PICKING UP THE PIECES: SEVENTEENTH CENTURY TIN-GLAZED EARTHENWARE FROM FERRYLAND, NEWFOUNDLAND

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Abstract

Excavations in Ferryland, Newfoundland, have uncovered remains of the Colony of Avalon, a seventeenth century fishing plantation and one of the earliest permanent European habitations in North America. One class of artifacts recovered is tin glazed earthenware, a popular but expensive type of ceramic produced throughout the seventeenth century. The presence of tin-glazed earthenware has been used to infer the relative wealth and status of people who lived in particular areas of the site. Analysis of this class of artifact has also helped to determine trade patterns to the colony, through examination of the amounts of vessels from different European pottery producing countries. Results from the analysis show that England, the Netherlands and Iberia were main sources of tin-glazed earthenware sent to Ferryland, as part of the involvement in the trade of Newfoundland cod.

Résumé

Les fouilles du site Ferryland, à Terre-Neuve, ont révélé la présence de vestiges de la Colonie d'Avalon, un lieu de pêche datant du XVIIe siècle et l'un des premiers établissements européens permanents en Amérique du Nord. On y a retrouvé plusieurs fragments de faïence tanifère, une céramique populaire mais dispendieuse et produite tout au long du XVIIe siècle. La présence de faïence tanifère a été utilisée pour établir le niveau de richesse relative et le statut social des habitants des différents secteurs du site. L'analyse de cette classe d'artefacts a aussi permis de déterminer le fonctionnement des échanges vers la colonie, plus précisément par un examen de la quantité de vases provenant des différents pays producteurs d'Europe. Les résultats de ces analyses montrent que la faïence tanifère envoyée à Ferryland provenait principalement d'Angleterre, des Pays-Bas et des pays de la péninsule Ibérique, dans le cadre de leur implication dans le commerce de la morue de Terre-Neuve.

Introduction

The Colony of Avalon, located in Ferryland, Newfoundland is a unique site, both because of its rich archaeological record, and also because it was one of the first English settlements in North America. Ferryland played an important part in the seventeenth century European cod trade, and so had many links with other European countries. This is reflected in the artifacts which appear in the archaeological record, and is especially apparent in the ceramics. Tin-glazed earthenware is one particular type of ceramic which has been found in relatively large quantities across the site. As one would expect, the tin-glaze is mainly English in origin, but there is also a relatively large number of Portuguese vessels in the archaeological record. Portuguese tin-glazed earthenware is only beginning to be actively studied and recognized in North America, as attested by the recent article in *Historical Archaeology* by Stephen Pendery which synthesizes the currently published material. In Europe, the seventeenth century is often overlooked as it considered to be too recent to be of interest as compared to Roman sites. These Portuguese vessels from Ferryland

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illustrate the strong trade links Newfoundland had with the Iberian peninsula, and reflect the choices of a settlement on the economic periphery of Europe.

History of Ferryland

Ferryland is an outport community located on the east coast of the Avalon Peninsula, approximately 80 km south of St. John's. For the last 500 years it has played an important role in the history of Newfoundland, but is best known as the site of seventeenth century colonial ventures by George Calvert, later the first Lord Baltimore.

The rich cod fishery off the coast of Newfoundland attracted fishermen to the area from many European nations on a seasonal basis beginning in the early 1500s but it was not until 1621, that Sir George Calvert, under a title granted by King James I, established the Colony of Avalon. Calvert was unable to travel to Newfoundland at first, so Captain Edward Wynne was sent with 11 colonists to Newfoundland to set up the new colony at Ferryland (Cell 1969:92). Calvert himself did not actually visit Ferryland until 1627, and brought his family to the settlement the next year to take up permanent residence. After a harsh winter, the Calverts left Ferryland in 1629, and later set up a new colony in what is now the state of Maryland (Pope 1986:148-149). However, Charles I granted the entire island of Newfoundland to Sir David Kirke in 1637. A series of lawsuits between the Kirkes and the Calverts lasted until the third quarter of the seventeenth century (Tuck 1993:295).

