sup>62</sup>

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<sup>56</sup> Bruijn, *Dutch-Asiatic Shipping*, 159.

<sup>57</sup> Boxer, ‘The Dutch-East Indiamen’, 94.

<sup>58</sup> Ibid.

<sup>59</sup> Bruijn, *Dutch-Asiatic Shipping*, 159 and Boxer, ‘The Dutch-East Indiamen’, 95.

<sup>60</sup> Bruijn, *Dutch-Asiatic Shipping*, 159.

<sup>61</sup> Solmonson, *Gin*, 51.

<sup>62</sup> Found in Boxer, ‘The Dutch-East Indiamen’, 98.





**Figure 2: A Dutchman shown on a print from Japan.** The square bottle with a juniper plant and traditional jenever glass indicated the consumption of that beverage and association between the Dutch and alcohol by the local population. Image reprinted under fair use principles.

Nicolaus de Graaf, a mariner who sailed on Dutch vessels from 1639 to 1687, said that sailors were given ‘one can’ of beer daily.<sup>63</sup> In the early seventeenth century, Dutch warships had rations of beer and water, but by the Second Anglo-Dutch war

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<sup>63</sup> Found in Boxer, ‘The Dutch-East Indiamen’, 94. It is unclear if ‘one can’ is a translation of the Dutch measurement *kan* or Boxer’s attempt to explain the ration with more modern terminology.

(1665-1667), brandy was substituted in place of beer.<sup>64</sup> Mid-eighteenth-century Dutch soldier Rudolph Siegfried Allemann's biography notes that he was given a glass of brandy at 4 o'clock and water at 6 o'clock daily.<sup>65</sup>

By 1692, genever was becoming more common aboard ships, but it was still not as common as beer. For example, in the seventeenth century, the vessel *Overijssel* brought f774,000 worth of beer and only f12,000 of genever for crew consumption.<sup>66</sup> By the eighteenth century, however, genever had become the more popular ration aboard Dutch vessels. An *oorlam* is sometimes listed as the name for the genever rations (around 50 ml) a term that coincidentally was also used to refer to an old seaman.<sup>67</sup> A 1713 VOC document, *Lyste en Reglement*, lists crew allowances based on rank: *onderstuurman* (ordinary seamen) got 3 *fleskelders* (which contain 12 bottles each), while merchants, according to a 1719 list, got 8 *fleskelders*.<sup>68</sup> A 1724 VOC ration list, for one month, provided 75 ml of brandy every other day after the *flapkan* (1.5 liters) of water and one quarter-barrel of beer was gone.<sup>69</sup>

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<sup>64</sup> Pak, *Nelson's Blood*, 194.

<sup>65</sup> Found in Boxer, 'The Dutch-East Indiamen', 94 and Mentzel, O. F., with Greenlees, M. (transl.), *Life in the Cape in Mid-Eighteenth Century. Being the Biography of Rudolf Siegfried Allemann, Captain of the Military Forces and Commander of the Castle in the Service of the Dutch East India Company at the Cape of Good Hope* (Cape Town, 1919), 34.

<sup>66</sup> Pak, *Nelson's Blood*, 194.

<sup>67</sup> *Ibid.*

<sup>68</sup> Documents seen in Nagelkerken, *The Historic Anchorage*, 77.

<sup>69</sup> Bruijn, *Dutch-Asiatic*, 214. This author believes that brandy may be a mistranslation of jenever in some sources, but further research into this is required. In Dutch literature on *jenever*, *brandewijn* or *korenbrandewijn* is discussed as a very close relative to genever and *korenbrandewijn* was made from grain according to van Schoonenberghe, *Jenever*, 68. Further archival research, in the original Dutch, is needed to confirm, but there may be some mistranslations of the beverage to English.

A 1762 Dutch Admiralty College document details a debate examining whether, and to what extent, genever should be included in ship rations.<sup>70</sup> This debate came after several of the successful voyages in the West Indies, where crews returned healthy with many citing genever as the reason. The Admiralty ultimately decided to allow genever rations, based on cost versus benefit calculations, but the document is valuable because it contains genever provisioning information. Ships of 40 *stukken* (directly translates to ‘pieces’, most likely referring to guns) were given 24 *ankers* of genever.<sup>71</sup> According to researchers at the Schiedam Jenever Museum, an *anker* equates to 40 liters.<sup>72</sup> In the eighteenth century, West Indies voyages conducting triangle trades usually lasted around 18 months and, as previously mentioned, had crews of around 40 (with genever rations of just under 50 ml a day per person if split evenly).<sup>73</sup> A 1781 document from the same archival bundle notes a ship of 60 *stukken* received 60 *ankers* (240 liters) for 12 months. By the nineteenth century, genever rations were frequently 0.075 *kan* three times a day.<sup>74</sup> A *kan* translates to roughly one liter, so the ration was set to approximately three-quarters of a cup (177 ml) of straight alcohol each day.<sup>75</sup>

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<sup>70</sup> Nationaal Archief (hereafter NA) 1.01.47.21, folio 7: De Verstreking van Jenever aan het Scheepsvolk. 1762-1784. Section titled ‘Genever’ dating to 26 August 1762.

<sup>71</sup> Ships of 60 guns were given 40 ankers, 50 guns received 32 ankers, 30 guns received 20 ankers, and 20 guns received 12 ankers.

<sup>72</sup> Leroy Fisscher, pers. comm.

<sup>73</sup> Zeeuws Archief, ‘The Voyage-History’, retrieved online 15 January 2022, <https://www.zeeuwsarchief.nl/en/themepage/slave-voyage-aboard-the-unity/the-voyage-history/>

<sup>74</sup> From an 1864 order seen in Solomonson, *Gin*, 51.

<sup>75</sup> *Ibid.*

Other, more personal, primary sources for the eighteenth century also mention Dutch genever and sailors. Allerman's biography notes that the *seelenverkauf* (broker agent) gave new VOC sailors supplies for their journey in advance, including 'a little barrel of gin' and 'a metal tube for drawing the gin out of the cask', which cost no more than 40 gulden.<sup>76</sup> William Hickey, a passenger on a Dutch East-Indiaman in 1780, noted that the captain washed down breakfast with a full glass of 'the favorite liquor, gin'—after consuming three small beers during the meal.<sup>77</sup> Hickey relates that their midday meal was even more substantial, and perhaps the gin consumption was too. The captain drank throughout each day, though Hickey 'would not dare to guess how many *sopekys*' the man drank before dinner. He never seemed drunk, however. Hickey recalls that the servant was 'in perpetual motion with the gin bottle and glass'.<sup>78</sup>

The memoirs of VOC sailor Jan Ambrosius, another contemporary source, has a section titled '*Verdrinken Zonder Water*', or 'Drowning Without Water', referring to the excessive drinking of sailors.<sup>79</sup> Here, he notes in 1760 that the cabin boy would come around at 11 o'clock with a bottle of genever—a stronger beverage than Ambrosius had ever had before.<sup>80</sup> Ambrosius was a Dutch anomaly and skipped alcohol rations throughout his time as a sailor, noting that he was in the minority to do so. At the end of

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<sup>76</sup> Mentzel, *Life in the Cape*, 21.

<sup>77</sup> Hickey, W., and Spencer, A. (ed.), *Memoirs of William Hickey*, vol. II (London, 1950), 229.

<sup>78</sup> *Ibid.*

<sup>79</sup> Hoorn, Jan Ambrosius, *Verdrinken Zonder Water: De Memoires van VOC-Matroos Jan Ambrosius Hoorn, 1758-1778* (Amsterdam, 2014).

<sup>80</sup> *Ibid.*, 97.

his memoirs, written in retirement, he remembered men who would drink six bottles in one night, though they did not live very long.<sup>81</sup> While this is probably an exaggeration, Ambrosius laments that so many sailors began to drink genever when young, and by the time they were older they had ‘drowned without water’. He finishes by reminding the reader not to drink excessively.

In 1899 the government attempted to curb the chronic drunkenness of Dutch sailors by only allowing alcohol rations to sailors over the age of 20.<sup>82</sup> By 1905, liquor rations were abolished by royal decree.<sup>83</sup> This debate was not limited solely to the Dutch among European nation’s navies. Government control of sailors’ alcohol consumption also occurred in the British Royal Navy.

## **British Genever and Gin Consumption**

### *Origins and Non-Maritime Consumption*

Genever’s history as a significant beverage extends beyond the borders of the Netherlands. The spirit made its way from the Low Countries to Britain, and later to America, to become the global phenomenon it is today. Dutch genever, however, was not the first alcohol from the Low Countries to eclipse a traditional British beverage. In the fifteenth and sixteenth centuries, beer from this region slowly replaced English ale

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<sup>81</sup> Pak, *Nelson’s Blood*, 258.

<sup>82</sup> *Ibid.*, 194.

<sup>83</sup> *Ibid.*

and by the eighteenth century that beer was overtaken by genever (and later gin) and rum.<sup>84</sup> Historian Jessica Warner argues that in order for the English to switch from their favored alcoholic beverages, the new option had to be affordable, better tasting and/or stronger than the drink it replaced, and easy for the English to produce locally.<sup>85</sup>

Genever met all of these conditions.

Sir Robert Dudley, a supporter of the Protestant Dutch cause over the Catholic Hapsburgs, is credited with bringing the first gin (really genever) to England in 1585. Later, English soldiers fighting on the Continent developed a taste for genever during the Thirty Years War (1618-1648). The English slang term ‘Dutch Courage’ refers to Dutch soldiers taking swigs of the liquor before charging into battle.<sup>86</sup> But it took the Glorious Revolution in 1688, and the new genever-drinking Dutch King William of Orange for the spirit to really begin its rise to popularity within England. William banned French spirits and wines and dissolved the English domestic distillery monopoly, paving the way for an increase in genever production.<sup>87</sup> At the same time, many Dutch immigrants, well-versed in distillation methods, had already settled in London. Their reputation as alcoholics and butter lovers, as well as for ‘strong waters’ on their ships, was noted by

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<sup>84</sup> Warner, J., ‘The Naturalization of Beer and Gin in Early Modern England’, *Contemporary Drug Problems*, 24 (Summer 1997), 374.

<sup>85</sup> *Ibid.*, 378.

<sup>86</sup> Solmonson, *Gin*, 68. Contemporary accounts of this can also be seen in Warner, ‘The Naturalisation’, 386.

<sup>87</sup> *Ibid.*, 73.

writer Daniel Defoe.<sup>88</sup> It was not until the eighteenth century that the British began drinking gin themselves.

Attempts to recreate Dutch genever, though unsuccessful, led to the creation of the spirit we recognize as gin today with a different flavor profile and distillation base than genever. A political pamphlet in 1714 first mentions gin as ‘the infamous liquor, the name of which, derived from Juniper berries in Dutch... charms the unactive, the desperate, the crazy’.<sup>89</sup> Specific styles, such as Old Tom and London Dry, developed in England and led to the ‘Gin Craze’ of 1720 to 1751.<sup>90</sup> Gin became so popular that at one point London’s 600,000 residents supported more than 7,000 licensed gin retailers.<sup>91</sup> Through the eighteenth and nineteenth centuries Parliaments attempted to tax and regulate gin with varied success. Eventually (in the late eighteenth century) the consumption of gin by the masses and impoverished dwindled due to changed drinking fashions and high market prices, and it became a beverage of the upper classes in sophisticated drinking venues and aristocratic beverages.<sup>92</sup> This enjoyment of gin by the upper-class extended to officers on British naval vessels.