In 1673 four Dutch ships attacked Ferryland, and soldiers destroyed boats, wharves and train vats (Prowse 1895:1830). The settlement was rebuilt, but the 1696 attack by d'Iberville's Canadian forces was more disastrous and resulted in a brief depopulation of the settlement (Prowse 1895:216, Tuck 1996:23). Troops landed at Ferryland and proceeded to destroy the settlement and burn it to the ground. Many colonists did return in the following years, but occupation shifted away from the Pool to areas on the mainland.

Excavations at Ferryland

The existence of the Colony of Avalon was never completely forgotten, but investigators were unsure of its precise location, due to some confusion about eighteenth-century remains that were also visible in the area. Excavations have been carried out under the direction of Dr. Jim Tuck of Memorial University, revealing a broad range of seventeenth-century artifacts and some structural remains.

Excavations have continued in eight areas of the site and over a million artifacts have been recovered. Tin-glazed earthenware has been found at every area of the site, although most of it was recovered from one area, thought to be the location of the "Mansion House" the home of the Calverts, and later the Kirkes.

What is tin-glaze?

Tin-glazed earthenware became popular in the sixteenth and seventeenth centuries in Europe because of the whiteness of its glaze which was the closest imitation people could get to the new imports of Chinese

porcelain. Although these ceramics were several times more expensive than the price of the more common lead-glazed earthenware, there was a definite demand for these goods. European tin-glazed earthenware has been excavated from archaeological sites across the world, so it was obviously considered a valuable commodity to be traded and exported.

"Tin-glazed earthenware" is the technical term for earthenware fired at low temperatures which has been covered by a lead glaze made opaque by the addition of tin oxide. The biscuit vessels are painted with the glaze, and fired again. The second firing causes the white glaze to become fixed to the body and the pigments are fused into the glaze (Woodhouse 1974:95). It is well-suited for food and beverage service, as well as for pharmaceutical and hygienic uses, although unsatisfactory for cooking purposes due to its inability to withstand thermal shock.

It is uncertain when production of tin-glazed earthenware began in Portugal, but it appears to be in the second half of the 16th century (Calado 1992:11). Lisbon was the centre of Portuguese production, but by the seventeenth century other towns were also manufacturing it. At the height of production, Lisbon alone was producing over 28,000 pieces per year (Calado 1992:32). Even today, tin-glazed earthenware is made in Portugal.

Early seventeenth century Portuguese pieces show Spanish, Italian and Near Eastern influences. By mid-century, Portuguese potters had developed their own interpretations of Chinese porcelain designs, which did not have a great deal of significance to them. Instead, they adapted them to fit their own life-experiences. As the designs changed, the potters gave nicknames to some designs that were very common. An example of this is the "aranhoe" or "big spider" pattern. Originally a copy of Chinese artemisa leaves, the design evolved as Portuguese potters tried to relate it to an image they knew and recognized. Other examples of this trend are the "rendas" or "lace pattern" named after the similarity to lace on the edges of tablecloths. Originally the Chinese had painted borders of parts of peacock feathers. Chinese scales turned into a Portuguese bead design known as "contas".

Ferryland tin-glaze

From the tin-glaze recovered at Ferryland, 570 different vessels have been distinguished from six different countries. At times, it is difficult to separate English and Dutch ceramics, or Spanish and Portuguese ceramics, so I also adopted blended categories, such as English/Dutch, or Iberian, which subsumed both Spanish and Portuguese.

Twenty-five different forms of vessels made in tin-glazed earthenware can be recognized from the archaeological record at Ferryland. I divided the vessels into a modified form of the Potomac Typological System, or POTS, which was originally developed to organize vessels excavated in the Chesapeake region by form (Beaudry et al. 1991). Well over half the vessels can be classified under the Food Service heading.

Portuguese wares

Ninety of the 570 vessels recovered from Ferryland were identified as being irrefutably Portuguese, and 201 as coming from the Iberian Peninsula. The vast majority of these Portuguese vessels are of very high quality, and were probably used mainly for decoration and display (Rafael S. Calado, personal communication 1999). In Pendery's *Historical Archaeology* article, he separates the Portuguese vessels found in New England sites into different decorative styles based on dates of production. Ferryland is special in that there have been a wider variety of forms recovered than at the New England sites. As well, the dates of production for the vessels from New England sites seem to cluster around the middle years of the seventeenth century, whereas Ferryland has examples from the entire century. Most of the Ferryland Portuguese vessels were "deep" forms of plates, with a diameter of approximately 20 cm and decorated with a variety of designs. Several plain white-glazed Iberian plates are in the collection, and can be recognized by their thin, off-white glaze, as well as the large red inclusions in the fabric. There may be evidence of a matching set of plates, as 12 plates decorated in blue with a geometric pattern of alternating thick and thin lines have been identified. This style of decoration dates to approximately 1600-1625. One rare example of a plate has a picture of a winged heart in the centre of the plate with the word "Amors" (meaning "love" in Portuguese) written across the heart. Similar plates were commissioned for weddings in Portugal and used to carry the wedding rings to the altar (Rafael S. Calado, personal communication 1999).

Another plate bears the coat of arms of the dos Silvas, originally an aristocratic family in Portugal. Many of the complete examples found in museums include a date painted above the central design, but unfortunately the plate from Ferryland is missing that particular section. Many such plates were made, but it is impossible to learn which member of the family commissioned it, as the name is now a very common one in Portugal.

Sherds of two wide, shallow bowls that were recovered were used by sailors to eat from while on board ship. They have low, wide footrings which make them very stable, and so would be well suited for use on ocean voyages (Rafael S. Calado, personal communication 1999).

These two bowls are the only examples of more ordinary, utilitarian Portuguese tin-glazed earthenware found at Ferryland.

In the late sixteenth and throughout the seventeenth century large chargers were used for bringing food to the table or for use as a surface on which to place hot pans (Archer 1997:70). Some of the more elaborately painted ones were probably only used for decorative purposes. Only one Portuguese vessel from the Ferryland archaeological record has a diameter large enough to fit this category. It is a very large dish, with a diameter of approximately 50 cm, decorated with an aranhoe or "big spider" border. This dates it to approximately 1650-1675 but unfortunately the central motif of the dish is missing (Rafael S. Calado, personal communication 1999; Pendery 1999:62). Many of these dishes were displayed on walls as decorations, but the example from Ferryland does not have any identifiable holes in order to hang it.

One of the most interesting pieces of tin-glazed has yet to be conclusively identified. Only fragments have been recovered so far, and consist of a moulded woman's face on a hollow piece of tin-glazed earthenware, with the features painted in manganese. The figurine appears to have been made using a plaster

mold which had been used several times previously, as the edges of the figurine are losing definition (Alexandre Pais, personal communication 1999). Other curved sherds have blue, yellow and orange decoration, with some outlined in more manganese. Both the interior and exterior of the vessel are glazed. The face has extra clay built up on top of her head, which could possibly be an attachment for a handle. The hollow interior of the head has an extra lump of glazed clay partially obscuring the diameter of the hole, which also begs for explanation. The figurine has been variously interpreted as a bottle, with the handle attachment on top of the head; a candle holder, with possibly a silver mount placed on the top of the figure's head; a small jar for olive oil; the spout of a teapot, with the extra glazed clay inside to lessen the flow of liquid; an anthropomorphic bottle with a clay glazed stopper, similar to those on display at museums in Portugal; or possibly a whistle or religious figurine. I have been unsuccessful in finding a similar form in any documentary source, but possibly with more excavation more pieces will be found, which will give a better understanding of the shape of this unknown vessel. The use of manganese in the decoration suggests a date of manufacture sometime after 1650 (Rafael S. Calado, personal communication 1999).

Fragments of a Portuguese tray which held small glass bottles of water and wine used in Catholic church services have also been found (Rafael S. Calado, personal communication 1999). The tray was originally oval in shape and has small prongs around the wide flat rim. Similar trays can be seen in museum collections in Portugal.