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<sup>88</sup> Warner, ‘The Naturalisation’, 379, 388.

<sup>89</sup> Found in Coates, *Gin*, 21.

<sup>90</sup> Solmonson, *Gin*, 73. For a good overview of the different styles of British gin and how they developed see Coates, *Gin: The Essential Guide for Gin Aficionados*.

<sup>91</sup> Coates, *Gin*, 21.

<sup>92</sup> Ibid., 31 and Clark, P. ‘The “Mother Gin” Controversy in the Early Eighteenth Century’, *Transactions of the Royal Historical Society*, (1988), 63-84, 84.

## **Rum and the Royal Navy**

When one considers the Royal Navy and its alcohol consumption, the beverage that jumps to mind is rum, particularly in its watery form, ‘grog’, mixed with lime and sugar. This is because the Navy, like its Dutch counterpart, had a long history of using rum as a customary alcohol ration for sailors and for medicinal purposes. In 1655, rum was informally adopted as a substitute for traditional beer rations on ships in the Caribbean, where sugar plantations and rum production flourished.<sup>93</sup> Beer rations were available as early as the time of Henry VIII, but Vice Admiral William Penn’s West Indies naval fleet made the switch to rum due to its plentiful nature where the ships were stationed.<sup>94</sup> The issuing of rum did not become formal naval policy until the first written regulations were published in 1731, at which point the rum ration was around a half pint (284ml) per man per day, or a gallon of beer per day.<sup>95</sup> Within a century, rum became the preferred beverage, eclipsing weak beer that soured quickly at sea.<sup>96</sup> Beer rations were repealed altogether in 1831.<sup>97</sup>

By the 1740s, rum was the drink of choice in the British West Indies and was drunk neat in drams.<sup>98</sup> Because this created crew drunkenness and behavioral problems,

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<sup>93</sup> Standage, *A History of*, 108.

<sup>94</sup> Solmonson, *Gin*, 97 and Pak, *Nelson’s Blood*.

<sup>95</sup> *Ibid.*, 19.

<sup>96</sup> *Ibid.* and Standage, *A History*, 108.

<sup>97</sup> Pak, *Nelson’s Blood*, 71.

<sup>98</sup> *Ibid.*, 21.



Admiral Edward Vernon ordered the rum rations to be mixed with two-parts water. The Admiral's nickname was Old Grog and the beverage, grog, was named for him.<sup>99</sup> By 1756, grog was officially in the Naval Regulations and by 1795 lemon or lime was recommended to prevent scurvy in a three to one ratio.<sup>100</sup> Passenger William Hickey remembered a sailor crediting grog for his immunity to vitamin C deficiency disease, saying 'on your honour, grog is your only hope...more virtues than all the contents of a doctor's chest'.<sup>101</sup>

Drunken behavior was still a problem, though, since there were plenty of ways for a sailor to save his rations and drink them all at once.<sup>102</sup> In 1823, HMS *Thetis* was selected to test a reduced quarter-pint (142 ml) ration of rum for the crew. This was successful and new regulations were in place a year later.<sup>103</sup> The quarter-pints were called gills and though they were less than previous rations, they were still equal to about four strong double whiskeys today.<sup>104</sup> This rum ration was available to all crew members, just as genever was provided to the Dutch; but unlike the Dutch, onboard Royal Navy ships the officers usually drank something else.

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<sup>99</sup> Standage, *A History*, 109.

<sup>100</sup> Pak, *Nelson's Blood*, 23, 29, 45 and Standage, *A History*, 110.

<sup>101</sup> Hickey, *Memoirs of*, 214.

<sup>102</sup> Pak, *Nelsons Blood*, 21 and 60.

<sup>103</sup> *Ibid.*, 65.

<sup>104</sup> *Ibid.*

## **Gin and the Royal Navy**

In the seventeenth century, the Navy Royal, heretofore a semi-privatized body, became a more state-controlled entity, the Royal Navy, and that brought a new type of career-driven officers who were appointed by the state.<sup>105</sup> They were keen to stand out from their peers and lesser crew members and they drank to do so. Gin became the drink of naval officers and a culture developed around it that still persists today. Gin pennants, green and white flags, were (and still are) often raised when a ship was in port as an invitation for other officers to come aboard and partake of a gin cocktail.<sup>106</sup>

But in the late eighteenth century, gin was not valued for its status-raising reputation alone. Like the British use of rum and the Dutch consumption of genever, gin was embraced for its medical benefits as well. As mentioned, lime was used with rum by 1795 but it was only crew members who drank grog. Officers developed their own gin and lime beverage, the Gimlet, to drink their own scurvy-reducing rations.<sup>107</sup> Additionally, gin was used to mask the bitter, foul taste of many medicines. In 1824, gin was mixed with Angostura Bitters to make ‘pink gin’, considered a seasickness cure. Britain’s trade with Malaysia made this possible since the bitters were readily available there.<sup>108</sup> Quinine was known for its anti-malarial properties, so the British East India Company later issued tonic water (which contained quinine) to make the classic Gin and

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<sup>105</sup> Solmonson, *Gin*, 97. For a history of the Navy Royal, which became the Royal Navy under Charles II see Rogers, N.A.M., *The Command of the Ocean: A Naval History of Britain 1649-1815* (London, 2004).

<sup>106</sup> Solmonson, *Gin*, 106.

<sup>107</sup> *Ibid.*, 101.

<sup>108</sup> *Ibid.*, 99.

Tonic officers consumed.<sup>109</sup> Just as case bottles and genever represent Dutch imperial expansion, gin beverages showcase British colonialism and class distinctions.

Gin's connection to the Royal Navy is easily seen in the relationship between port cities and gin production. Purser were tasked with provisioning the ships and they usually stocked from local ports.<sup>110</sup> London, Bristol, and Liverpool developed gin distilleries and production centers, starting in 1769 with Gordon's in London.<sup>111</sup> By 1850, the Navy was conducting considerable business through Plymouth and the Plymouth Gin Company was supplying the Navy with 1,000 barrels of custom-made stronger gin, which was crucial as it would evaporate faster if it spilled on the gunpowder (with which it was stored, in locked closets).<sup>112</sup> In the historical record, gin is not noted to have created the same behavioral issues as rum—most likely because only officers became drunk on gin and they were not subject to the same consequences for drunken behavior as their crew. The class difference in perceptions of the beverages was alive and well.

### **Alcohol Units**

Dutch and British sailors consumed their versions of gin differently. While the British used it as a badge of status, the Dutch treated it as an egalitarian, everyday ration.

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<sup>109</sup> Solmonson, *Gin*, 106.

<sup>110</sup> *Ibid.*, 98.

<sup>111</sup> *Ibid.*

<sup>112</sup> *Ibid.*

The rum rations of a quarter-pint (142 ml) given to British West Indies sailors in the nineteenth century were comparable with the one-third pint (225 ml), full strength neat genever given to Dutch sailors around the same time. Dutch ships had a reputation for harsh crew treatment and misbehavior onboard. Was this because of a higher intoxication rate than their foreign counterparts due to greater ration amounts?

Working with modern-day alcohol percentages and units of alcohol, British sailors appear to be the more intoxicated. The 1731 regulations of one-half pint (284 ml) of rum daily equates to roughly 12.8 of today's units of alcohol.<sup>113</sup> This was before the addition of water, so it can be directly compared with the Dutch rations. Unfortunately, Dutch ration information in the eighteenth century is hard to find, but one secondary source notes it was a *kan* of 75 ml three times a day (225 ml or 11.3 units of alcohol).<sup>114</sup> Even with the addition of water (grog) in 1756, the British rum daily ration still works out to a 15 per cent beverage with 12.8 units of alcohol. For reference, the British National Health Service recommends no more than 14 units a week. Sailors were drinking close to that each day.

So, although the Dutch, and especially Dutch seamen, had a reputation for alcohol-fueled voyages, their consumption was below the drinking rate of the British

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<sup>113</sup> These calculations are made with the assumption of rum at 45 per cent alcohol and genever at 50 per cent and the unit measurements come from the British standard of 1 unit as 10ml of pure alcohol. See Alcohol Units by the NHS, updated 15 October 2021, retrieved 15 January 2022, <https://www.nhs.uk/live-well/alcohol-support/calculating-alcohol-units/>

<sup>114</sup> van Schoonenberghe, *Jenever*, 71.

Royal Navy. What is important to note here, though, is that sailors of both nations were consuming very high amounts of alcohol, even when rations were reduced. Following naval reforms, the British rate dropped to 6.4 units in 1824 while the Dutch stayed in the double digits (the 1864 ration of a *kan*, 75 ml, three times a day). For Dutch sailors, alcohol rations were abolished only in the early twentieth century and the British Royal Navy kept rum rations until 1970.

Alcohol was clearly an important part of life at sea for both nations as well as a valuable commodity for trade. This is clear when examining how sailors were viewed by landsmen. British Royal Navy men got the nickname ‘limeys’ due to their consumption of grog and gimlets. Their nickname was tied to alcohol. Similarly, the Dutch abroad became synonymous with drunkards and even today a *Kopstootje* (headbang) is a popular Dutch drink that is still associated with sailors. Given the high amount of alcohol that sailors were consuming, these stereotypes were likely justified. As Robert Hennebo’s 1723 poem, ‘Lof der Jenever’ notes, *wat schip zou van de wal afsteken, indien ’t jenever quam te ontbreken?*<sup>115</sup> What ship would leave the harbor without jenever?

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<sup>115</sup> Hennebo, R., *Rouw-klachten van den heere Jacobus Veenhuysen ; beneevens De lof der jenever, Eerste en tweede deel* (Amsterdam, 1723).

## CHAPTER III

### IMAGES OF GIN CONSUMPTION IN THE AGE OF SAIL

Along with written records, historical images can also give insight into genever and its Dutch and British consumption in the seventeenth and eighteenth centuries. For scholars, this period is blessed with thousands of Dutch realistic paintings of still life and daily scenes that include both case bottles and stoneware jugs as well as engravings and political cartoons reflecting popular nationalistic views. While historical evidence provides information about alcohol consumption, observations, and rations, visual evidence suggests how drinkers interacted with vessels used for drinking and situated them in their living environment.

Historical images depicting both generic alcohol drinking and specifically genever usage that were created in both the Netherlands and the United Kingdom. The Dutch images can be considered a reliable source because during this period, Dutch artists were famous for their efforts to faithfully record the scenes and subjects that they depicted.<sup>116</sup> Food and food-related items were also used as props in still life paintings and were illustrated as accurately as possible.<sup>117</sup>

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<sup>116</sup> Janowitz, M. F., 'Indian Corn and Dutch Pots: Seventeenth-Century Foodways in New Amsterdam/New York', *Historical Archaeology*, 27 (1993), 7.

<sup>117</sup> *Ibid.*

## Images of the Dutch

A principal source for images of Dutch genever consumption is the Rijksmuseum and its online digital archive. There, dozens of images can be found depicting sailors and genever as well as others documenting the export of genever to England. Images show alcohol consumption in general, and the different vessels and glasses that were used for specific alcohols. A 1757 image (*figure 3*) titled ‘Smoker and Drinker’ shows a man drinking from a stoneware jug.<sup>118</sup> Although it is not clear what type of alcohol is in the jug, the style matches many found in the archaeological record that were typically used to drink alcohol. The title of the print is also indicative of the jug’s contents.



**Figure 3: ‘Smoker and Drinker’ (1757).**  
Image courtesy of the Rijksmuseum.

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<sup>118</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.399595>

A comparison of images seventeenth- and eighteenth-century images by Jan van der Bruggen show differences in drinking vessels that were dependent on alcohol type. In ‘Sniffing, Drinking and Smoking Men’ (*figure 4*), the artist includes the same type of square case bottle that also appears in ‘Old Woman with Bottle and Glass’ (*figure 5*). However, in “Man with Pitcher and Wine Glass” (*figure 6*) van der Bruggen presents a stoneware pitcher and different glass style.



**Figure 4:** ‘Sniffing, Drinking and Smoking Men’ (1659-1740). Image courtesy of the Rijksmuseum.





**Figure 5: 'Old Woman with Bottle and Glass' (1659-1740).** Image courtesy of the Rijksmuseum.



**Figure 6: 'Man with Pitcher and Wine Glass' (1659-1740).** Image courtesy of the Rijksmuseum.

Moving away from images created in the Netherlands, other nation's depictions of solely Dutch and Dutch sailors commonly associate them with genever or 'Holland gin'. This highlights that the beverage was synonymous with the Netherlands, at least in cartoons and caricatures. In one image (*figure 2*) a Dutchman is shown in a Japanese print.<sup>119</sup> The square bottle with a juniper plant and traditional jenever glass indicate the

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<sup>119</sup> Image shown previously. This image has been hard to track down on the internet beyond a few websites. Occasionally the image is labelled 'coffee' and the beverage is assumed to be a unique Dutch-style of the hot drink. However, I believe this is actually genever given the shape of the bottle, traditional jenever glasses, juniper twig image on the label, and the dark color of the liquid.

consumption of that beverage and the Japanese artist's association between the Dutch and that type of alcohol.

An anonymous English cartoon from 1781 called 'The Dutch in the Dumps' (*figure 7*) shows two English sailors taking the trousers from a Dutch sailor as punishment for his support of France.<sup>120</sup> Below them is a square case bottle of Holland's gin. 'Cartoon of the panic among the patriots after the recovery of stadtholder Willem V, 1787' (*figure 8*), created by famous British caricaturist James Gillray, shows a cartoon of the residents of Amsterdam in a panic after William of Orange was reinstated.<sup>121</sup> William is shown subduing the 'patriots' (drawn as frogs) and some of them try to offer the prince gifts, including 'Holland Gin'.

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<sup>120</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.385663>

<sup>121</sup> For more information on Gillray and British cartoons see Hoban, S., 'The Satirical World of James Gillray', *The Lancet*, 358 (August 2001), 675. Image is available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.430861>



**Figure 7: 'The Dutch in the Dumps' (1781).** Image courtesy of the Rijksmuseum.



**Figure 8: 'Cartoon of the Panic Among the Patriots after the Recovery of Stadtholder Willem V' (1787).** Image courtesy of the Rijksmuseum.



Isaac Cruikshank's 'French Sans-Culottes in Dutch Trousers, 1795' (figure 9), provides another image showing a British depiction of Dutch dress and gin.<sup>122</sup> Here, the man on the left is a French sailor wearing baggy trousers that he took from the Dutchman behind him, and he is guzzling a square case bottle labelled gin. His speech bubble exclaims 'they may talk of the coldness of this country but by far here is the warm liquor'.



**Figure 9: 'French Sans-Culottes in Dutch Trousers' (1795).** Image courtesy of the Rijksmuseum.

<sup>122</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.385670>

‘Renewed friendship between the Netherlands and England, 1799’ (*figure 10*) created by Englishman Thomas Rowlandson shows the British chasing the French out of the Netherlands and a busy Dutch girl pouring the British officer a glass of genever as a reward.<sup>123</sup> The woman notes ‘I had great trouble to smuggle this bottle for you’ past the French. The Dutchman laments to the British soldier that the evil French left them with barely a drop of Hollander (genever) or red herring.



**Figure 10: ‘Renewed Friendship Between the Netherlands and England’ (1799).** Image courtesy of the Rijksmuseum.

<sup>123</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.385666>



Another Thomas Rowlandson caricature, ‘Dutch fleet pulled by joint effort, 1813’ (*figure 11*) shows Napoleon after he lost Holland and the Dutch allies pulling their ships from Texel.<sup>124</sup> At the bottom, barrels of ‘Real Holland’s Best Double Proof’ are depicted. Another 1813 print, produced by an anonymous source but in the style of Rowlandson, is titled ‘Fumigation of the Corsican, 1813’ (*figure 12*).<sup>125</sup> Here, Napoleon is shown angrily standing on a barrel of Dutch gin, causing the lid to come off and expel fumes into the room. A Dutchman is shown below the barrel with cheese, herring, and tobacco.



**Figure 11: ‘Dutch Fleet Pulled by Joint Effort’ (1813).** Image courtesy of the Rijksmuseum.

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<sup>124</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.419645>

<sup>125</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.384101>



**Figure 12: ‘Fumigation of the Corsicana’ (1813).** Image courtesy of the Rijksmuseum.

### Images of the British

It is harder to find images of British gin drinking and the types of vessels they used. William Hogarth’s ‘Gin Lane’ (*figure 13*), dated to 1751, is probably the most famous contemporary depiction of gin in London, but no bottles are shown.<sup>126</sup>

Interestingly, it is another Hogarth work, not even specifically relating to gin, that does show a contemporary image of British gin bottles. His 1755 ‘An Election Entertainment’

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<sup>126</sup> Image available under Creative Common License CC-BY-NC-ND 3.0 (Unported) by the Tate Britain at <https://www.tate.org.uk/art/artworks/hogarth-gin-lane-t01799>



(figure 14) depicts Whig politicians in a disorderly meeting.<sup>127</sup> In the foreground, a man is pouring liquid from a bottle labelled 'gin' onto the head of another. But this is not the square case bottle used for gin but is shorter and rounded—a contrast to the previous British-made caricatures featuring Dutch gin drinking, in which the square case bottle or wooden barrels are more common. Artists clearly noted a difference between genever and gin and depicted it accordingly. This probably reflects social trends at the time.



**Figure 13: 'Gin Lane' (1751).** Image courtesy of Tate Britain.

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<sup>127</sup> Available Open Access on the Rijksmuseum website at <http://hdl.handle.net/10934/RM0001.COLLECT.123814>





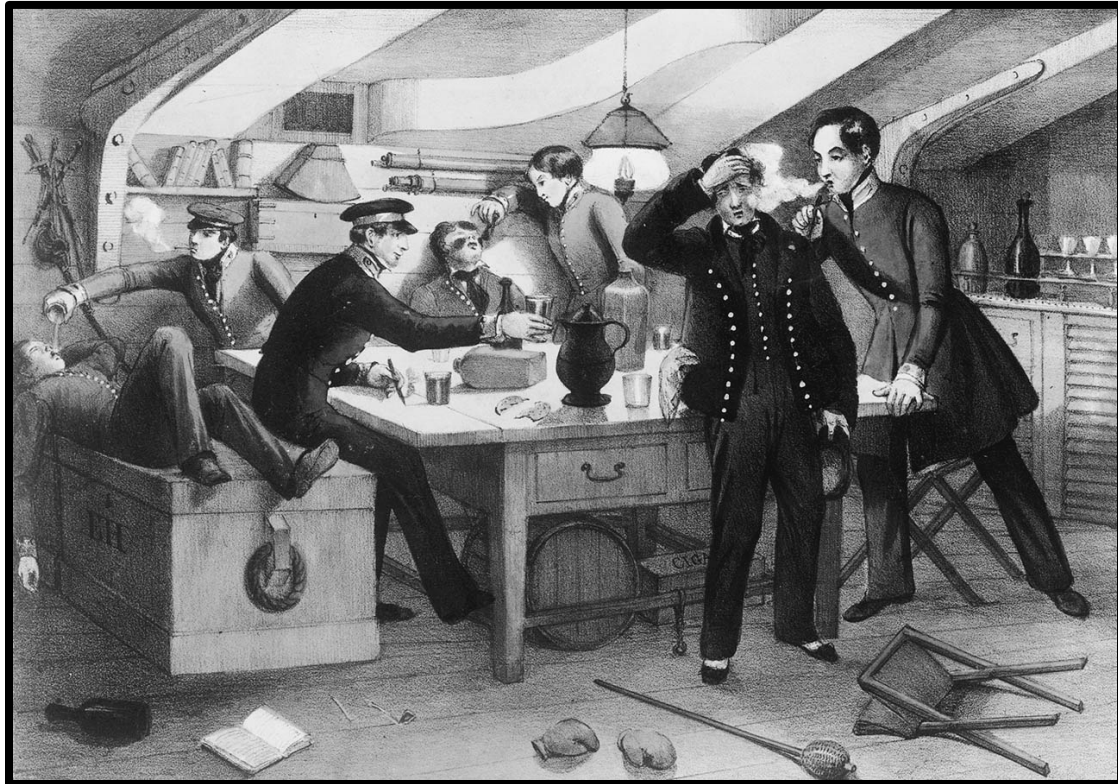
**Figure 14: ‘An Election Entertainment’ (1755).** Image courtesy of the Rijksmuseum.

Interestingly, one of the few contemporary images of British sailors drinking alcohol shows a signature Dutch case bottle, but the image is entitled “Come Youngster Another Glass of Grog Before you Go on Deck” (*figure 15*).<sup>128</sup> This nineteenth-century image shows sailors drinking together below deck from square bottles. There are wine bottles on shelves in the right corner, indicating that different types of alcohol were

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<sup>128</sup> Available Open Access on the Royal Museums of Greenwich website at <https://www.rmg.co.uk/collections/objects/rmgc-object-108967>

stored in distinct types of bottles. By the nineteenth century, the Dutch were not the only nation to use square bottles and it is more difficult to determine which alcohol the bottles contained.



**Figure 15: ‘Come Youngster Another Glass of Grog Before you go on Deck’ (1800-1901). Image courtesy of The Royal Greenwich Museums.**

### Analysis

Images are an important supplement to the historical record. From contemporary sources, it is clear—at least to contemporary artists and the print-buying public—that Dutch and British sailors drank significant amounts. Visual sources help illustrate how

and where they were drinking and how integral a part alcohol played as a stereotypical national identifier in the maritime culture of each.

CHAPTER IV  
ARCHAEOLOGICAL CLASSIFICATION OF SITES BASED ON GENEVER'S  
MATERIAL CULTURE

Material culture compliments the historical and visual record by providing further insights into alcohol and its consumption by the Dutch and British. The archaeological record shows material goods trends, including the presence of case bottles and stoneware jugs on nearly all known and studied Dutch wrecks from this period. So, what does the presence or absence of case bottles or stoneware jugs on shipwrecks of the sixteenth through nineteenth centuries suggest about genever consumption on Dutch or other European vessels?