Trade

The rich fishing grounds off the coast of Newfoundland and the high demand for well-cured fish in Europe made Ferryland an important partner in a seasonal trade involving several international ports bordering the Atlantic Ocean. Specialized freighting vessels known as sack ships were sent to Newfoundland for cod, and a system whereby a variety of goods including wine moved to northern Europe and across the Atlantic in a triangular pattern developed over the seventeenth century.

Originally Newfoundland cod was shipped to England, and was then re-exported to markets in southern Europe. By the middle of the seventeenth century a more efficient shipping system had developed, one that omitted the initial trip to England. The people of the Iberian peninsula desired the fish from Newfoundland, and there was a high demand in England for the strong sweet wines produced in Spain and Portugal. Fish caught in Newfoundland was sent directly to southern European ports in the Mediterranean and Iberia, the Portuguese and Spanish shipped wine and fruit to English and Dutch ports, and the English sent labour and supplies to Newfoundland. The flow of goods moved in a triangular pattern although the trade was not equal on all sides. Large amounts of cod were shipped to Europe, but the amount of supplies and goods returning to Newfoundland was relatively small in comparison (Pope 1994:265). By shipping cod to European countries, England was able to make up the imbalance in trade caused by their importation of Iberian and French wines. Some cod was still re-exported from English ports throughout the seventeenth century, but it was on a much smaller scale.

Mechanisms of trade

Unfortunately it will be difficult to truly understand the details of the mechanisms of trade by which the tin-glazed earthenware arrived in Ferryland. No known records explicitly list tin-glaze as part of the cargo brought to Ferryland, but the presence of the ceramics imply some sort of trade was being carried on. There are several explanations which could account for the presence of the Portuguese ceramics. With the passing of the Navigation Acts in the 1650s, only English ships could carry foreign goods being imported into England or her colonies (Noel Hume 1969:140). This prevented Portuguese ships coming directly to Ferryland to trade.

People in Ferryland could have had relatives or friends who either traveled to Portugal and bought ceramics, or sent them Portuguese wares they had purchased in England. The appearance of the tin-glazed earthenware does not necessarily mean that people were shipping over huge crateloads of expensive ceramics to Ferryland. People could have brought small numbers of vessels as part of their luggage, and so it would not have shown up on shipping records. Perhaps sailors brought some vessels themselves as private cargo or as portage, and traded it on the side.

The most likely explanation, however, is that the sack ships coming from Portugal to England as part of the triangular trade system probably had some tin-glaze packed in their holds. which was simply not unloaded when the ships sailed into English ports. It is unlikely that people would go to the trouble of unloading goods from a ship, pay to store them in a warehouse for a period of time, and then load them back on board when the ship was ready to sail to Newfoundland for more cod. It is possible that the tin glaze was left in the hold until it got to Ferryland, and was sold to the settlers there. Compared to some other archaeological sites in English port towns, Ferryland has a higher percentage of Portuguese wares.

Conclusion

Although the number of 570 different tin-glazed earthenware vessels may seem like a large amount for a settlement like Ferryland, over the 75 year life span of the site, it is just under eight vessels per year. As well, some of the vessels date to the eighteenth century, which was after the time of the main occupation of the site, so the number per year throughout the seventeenth century is even lower. If 201 of the vessels come from the Iberian Peninsula, that would amount to just under three vessels per year. Though this is not exactly overwhelming confirmation of a system of luxury goods crossing the Atlantic Ocean, the presence of the more exotic forms of vessels suggest something more than a system of basic trade. The fact that a tin-glazed figurine which has not previously been seen in North America appears in the Ferryland archaeological record indicates that some sort of trade in souvenir or specialty items was ongoing. Perhaps, similarly to what Alison Grant has suggested for the production of North Devon wares, a network of kin-based ties was operating which allowed for rarer items to be requested and purchased (Grant 1983).

Ferryland is a unique site in that it has a higher proportion of Portuguese tin-glazed earthenware than one might expect to see in an early settlement in Newfoundland. The large amounts of an expensive ceramic shows that some people in Ferryland could afford to purchase these kinds of luxury goods and had the opportunity, even though they were far away from the main centres of production.

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