There are two main locations where Dutch shipwrecks and maritime-related sites have been archaeologically identified: the Caribbean and various points along the VOC trade routes from European waters to the Indian Ocean and Asia. This speaks to the universality of Dutch genever consumption. Through Dutch global shipping, commerce, and colonization the beverage was consumed in the West Indies, the East Indies, domestically in Holland, and everywhere else in between.

**The Dutch Archaeological Record**

Dutch consumption and transportation of genever appears in the archaeological record in two distinctive beverage containers. Firstly, green glass square case bottles

became synonymous with the spirit and were used to transport genever all over the Dutch maritime world and beyond. Additionally, genever was consumed on ships in stoneware jugs because gin intended for consumption by sailors was typically bottled in these containers.<sup>129</sup> The relatively high concentrations of genever-related artefacts on sites shows the prevalence of this spirit in the Dutch world both for trade or consumption as a commodity by the upper class (in case bottles) and as part of a sailor's daily life (in stoneware jugs).

#### *Transporting Genever: Case Bottles and Stoneware Jugs*

Large-scale glass production began in the Netherlands around the same time that the Dutch were emerging as a world maritime power in the mid seventeenth century.<sup>130</sup> At this time, green glass was commonly used for bottles, especially in Rotterdam,<sup>131</sup> but it was actually in the sixteenth century that the square bottle form started production, initially as small bottles, roughly 15 cm tall.<sup>132</sup> Later, they measured up to 28 cm tall,<sup>133</sup> and by 1656, they were packed into cases for transport.<sup>134</sup> They were known as *kelderflessen*, named for the cases (*kelder*) that they were stored in as groups of 6, 9, 12,

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<sup>129</sup> A number of archaeological studies of maritime-related sites have made this claim including Nagelkerken, W., Hayes, R., *The Historical Anchorage of Kralendijk, Bonaire, Netherlands Antilles. Including the Wreckage of the Dutch Brigantine Sirene (1831)* (Stichting Marien Archeologisch Onderzoek Nederlandse Antillen, 2002) and Marsden, P., *The Wreck of the Amsterdam* (New York, 1974).

<sup>130</sup> McNulty, R. H., 'Common Beverage Bottles: Their Production, Use, and forms in Seventeenth- and Eighteenth-Century Netherlands: Part I', *Journal of Glass Studies*, 13 (1971), 91.

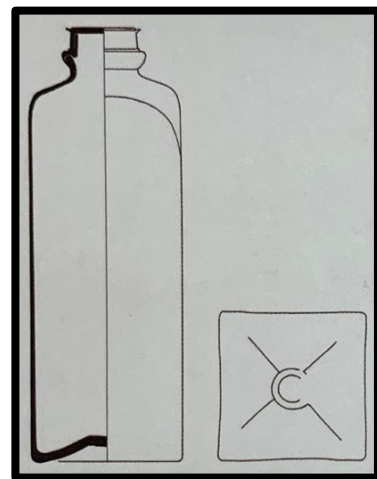
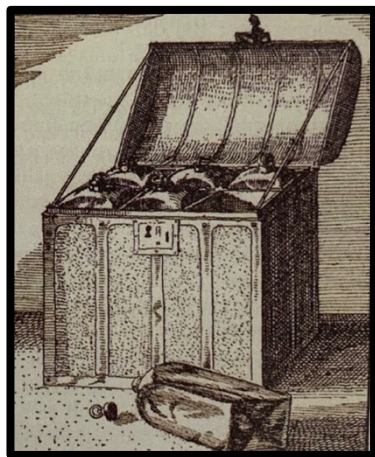
<sup>131</sup> *Ibid.*, 94.

<sup>132</sup> Vos, 134

<sup>133</sup> McNulty, 'Common Beverage', 91

<sup>134</sup> *Ibid.*, 106.

or even 15 (seen in *figure 16*).<sup>135</sup> By the eighteenth century, the fine glass industry was thriving and by 1736 most Dutch glass container factories were making these green case bottles. They were first used to bottle spirits (beer was not bottled in glass until later in the century).<sup>136</sup> As genever grew in popularity, so did the style of bottle it came in and other countries attempted to imitate the classic square shape. Germany, for instance, produced such bottles for genever imitations.<sup>137</sup> Dutch case bottles were almost exclusively used for the export of gin rather than for domestic consumption where stoneware storage was standard, as noted by Dutch archaeologist Ivan Nagelkerken.<sup>138</sup> It is striking that no bottles of this type have been found archaeologically in Holland, strongly suggesting the bottles truly represent genever as an export commodity and for maritime consumption.



**Figure 16: Case for *kelderflessen* (left) and sketch of case bottle shape (right).** Reprinted with permission from Vos, A. D., *Onderwater-archeologie op de Rede van Texel: Waardstellende Onderzepeken in de Westelijke Waddenzee (Burgzand)* (Amersfoort, 2012), 134.

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<sup>135</sup> *Ibid.*, 109.

<sup>136</sup> McNulty, 'Common Beverage', 96 and 98.

<sup>137</sup> Vermeulen, 'J. F. Nagel' 1-5.

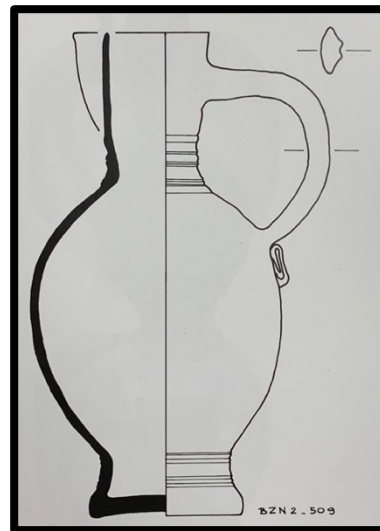
<sup>138</sup> Nagelkerken, *The Historical Anchorage*, 78.



The other way genever was transported by the Dutch was in stoneware jugs (figure 17 and 18).<sup>139</sup> The jugs can be representative of genever consumed by sailors and domestic residents, especially in the early period of the liquor's popularity. In the Low Countries, brown-colored Rhenish stoneware was often used as the main container for liquids.<sup>140</sup> Although the presence of this stoneware on archaeological sites does not indicate consumption of gin as obviously as case bottles do (stoneware jugs were used for other purposes), it does strongly reflect alcohol and crew drinking.



**Figure 18: Stoneware jug example.** Reprinted with permission from STIMANA.



**Figure 17: Stoneware pitcher example.** Reprinted with permission from Vos, A. D., *Onderwater-archeologie op de Rede van Texel: Waardstellende Onderzepeken in de Westelijke Waddenzee (Burgzand)* (Amersfoort, 2012), 139.

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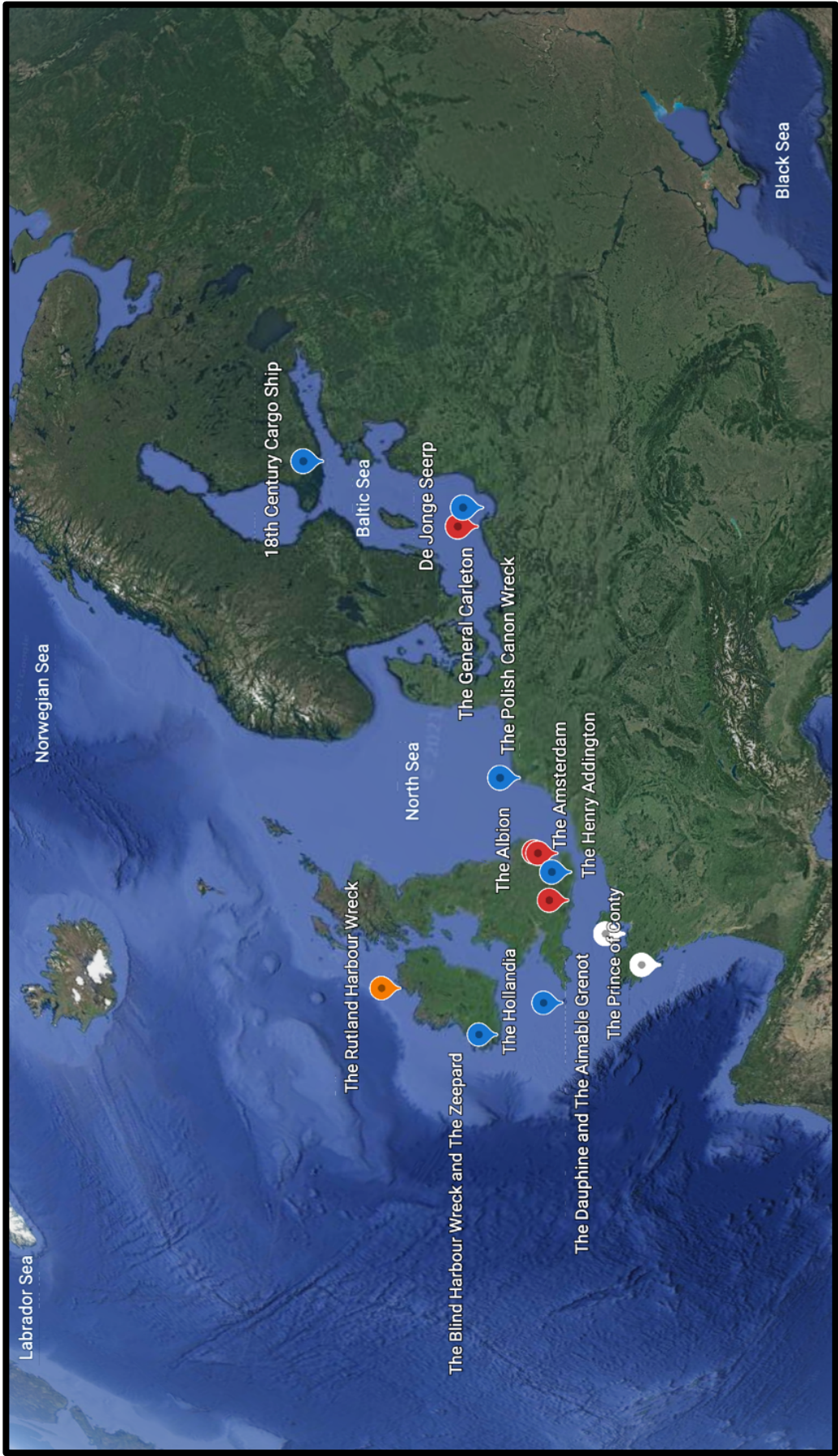
<sup>139</sup> Nagelkerken, *The Historical Anchorage*, 78.

<sup>140</sup> Nagelkerken, W., *Ceramics of Orange Bay, St. Eustatius, Netherlands Antilles*, STIMANA Marine Archaeology Series, No. 1 (Curaçao, 2000), 41.

## Methodology

If Dutch sailors in the Age of Sail were drinking genever and the vessels were also used to export the spirit, then the archaeological record should reflect this. Methodologically, this can be tested by evaluating Dutch shipwrecks in a variety of locations as well as shipwrecks of other nationalities to see if only Dutch vessels contain both stoneware and case bottles. A sampling of shipwrecks was chosen for this purpose. Scores of British, Portuguese, and French wrecks dating from the seventeenth to nineteenth centuries have been located and archaeologically assessed. For this paper, a selection of vessels has been evaluated, representing a wide geographic spread and detailed archaeological reports. The dates for the chosen wrecks characterize a time before mass globalization and trade started in the mid-nineteenth century, thus making it easier to assign specific, limited nationalities to diagnostic artefacts. Each of the following wrecks (seen in Tables 1, 2, and 3; *figures 19, 20, and 21*) will be evaluated for their artefact assemblage and if they contain stoneware vessels, case bottles, or both.





**Figure 19: Northern European Shipwreck locations in place.** Image created by author.



**Figure 20: Oceania shipwreck locations in place.** Image created by author.



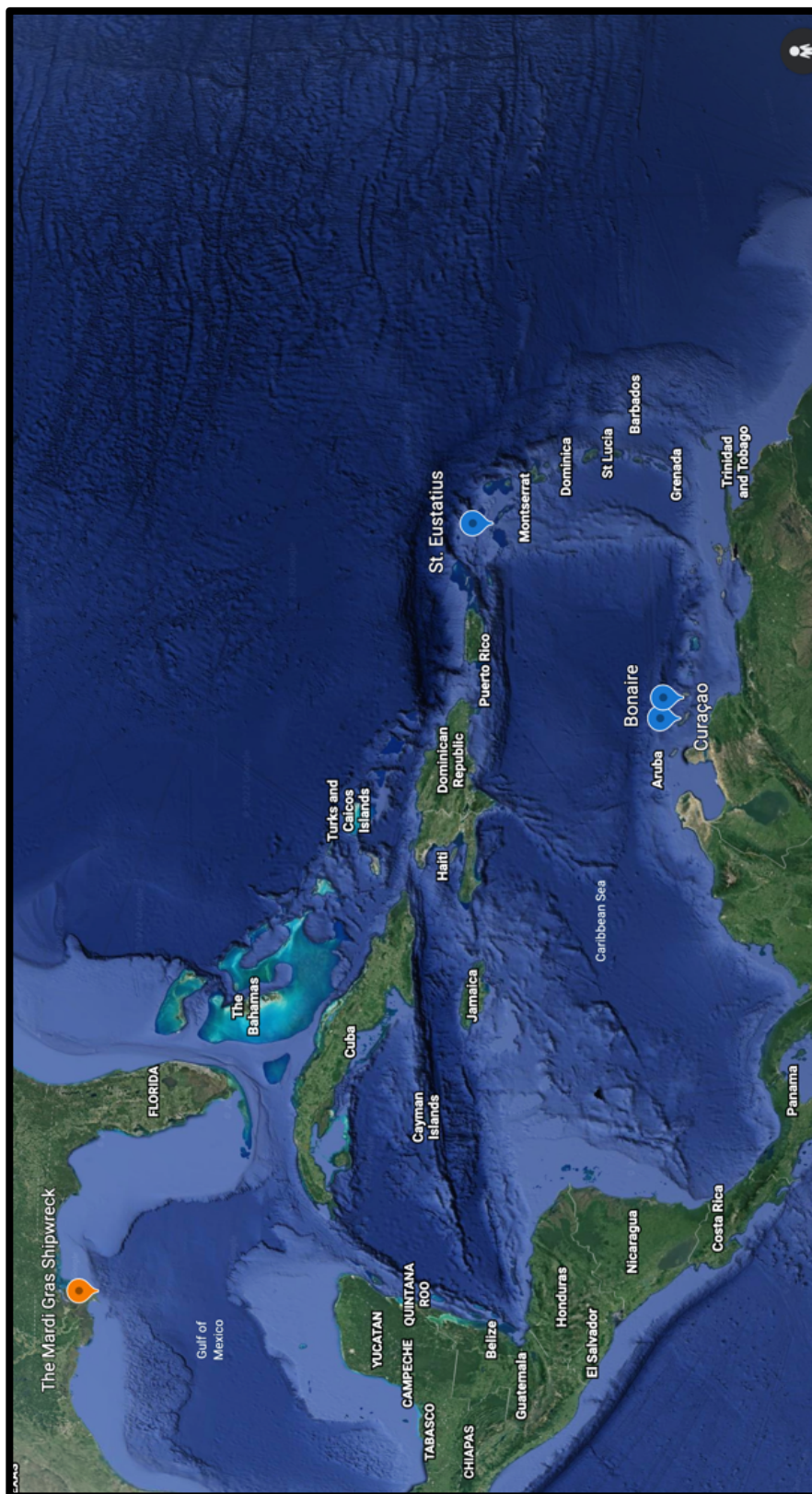


Figure 21: North American and West Indies shipwreck and site locations. Image created by the author

## **The WIC and Genever**

The Netherlands Antilles was designated as an autonomous entity in the Kingdom of the Netherlands from 1954 until 2010 when it became a municipality known as the Dutch Caribbean.<sup>141</sup> Since 1967, the Archaeological and Anthropological Institute of the Netherlands Antilles (AAINA) has managed the cultural heritage of the area and conducted a number of archaeological surveys and projects.<sup>142</sup> In 1998 the Foundation for Maritime Archaeology of the Netherlands Antilles (STIMANA) took over many of these projects. Additionally, several of the islands have their own archaeological centers conducting research and issuing publications.

While information gathered from the Dutch Caribbean is useful, it must be used cautiously. The sites analyzed in this thesis come from surveys of two historic anchorages and one island. The Caribbean was a melting pot of cultures and trade squeezed into a small geographic region during the Age of Sail and diagnostic artifacts associated with particular national or geographic trends are less reliable in such internationally blended contexts. Although Sint Eustatius and Bonaire show evidence of genever consumption, it cannot be assumed confidently that the presence of stoneware jugs and case bottles together represent a uniquely Dutch context or site.

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<sup>141</sup> Hofman, C., Haviser, J. (eds.), *Managing our Past into the Future: Archaeological Heritage Management in the Dutch Caribbean* (Leiden, 2015), 27.

<sup>142</sup> *Ibid.*, 29.

### *Sint Eustatius*

In the seventeenth and eighteenth centuries, Sint Eustatius (Statia) was one of the most important islands in the Caribbean due to its location, safe anchorage, political status, and economic stability.<sup>143</sup> Between 2,000 and 4,000 ships anchored in Orange Bay every year during the island's economic zenith in the 1780s to 1790s.<sup>144</sup> These ships left behind a rich archaeological record in the waters around the island and the sailors' and residents' material culture is evident on terrestrial sites throughout the island. This maritime and commercial culture clearly included drinking since wine and gin bottles have been found on every archaeological site on the island.<sup>145</sup> Contemporary written evidence and port records indicates high alcohol consumption among the resident mariners as well.

Dutch governors passed legislation in the eighteenth and nineteenth centuries to curb excessive drinking, including one regulation that made it illegal to sell wine to soldiers since they drank too much.<sup>146</sup> Statia's Lower Town was the location for most of this drunkenness. One 1829 visitor noted that 'upon arrival to the island, most sailors go straight to the first rum house'.<sup>147</sup>

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<sup>143</sup> Nagelkerken, *Ceramics of Orange Bay*, 2.

<sup>144</sup> *Ibid.*, 3.

<sup>145</sup> Stelten, R., *From Golden Rock to Historic Gem: A Historical Archaeological Analysis of the Maritime Cultural Landscape of St. Eustatius, Dutch Caribbean* (Leiden, 2019), 108.

<sup>146</sup> *Ibid.*, 124.

<sup>147</sup> Found in Stelten, *From Golden Rock*, 124.

## Maritime Archaeological Record

In addition to ample terrestrial evidence of drinking, the historic anchorage and shipwreck sites also show evidence of alcohol usage. During the island's peak trade in the late eighteenth century, Orange Bay, and its anchorage area, was packed with ships. In the 1980s and 1990s The College of William and Mary and AAINA surveyed Orange Bay.<sup>148</sup> Of their finds, 38 per cent were earthenware ceramics, 28 per cent were bottles, and 23 per cent were bricks.<sup>149</sup> More than 400 ceramic artefacts were recovered in total, including fragments of brown (Rhenish) stoneware containers from the seventeenth century commonly used to hold liquor and greyish-blue stoneware from the eighteenth century.<sup>150</sup> The latter made up the largest group of ceramics and was traditionally used to transport mineral water on ships. Most jugs were German-made dating from 1750-1775.<sup>151</sup> These ceramics were crucial to proving that mostly Dutch ships anchored in the bay in the early eighteenth century.<sup>152</sup> Kathryn Bequette later surveyed the anchorage area for a 1992 thesis and collected 476 surface artefacts—most of which were dark green bottle fragments, from both case and wine bottles, and white earthenware sherds associated with the ships' cargoes.<sup>153</sup>

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<sup>148</sup> Nagelkerken, *Ceramics of Orange Bay*, 7.

<sup>149</sup> *Ibid.*

<sup>150</sup> *Ibid.*, 41.

<sup>151</sup> *Ibid.*, 50.

<sup>152</sup> *Ibid.*, 69.

<sup>153</sup> Bequette, K. E., 'An Archaeological Reconnaissance of the Anchorage, Seawalls, and Shipwrecks Within Oranje Bay, St. Eustatius, Netherlands Antilles', unpublished MA thesis (East Carolina University, 1992, 132.

Some shipwreck sites were also surveyed and excavated in the waters of Sint Eustatius and show more evidence of alcohol aboard vessels. Bequette discovered case bottle fragments and bottle bases on SE-502, a mid-eighteenth-century Dutch merchant ship.<sup>154</sup> Known locally today as ‘Stingray City’, the site has been looted frequently and has lost much of its archaeological value.<sup>155</sup> Another site known today as ‘Triple Wreck’ (SE-504) is now a popular dive site and subject to excavation by a privately-owned company, Shipwreck Survey.<sup>156</sup> Although there is no significant dating information available for the site, Bequette’s survey recovered several case bottle fragments, tops, and bases.<sup>157</sup> This material is consistent with the wider picture of Sint Eustatius and Dutch maritime culture during the Age of Sail.

### *Bonaire*

Bonaire, a Caribbean Island located off Venezuela, was another Dutch port visited frequently during the Age of Sail. In the early seventeenth century English, Spanish, French, and Dutch ships stopped there frequently until the WIC took possession of the island in 1635.<sup>158</sup> Apart from a brief period of British control from 1807 to 1816, the island has remained in Dutch hands.<sup>159</sup> Ivan Nagelkerken surveyed the historic anchorage of Kralendijk and published his findings in 2002.

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<sup>154</sup> Bequette, ‘An Archaeological Reconnaissance’, 110, 137.

<sup>155</sup> Stelten, *From Golden Rock*, 74.

<sup>156</sup> *Ibid.*, 74.

<sup>157</sup> Bequette, ‘An Archaeological Reconnaissance’, 123.

<sup>158</sup> Nagelkerken, *The Historical Anchorage*, 12.

<sup>159</sup> *Ibid.*, 13.

Just over one-tenth of the artefacts he found were square case bottles, 30 per cent of which were from the eighteenth century (the rest from the nineteenth century).<sup>160</sup> Additionally, stoneware jugs were found, and these were most likely what held the genever for the sailors themselves.<sup>161</sup> These dated to the late nineteenth and early twentieth centuries. The relative concentration of genever-related artefacts in Nagelkerken's survey shows the prevalence of this spirit.

### **The VOC and Genever**

The second main source of archaeological sites where Dutch maritime culture predominated, and more reliably so than in the Caribbean, is the wrecks of East India Company (VOC) vessels. These shipwrecks are found all over the world, especially along the trade routes of the VOC. Unfortunately, because of their valuable cargoes, these sites are particularly prone to looting and salvaging—some even disturbed with the Dutch government's permission.<sup>162</sup> Although a complete record of wrecked VOC ships is hard to obtain, many general trends are evident. Western Australia, in particular, has more than 12 VOC period shipwrecks, which make up a large percentage of the nearly 50 VOC wrecks found in total.<sup>163</sup> A few of these shipwrecks are discussed in this thesis.

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<sup>160</sup> Nagelkerken, *The Historical Anchorage*, 77.

<sup>161</sup> *Ibid.*, 79.

<sup>162</sup> van Duivenvoorde, W., 'The Batavia Shipwreck: An Archaeological Study of an Early Seventeenth-Century Dutch East-Indiaman', published PhD dissertation (Texas A&M University, 2008), 253.

<sup>163</sup> *Ibid.*, 8, and Green, J., H., 'The Wreck of the Dutch East Indiaman the *Vergulde Draeck*, 1656', *The International Journal of Nautical Archaeology*, 2 (1973), 267.



## Vergulde Draeck

The *Vergulde Draeck* sank in 1656 off the northern coast, near the present-day city of Perth, Australia. The ship had a crew of 193 and was considered a medium-sized vessel.<sup>164</sup> Its cargo of trade goods was worth an estimated 106,400 guilders (almost \$50,000 at the time). The wreck was discovered in 1963.<sup>165</sup> Sadly, much of the cargo and associated artefacts were looted before professional archaeologists were involved.<sup>166</sup> When the wreck was excavated by archaeologists with the Western Australia Museum, they found the remaining artefacts scattered and disturbed to such an extent that their location on the ship was difficult to place (with the exception of a galley area with cooking pots).<sup>167</sup> Divers recovered 44 complete stoneware jugs of the salt-glazed Bartmann style, most with the Amsterdam city coat of arms.<sup>168</sup> Additionally, two groups of glass case bottles were found with their associated pewter screw tops.<sup>169</sup> The presence of case bottles and stoneware jugs provides evidence of spirits both issued to the crew and also the alcohol among the general cargo.

## *The Zeepaard and the Blind Harbour Wreck*

During the Anglo-Dutch wars (1652-1654, 1665-1667, and 1672-1674), VOC ships were forced to sail to Asia via a more northerly route around Scotland and Ireland

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<sup>164</sup> Green, 'The Wreck of the Dutch East Indiaman', 267.

<sup>165</sup> *Ibid.*, 267.

<sup>166</sup> *Ibid.*, 273.

<sup>167</sup> *Ibid.*, 278.

<sup>168</sup> *Ibid.*, 280.

<sup>169</sup> *Ibid.*, 286.

since it was unsafe for them to use the English Channel.<sup>170</sup> The *Zeepaard*, a 400-ton VOC ship returning from Batavia, wrecked off the coast of Ireland in 1665.<sup>171</sup> The wreck was researched by archaeologists with the National Museum of Ireland in Blind Harbour, along with the remains of an unknown ship (the Blind Harbour Wreck). The *Zeepaard*'s identity was confirmed with archival documents, and archaeological finds also indicated that it was a Dutch vessel.<sup>172</sup> The neck of a Bartmann jug, as well as one partial and two complete vessels, were among the ceramics finds.<sup>173</sup> While there were no glass finds (or case bottles), excavators did recover three pewter bottle top reinforcement rings.<sup>174</sup> These were used by the VOC to pack glass bottles and protect their necks during travel.<sup>175</sup> The same type of rings were found on the *Vergulde Draek*, and it can be assumed they, similarly, were used to protect square case bottles. The Blind Harbour Wreck likewise had nine pewter bottle protective rings among the finds.<sup>176</sup> Although no ceramics were listed with the wreck, it was noted that the hull timbers had likely settled on top of most artefacts.<sup>177</sup> If stoneware jugs were found, they aid in identify the wreck.

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<sup>170</sup> Brady, K., 'The *Zeepaard* and the Blind Harbour Wreck. Investigations of Two Seventeenth-Century Wrecks in Broadhaven Bay (County Mayo, Ireland)', in *Ships and Maritime Landscapes: Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology* (Amsterdam, 2012), 416.

<sup>171</sup> *Ibid.*

<sup>172</sup> *Ibid.*, 419.

<sup>173</sup> *Ibid.*, 420, 421.

<sup>174</sup> *Ibid.*

<sup>175</sup> *Ibid.*, 419.

<sup>176</sup> *Ibid.*

<sup>177</sup> *Ibid.*, 418.

### *The Polish Cannon Wreck*

Chronologically, the next VOC wreck discussed here is site BVN2 off the Dutch coast near Texel, locally known as the Polish Cannon Wreck.<sup>178</sup> This VOC ship wrecked leaving the Netherlands in the late seventeenth century (estimated to be 1670-1680) and provides a good example of the materials loaded on a vessel for an outbound voyage. Of the glass finds, nearly all were case bottles. Dutch archaeologist Arent Vos notes that these bottles were used to transport alcohol over long distances and on BVN2, nearly 80 bottles and their tin caps were found.<sup>179</sup> Additionally, Westerwald-style stoneware pitchers were found and could be evidence of alcohol issued to the crew.<sup>180</sup> The period of the shipwreck may be a little early for the alcohol to have been genever given its production dates in the Netherlands, but it is entirely possible.

### *The Hollandia*

Another VOC shipwreck that provides evidence from an outbound voyage is the *Hollandia*, which wrecked off of the Isles of Scilly, in the southwest corner of the U.K, in 1743.<sup>181</sup> The vessel was built in the VOC's Amsterdam shipyard and had a crew of 276 men—smaller than typical for a vessel of its size.<sup>182</sup> Artefacts from the ship indicate that there were high ranking passengers aboard the vessel, as well as the crew, all of

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<sup>178</sup> Vos, A. D., *Onderwater-archeologie op de Rede van Texel: Waardstellende Onderzepeken in de Westelijke Waddenzee (Burgzand)* (Amersfoort, 2012), 109.

<sup>179</sup> *Ibid.*, 134.

<sup>180</sup> *Ibid.*, 135.

<sup>181</sup> Cowan, R., Cowan, Z., Marsden, 'The Dutch East Indiaman *Hollandia* Wrecked on the Isles of Scilly in 1743', *The International Journal of Nautical Archaeology*, 4 (1975), 267.

<sup>182</sup> *Ibid.*, 273.

whom were headed to the East Indies.<sup>183</sup> Unfortunately, no contemporary cargo list exists for *Hollandia*; there is some evidence of contemporary salvaging.<sup>184</sup> Nevertheless, when the wreck was discovered in the early 1970s silver coins and VOC cannon helped establish the wreck's Dutch origins.<sup>185</sup>

Finds from the wreck included personal possessions of the crew and passengers as well as official VOC cargo.<sup>186</sup> General cargo items included globular-shaped 'onion' bottle (still filled with wine), brass taps for barrels, and the square-sided green glass bottles with pewter caps that indicate gin case bottles.<sup>187</sup> Personal items and tableware included sherds of Bartmann jugs and other salt-glazed stoneware. This vessel and the *Amsterdam* (discussed next) were very similar ships constructed and wrecked around the same time. Together, they provide valuable insight into VOC East Indiamen and the culture onboard the ships, which included alcohol. Historical evidence tells us they were likely issuing alcohol on VOC ships, but without the cargo lists it is hard to know what Batavia-bound cargo was and what was intended for crew and passengers.

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<sup>183</sup> Cowan, 'The Dutch East Indiaman', 273.

<sup>184</sup> *Ibid.*

<sup>185</sup> *Ibid.*, 275.

<sup>186</sup> *Ibid.*, 284.

<sup>187</sup> *Ibid.*, 289-291.

## *The Amsterdam*

The *Amsterdam*, also built in the VOC Amsterdam shipyard, wrecked in 1749 off the south coast of England.<sup>188</sup> The site conditions preserved the vessel well and limited excessive salvage until the ship was scientifically studied.<sup>189</sup> Though some items were looted in 1827 and 1969, archaeologist Peter Marsden's extensive research on items removed during the 1969 salvage has revealed a highly detailed picture of the ship, its cargo, and the crew.<sup>190</sup> Stoneware and glass bottles were taken from the wreck in the nineteenth century and included square case bottles and stoneware made in the Low Country.<sup>191</sup> In 1969 salvage work was done by digging into the ship's hold with a mechanical backhoe and extracting items. Marsden was able to reconstruct the holes and determined that one cache of artefacts was taken from the midship lower deck in the galley area.<sup>192</sup> Here, dozens of glass bottles, most full of red wine, and stoneware jugs, still corked, were recovered.

Roughly three-quarters of the ship has survived, along with much of the cargo and many personal items.<sup>193</sup> The finds came from a limited area but include the galley, gunroom, and a medical chest.<sup>194</sup> The vessel was provisioned for 300 men for at least a

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<sup>188</sup> Gawronski, J. H. G., 'The *Amsterdam* Project', *The International Journal of Nautical Archaeology*, 19 (1990), 53.

<sup>189</sup> *Ibid.*, 54.

<sup>190</sup> *Ibid.*, 55.

<sup>191</sup> Marsden, P., 'The Wreck of the Dutch East Indiaman *Amsterdam* Near Hastings, 1749', *The International Journal of Nautical Archaeology*, 1 (1972), 76.

<sup>192</sup> *Ibid.*, 87.

<sup>193</sup> Gawronski, 'The *Amsterdam* Project', 73.

<sup>194</sup> *Ibid.*, 58 and 60.

six-month voyage and was noted to be a typical large East Indiaman.<sup>195</sup> And, being a typical Dutch ship, the *Amsterdam* was full of alcohol. There were ‘a great many thousand dozen’ bottles of wine in chests, some French and many with liquid still inside.<sup>196</sup> In contemporary reports of the vessel’s sinking, it was noted that many of the crew broke into these alcohol supplies and were drunk by the time the vessel went down.<sup>197</sup>

The hold and the main hatch area of the ship also contained items related to alcohol. Here, Marsden found more stoneware jugs that held genever and green glass square bottles with corks that probably contained wine or genever.<sup>198</sup> Marsden states that ‘the presence of many hard-fired stoneware jugs in the excess cargo area makes it likely that she was carrying a quantity of spirits, most probably gin’.<sup>199</sup> The date of the *Amsterdam* (1749) supports the general narrative of substantial Dutch genever exports. High eighteenth-century rates of genever production suggests that genever was most likely the liquid in these jugs and bottles.

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<sup>195</sup> Marsden, ‘The Wreck of’, 75 and 88.

<sup>196</sup> *Ibid.*, 75.

<sup>197</sup> *Ibid.*

<sup>198</sup> *Ibid.*, 92.

<sup>199</sup> Marsden, P., *The Wreck of the Amsterdam*. (New York, 1974), 165.

### *An Eighteenth-Century Dutch Cargo Ship*

In the Baltic, off the coast of Finland, lies an unidentified, but probably Dutch shipwreck.<sup>200</sup> Seventy finds were retrieved from the wreck by Nord Stream Company archaeologists, with most objects from the galley area between the main and mizzenmast.<sup>201</sup> Along with onion-shaped wine bottles, square case bottles were discovered.<sup>202</sup> Three stoneware jugs were also found.<sup>203</sup> Based on the artefacts, researchers determined that the ship wrecked between 1788 and 1795.

### *De Jonge Seerp*

The final ship discussed in this section sank in the Baltic in early 1791.<sup>204</sup> The ship was determined to be of Dutch origin based on the cargo as well as archival material that supported its identification as the *Jonge Seerp*. The ship was excavated over 13 seasons by the Maritime Museum of Gdansk and more than 10,000 artefacts were recovered, including 4,071 pottery sherds making up 122 vessels.<sup>205</sup> Most of these artefacts were found in the bow and midship area. Of the ceramic material, 14 per cent were stoneware storage vessels, including jugs, from German makers.<sup>206</sup> This is the only

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<sup>200</sup> Sorokin, P., Stepanov, A., 'An Eighteenth-Century Dutch Cargo Ship in the Eastern Part of the Gulf of Finland (Baltic Sea)', in *Ships and Maritime Landscapes: Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology* (Amsterdam, 2012), 509.

<sup>201</sup> *Ibid.*, 509.

<sup>202</sup> *Ibid.*

<sup>203</sup> *Ibid.*, 511.

<sup>204</sup> Dabal, J. A., 'Ceramics from eighteenth Century Dutch and English Shipwrecks: A Survey of Southern Baltic Sea, Poland', *Underwater Archaeology Proceedings*, (2013), 67.

<sup>205</sup> *Ibid.*

<sup>206</sup> *Ibid.*, 68.

Dutch wreck in the author’s research that did not include obvious evidence of case bottles onboard, but there was evidence of wine consumption.<sup>207</sup> Given that the vessel was not a VOC ship and was probably used for Dutch European coastal trade, it would be unlikely that genever was a high export cargo (since the ship was not supplying overseas colonies) and it may have only been stored in the stoneware jugs.

**Table 1: Summary of Dutch Shipwrecks.**

<b>Date</b>	<b>Name</b>	<b>Location</b>	<b>Case Bottles</b>	<b>Stoneware Jugs</b>
Seventeenth Century	Blind Harbour Wreck	Ireland	Bottle tops	Unclear
1656	<i>Vergulde Draeck</i>	Australia	Yes	Bartmann
1665	<i>Zeepaard</i>	Ireland	Bottle tops	Bartmann
1670-1680	BVN2	Texel	Yes	Westerwald
1743	<i>Hollandia</i>	Southwest England	Yes	Bartmann
1749	<i>Amsterdam</i>	England	Yes	Yes
1788-1795	Dutch Cargo Ship	Baltic	Yes	Yes
1791	<i>De Jonge Seerp</i>	Baltic	No	German-made

### **Non-Dutch Archaeological Evidence**

The following shipwrecks were chosen as a sampling of the wrecks during this period. They represent a range of wreck locations and nationalities.

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<sup>207</sup> Dabal, ‘Ceramics from’, 69.



### *The Portuguese Wreck*

Fishermen found a mid-sixteenth-century shipwreck near the Seychelles and Warren Blake led an investigation in 1976.<sup>208</sup> The hull characteristics and the armament indicated Portuguese origin, typical of the *naus* vessel type.<sup>209</sup> Although the wreck date is perhaps too early for genever consumption and shipping, some artefacts were noted to be similar to those on Dutch VOC shipwrecks. A German-made Bartmann jug was found and compared with one found on the *Vergulde Draek* wreck. Some stoneware storage jars were similar to those found on the Dutch *Batavia*.<sup>210</sup> No case bottles were found on this wreck, although their production was rare during the sixteenth century.

### *The Rutland Island Wreck*

Another early unidentified wreck is the mid-seventeenth-century Rutland Island Wreck.<sup>211</sup> Although this vessel was subject to contemporary salvage and modern-day looting, more than 300 artefacts were recorded by the Underwater Archaeology Unit in Ireland.<sup>212</sup> The finds included Iberian earthenware, German stoneware, and wooden

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<sup>208</sup> Blake, W., 'A Mid-XVI Century Portuguese Wreck in the Seychelles', *The International Journal of Nautical Archaeology*, 15 (1986), 1.

<sup>209</sup> *Ibid.*, 5, 12.

<sup>210</sup> *Ibid.*, 17.

<sup>211</sup> Kelleher, C., 'The Rutland Island Wreck (County Donegal, Ireland). A seventeenth-Century Mystery', in *Ships and Maritime Landscapes: Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology*, (Amsterdam, 2012), p in *Ships and Maritime Landscapes: Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology* (Amsterdam, 2012), 450.

<sup>212</sup> *Ibid.*, 450, 453.

barrel hoops.<sup>213</sup> The Iberian pottery came from the probable galley and hearth area, while the stoneware was scattered throughout the wreck. No glass was noted. Early research suggests that this vessel may have been part of the 1588 Spanish Armada, but it is much more likely to be a later English vessel.<sup>214</sup>

### *The Dauphine and The Aimable Grenot*

The *Dauphine* was a French frigate, built in the French Royal Shipyards in 1703.<sup>215</sup> The vessel served as a privateer, commissioned and funded by King Louis XIV himself. The wreck (dating to 1704) was found off the coast of Saint-Malo, France, in 1995 and studied, along with the *Aimable Grenot*, by a team from the French Ministry of Culture. Archival sources on the ships and the wrecking confirmed their identities.<sup>216</sup> The *Dauphine* contained Frechen Bartmann jugs but no glass was noted.<sup>217</sup> The *Aimable Grenot* was another French privateering frigate, but it was privately owned.<sup>218</sup> It sank in 1749 on a voyage to Cadiz and the archaeological finds included German stoneware and wineglass bottles.<sup>219</sup> No case bottles were found.

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<sup>213</sup> Kelleher, 'The Rutland', 454.

<sup>214</sup> *Ibid.*, 455.

<sup>215</sup> Veyrat, E., 'The Two Shipwrecks of La Natière (Saint-Malo, France). An Archaeological Contribution to the Atlantic Maritime Landscape of the First Half of the eighteenth Century', in *Ships and Maritime Landscapes: Proceedings of the Thirteenth International Symposium on Boat and Ship Archaeology* (Amsterdam, 2012), 171.

<sup>216</sup> *Ibid.*

<sup>217</sup> *Ibid.*, 175.

<sup>218</sup> *Ibid.*, 171.

<sup>219</sup> *Ibid.*, 175.

### *The Sussex*

On its return voyage to Great Britain in 1738, the English East Indiaman *Sussex* was caught in a storm and sank off the eastern coast of the Cape of Good Hope.<sup>220</sup> The cargo mainly consisted of porcelain ceramics and no stoneware was noted.<sup>221</sup> Approximately 15 fragments of dark green bottle glass were recorded, described in the report as ‘characteristic of the period’ by archaeologists with the French Ministry of Culture.<sup>222</sup> It is unclear if this included case bottles, but it is unlikely, given these bottles’ distinct curved rather than flat figure profile.

### *The Griffin*

The *Griffin*, also an English East India Company (EIC) vessel, wrecked in the Philippines in 1761 after the ship struck an uncharted reef.<sup>223</sup> The passengers and crew were able to escape and took some of the ship’s cargo and personal items with them.<sup>224</sup> The surviving cargo, discovered by archaeologists with the National Museum of the Philippines and a private French organization, included several English bottles from the early eighteenth century and a fragmented wineglass stem. The report on the project listed neither case bottles nor stoneware jugs from this wreck.

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<sup>220</sup> Bousquet, G., L’Hour, M., and Richez, F., ‘The Discovery of an English East Indiaman at Bassas da India, a French Atoll in the Indian Ocean: The *Sussex* (1738)’, *The International Journal of Nautical Archaeology*, 19 (1990), 83.

<sup>221</sup> *Ibid.*, 85.

<sup>222</sup> *Ibid.*, 83.

<sup>223</sup> Daggett, C., Jay, E., and Osada, F., ‘The *Griffin*, an English East Indiaman Lost in the Philippines in 1761’, *The International Journal of Nautical Archaeology*, 19 (1990), 35.

<sup>224</sup> *Ibid.*, 36.

### *The Sadana Island Wreck*

This Ottoman-period wreck was excavated off the coast of Egypt, and archaeologists with the Institute of Nautical Archaeology and the Supreme Council of Antiquities for Egypt date its finds to around 1765.<sup>225</sup> The cargo consisted mainly of Chinese porcelain, with 4,000 artefacts recovered in total (though many were looted already).<sup>226</sup> Only earthenware ceramics are mentioned.<sup>227</sup> Three dozen broken green glass case bottles were found and archaeologist Cheryl Ward notes that these were probably part of the cargo.<sup>228</sup> The vessel has not been identified, but the construction methods are not indicative of Portuguese, English, or Dutch craftsmanship.<sup>229</sup>

### *HMS Swift*

*HMS Swift*, a British sloop of war, sank off the coast of Argentina in 1770.<sup>230</sup> The wreck was first excavated in 1997 by archaeologists with the Argentinian National Ministry of Culture and the combination of good preservation and archival evidence helped identify the wreck.<sup>231</sup> On the site, more than 20 wine bottles were found as well as smaller beer bottles.<sup>232</sup> Additionally, more than 12 mold-blown case bottles were

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<sup>225</sup> Ward, C., 'The Sadana Island Shipwreck: An Eighteenth-Century AD Merchantman off the Red Sea Coast of Egypt', *World Archaeology*, 32 (2001), 368.

<sup>226</sup> *Ibid.*, 369.

<sup>227</sup> *Ibid.*, 375.

<sup>228</sup> *Ibid.*, 376.

<sup>229</sup> *Ibid.*, 380.

<sup>230</sup> Elkin, D., in: Leshikar-Denton, M., Luna Erreguerena, (eds), *Underwater and Maritime Archaeology in Latin America and the Caribbean* (New York, 2008), 158.

<sup>231</sup> *Ibid.*, 159.

<sup>232</sup> *Ibid.*, 162.

found on the wreck with the characteristic short neck and square cross section.<sup>233</sup> Some of the bottles were inside a wooden case, and all were found in the stern area, which belonged to the ship's officers.<sup>234</sup> This supports the notion that it was only the officers in the Royal Navy who were entitled to gin rations.

### *The General Carleton*

The *General Carleton* sunk in 1785 in the Baltic.<sup>235</sup> The ship was excavated in the late 1990s by the Maritime Museum of Gdansk and the discovery of the ship's bell with 'General Carleton of Whitby 1777' engraved on it confirmed the vessel's identity. The British ship served regular Baltic trade routes and participated in the Revolutionary War in the Caribbean.<sup>236</sup> During excavation, 43 ceramic vessels and 169 pottery sherds were found.<sup>237</sup> Of these, 21 per cent were stoneware, in the form of English-made brown jars, and bottles and pitchers that were of German origin.<sup>238</sup> No glass fragments were reported.

### *The Sydney Cove*

The *Sydney Cove* wrecked in 1797 on a journey from Calcutta to Port Jackson, Australia (present-day Sydney) and was rediscovered in 1977. Regular excavations were

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<sup>233</sup> Elkin, *Underwater and Maritime Archaeology*, 162.

<sup>234</sup> *Ibid.*, 167.

<sup>235</sup> Dabal, 'Ceramics from', 66.

<sup>236</sup> *Ibid.*, 65.

<sup>237</sup> *Ibid.*, 66.

<sup>238</sup> *Ibid.*

conducted in the 1990s with the Tasmania Parks and Wildlife Service and the Queen Victoria Museum of Art.<sup>239</sup> The crew was able to escape and take their personal possessions, so very little evidence of shipboard-life remains.<sup>240</sup> The vessel's cargo consisted mainly of Indian goods, despite the vessel being British and heading towards a British colony.<sup>241</sup> The cargo included wineglass fragments and earthenware jars or bowls.<sup>242</sup> The largest group of finds from the cargo, however, related to alcohol consumption and exports. Around 7,000 gallons (31,500 L) of alcohol was noted to be in wooden casks in the hold.<sup>243</sup> The ship captain wrote a maritime protest detailing the abandonment of the vessel and noted that 105 casks of rum, 2 casks of brandy, and 4 pipes of Madeira were salvaged.<sup>244</sup>

Additionally, alcohol was brought onboard the vessel in bottles. Thirty-seven intact examples were found during the excavations, including 22 bottles that were still sealed.<sup>245</sup> The ship had wine-style quart bottles as well as beer-style quart bottles, but most importantly there were at least 12 cases of gin and brandy according to archaeological and archival material.<sup>246</sup> Interestingly, even though this was a British ship, the shipping company operating the vessel was known to advertise 'Holland

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<sup>239</sup> Nash, M., 'The Sydney Cove Shipwreck Project', *The International Journal of Nautical Archaeology*, 31 (2002), 39.

<sup>240</sup> *Ibid.*, 50.

<sup>241</sup> *Ibid.*, 39.

<sup>242</sup> *Ibid.*, 51.

<sup>243</sup> *Ibid.*

<sup>244</sup> *Ibid.*, 52.

<sup>245</sup> *Ibid.*

<sup>246</sup> *Ibid.*, 53.

Gin'.<sup>247</sup> Thus the 12-dozen gin case bottles recovered by archaeologists most likely held genever and reflected the international blend of European trade items among European ships operating in Indian Ocean waters.

*The Prince de Conty,*

*The Henry Addington, The Albion, and The Hindostan*

Other European shipwrecks are worth noting in this analysis because of their lack of either German stoneware or case bottles. The *Prince of Conty* was a French East Indiaman that sunk off the coast of Western France in 1746. Neither stoneware nor case bottles were listed in the excavations report.<sup>248</sup> The *Henry Addington* was an EIC vessel that wrecked in 1798 off the Isle of Wight in England.<sup>249</sup> None of the listed cargo included alcohol and there were no case bottles found in the excavations, which is very different to the VOC wrecks of the period. The *Hindostan* and the *Albion* were both British and wrecked in the Thames Estuary in 1765 and 1803, respectively.<sup>250</sup> Of the ceramics discussed in the site reports by the Marine Archaeological Surveys charity, none are German stoneware. Glass bottles are also never mentioned.<sup>251</sup>

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<sup>247</sup> Nash, 'The Sydney Cove', 53.

<sup>248</sup> L'Hour, M., Richez, F., 'An eighteenth Century French East Indiaman: The *Prince de Conty* (1746), *The International Journal of Nautical Archaeology*, 19 (1990), 75.

<sup>249</sup> Thomas, J. H., 'East India Company Shipping Losses in the Late Eighteenth Century: The Case of the *Henry Addington*', *The Mariner's Mirror*, 90 (2004), 57.

<sup>250</sup> Redknap, M., 'The *Albion* and *Hindostan*: The Fate of Two outward-bound East Indiamen', *The International Journal of Nautical Archaeology*, 19 (1990), 23.

<sup>251</sup> *Ibid.*, 29.

### *The Mardi Gras Wreck*

The Mardi Gras Wreck, in the Gulf of Mexico, dates to the 1820s and gives insight into the consumerism patterns of the United States during this time period.<sup>252</sup> A number of ceramic and glass vessels were recovered, mostly from the cabin area of the vessel, indicating that they were for shipboard use and not cargo.<sup>253</sup> There were 14 complete or near-complete bottles and 43 fragments, including 13 French wine bottles and 2 British beer bottles. There were no case bottles. For ceramic artefacts, there were 14 complete, 6 broken but identifiable, and 3 sherds found.<sup>254</sup> Of these, three were stoneware, produced in Germany: two were Rhenish dating to 1780-1830 and one was a small bottle for ink or oil.<sup>255</sup> The nationality of the vessel has not been determined, but no characteristically Dutch artefacts have been recovered.

**Table 2: Summary of a Sample of British, French, and Portuguese Shipwrecks.**

<b>Date</b>	<b>Name</b>	<b>Location</b>	<b>Case Bottles</b>	<b>Stoneware Jugs</b>
Mid-Sixteenth Century	Portuguese Wreck	The Seychelles	No	Bartmann
1704	<i>Dauphine</i>	Saint-Malo, France	No	Bartmann
1738	<i>Sussex</i>	East of the Cape of Good Hope	Unclear	No

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<sup>252</sup> Ford, B., 'The Glass and Ceramic Assemblage of the Mardi Gras Shipwreck', *Historical Archaeology*, 51 (2017), 379.

<sup>253</sup> *Ibid.*, 380.

<sup>254</sup> *Ibid.*, 384.

<sup>255</sup> *Ibid.*, 387 and 388.



Mid-Seventeenth Century	Rutland Island Wreck	Ireland	No	German Stoneware
1746	<i>Prince de Conty</i>	Western France	No	No
1749	<i>Aimable Grenot</i>	Saint-Malo, France	No	German Stoneware
1761	<i>Griffin</i>	Philippines	Unclear	No
1765	<i>Albion</i>	Thames Estuary	No	No
1765	Sadana Island Wreck	Egypt	Yes	No
1770	<i>HMS Swift</i>	Argentina	Yes	No
1785	<i>General Carleton</i>	Baltic	No	German
1797	<i>Sydney Cove</i>	Near Australia	Yes	No
1798	<i>Henry Addington</i>	Isle of Wight	No	No
1803	<i>Hindostan</i>	Thames Estuary	No	No
Early Nineteenth Century	Mardi Gras Wreck	Gulf of Mexico	No	Rhenish

### Analysis

The previously discussed archaeological data from this period suggests the question: can archaeologists reliably use the presence of both case bottles and stoneware drinking vessels to determine if a shipwreck of unknown provenance is of Dutch origin during the sixteenth through nineteenth centuries? Is there a correlation between the established substantial rations of alcohol issued to Dutch mariners, diagnostic artefacts associated with genever consumption (stoneware jugs and flat-sided green case bottles),

and known Dutch shipwrecks? Table 3 shows there is a strong correlation between the presence of both case bottles and stoneware jugs with Dutch shipwrecks or maritime archaeology sites. This is not a perfect classification or comparative system, since not all archaeological reports mention glass or ceramic remains, but a correlation is strongly suggested for archaeologists faced with a shipwreck of unknown origin.

This correlation is strongest for the period of 1580-1760, when both genever production and case bottles are almost exclusively Dutch. Bartmann production fell after 1690,<sup>256</sup> so the absence of this artefact does not indicate no genever at all, it simply means another style of vessel, often made of stoneware, may have been used.

**Table 3: Sample of Age of Sail Shipwrecks.**

<b>Date</b>	<b>Name</b>	<b>Nationality</b>	<b>Location</b>	<b>Case Bottles</b>	<b>Stoneware Jugs</b>
Mid-Sixteenth Century	Portuguese Wreck	Portuguese	The Seychelles	No	Bartmann
Seventeenth Century	Blind Harbour Wreck	Unknown	Ireland	Bottle tops	unclear
1656	<i>Vergulde Draeck</i>	Dutch	Australia	Yes	Bartmann
1665	<i>Zeepaard</i>	Dutch	Ireland	Bottle tops	Bartmann
1670-1680	BVN2	Dutch	Texel	Yes	Westerwald
1704	<i>Dauphine</i>	French	Saint-Malo, France	No	Bartmann

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<sup>256</sup> Hume, I.N., *A Guide to Artifacts of Colonial America* (Philadelphia, 1969), 57.

1738	<i>Sussex</i>	British	East of the Cape of Good Hope	Unclear	No
Mid-Seventeenth Century	Rutland Island Wreck	Unknown	Ireland	No	German Stoneware
1743	<i>Hollandia</i>	Dutch	Southwest England	Yes	Bartmann
1746	<i>Prince de Conty</i>	French	Western France	No	No
1749	<i>Aimable Grenot</i>	French	Saint-Malo, France	No	German Stoneware
1749	<i>Amsterdam</i>	Dutch	England	Yes	Yes
1761	<i>Griffin</i>	British	Philippines	Unclear	No
1765	<i>Albion</i>	British	Thames Estuary	No	No
1765	Sadana Island Wreck	Unclear	Egypt	Yes	No
1770	<i>HMS Swift</i>	British	Argentina	Yes	No
1785	<i>General Carleton</i>	British	Baltic	No	German
1788-1795	Dutch Cargo Ship	Dutch	Baltic	Yes	Yes
1791	<i>De Jonge Seerp</i>	Dutch	Baltic	unclear	German
1797	<i>Sydney Cove</i>	British	Near Australia	Yes	No
1798	<i>Henry Addington</i>	British	Isle of Wight	No	No
1803	<i>Hindostan</i>	British	Thames Estuary	No	No
Early Nineteenth Century	Mardi Gras Wreck	Unclear	Gulf of Mexico	No	Rhenish

## CHAPTER V

### CONCLUSION

Alcohol was not only cargo on a ship, but also a beverage for sailors, which makes it an important aspect of seafaring culture to study. Using the historical, visual, and archaeological history of genever and gin together reveals several trends, and this thesis is the first body of work to do that. Primary source material indicates that both Dutch and British sailors were consuming very high amounts of alcohol.

For the Dutch, sailors of all ranks drank genever because of its easy availability in the Netherlands and its perceived health benefits. British sailors, on the other hand, drank different spirits depending on their status, though after the 1790s all included lime for its scurvy-reducing properties. On Royal Navy ships, common sailors had rum or grog while the officers stood apart from the rest of their crew and drank gin. This created negative, class-related connotations around rum, as it was seen as the beverage of drunken, ill-behaved crews. Dutch genever was more egalitarian—all Dutch sailors, officers, and crew were recognized as heavy drinkers. This reputation can be seen in the images of the time: sailors are frequently depicted with bottles of spirits, and there is a distinction made between Dutch and genever and other types of liquor.

Archaeologically, the study of genever has yielded interesting results and a tentative method for shipwreck nationality determination. Based on a limited sample of Dutch and non-Dutch ships from the sixteenth to early nineteenth centuries, thus far my

research has shown that wreck sites with both square case bottles and stoneware drinking vessels are likely to be Dutch ships. British, French, and Portuguese ships generally do not contain both types of material. However, this theory needs to be studied further, as only a sampling of archaeological sites were used in this thesis.

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