

THE DATING OF WEST INDIAN HISTORIC SITES BY THE ANALYSIS OF CERAMIC SHERDS

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The purposes of this paper are:

1. To demonstrate a method of finding approximate occupation dates of historic sites by ceramic analysis of surface collections.
2. To inform local archaeologists of the possibilities, so that we may be able to test together the validity of this interpretation on sites of known documented occupation in the West Indies.
3. To list the approximate ranges and describe the attributes of the most common types of ceramics found in Antiguan and West Indian sites, thus encouraging more local research.

Introduction

In 1972 a formula was developed for use with 18th and early 19th century British ceramics in South Carolina to arrive at an interpreted occupation date represented by any specific ceramic collection. (South 1972: 71; 1977: 201). This led us to apply this method to our historic sites in Antigua. The method uses presence-absence and frequency of various ceramic types.

Archaeologists usually use artifacts to date a site, but to test the accuracy of South's method in Antigua, we have chosen a few sites whose occupation dates are already documented and some where occupation dates are totally unknown. The range of the ceramic types given by South are for North America, so we have been able to check these ranges in the West Indies. The only changes we made were the commencing dates of the earliest types, to *c.* 1640, as Antigua was first settled by a small group of English in 1632.

The results given in the following pages proved to be accurate, certainly to within five years. In the last example, by knowing the date of the site, and not knowing the ranges of some of the later ceramic types (for South does not include the Whiteware types), we were able to estimate some of the ranges, so that in the future we may be able to extend the usefulness of the method up to about 1850.

British ceramics are the main types used, as in the 18th and 19th centuries, England's industrial revolution assured a great export of ceramics, especially to her colonies. Today there are many different British ceramic sherds in the soils of many countries in the world. In the West Indies, archaeologists are particularly lucky, as apparently the ceramics in our soils are even more plentiful and sophisticated than those found in North America. This is because of the

greater importance of the sugar islands in those times. Proof of this importance can be seen when one considers that governors of the North American colonies were actually promoted to the colonies of the West Indies.

The first step in finding the interpreted occupation range of a site is to find its mean ceramic date. This is then applied to a bar graph of type ranges, on which the occupation brackets can be drawn.

Finding the Mean Ceramic Date of a Site

Each ceramic type found in a site has a median date of its temporal range in a territory. These median dates are listed together with the sherd frequency of that type. This frequency is then multiplied by the median date of the type to produce another column.

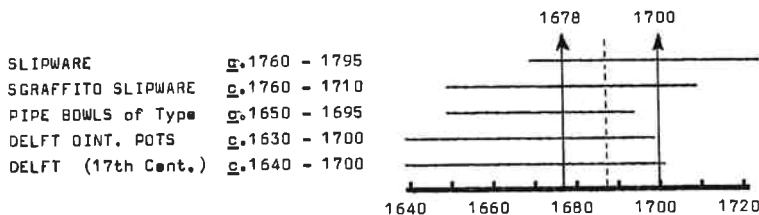


FIGURE 1
Bar Graph for Gateway Point

Mean ceramic date of the site = $86126 \div 51 = 1689$

The total number of sherds in the sample are then divided into the sum of the new column to produce the average median date or ceramic mean of the example as a whole.

It would seem that this frequency adjusted median would have little to do with the occupation dates of a historic site, but South has already shown that there is a similarity between the median date and the historic mean of 18th century sites in South Carolina (South 1977).

In theory, the period in which a type was disposed of would approximate a type's mode, or period of maximum popularity. We do not know exactly when a type reached its mode, for a type could have been at its greatest value at either end of its range. South accepts a mode's graphical curve as being symmetrical, *i.e.*, with a median date. Although all types would not have had the same mode, I feel that out of a large sample of types, the averages of all, including multimodal curves, would produce a median result.

This is what South calls a mean ceramic date, and it is an interpretive value in determining the occupation dates. It could just as well be called a mean artifact date, as any artifact whose range in any territory is known can be used.

Finding The Occupation Brackets of a Site

Having worked out a mean date for a site, a bar graph is now drawn against a time line, and the ranges of various artifact types are drawn as horizontal bars. Next the calculated mean date for the site is entered and is represented by a vertical dotted line. On either side of this line equidistant from it, two vertical lines are drawn to represent the beginning and ending brackets of the interpreted occupation of the site. If we know either one or the other date from historic sources, then the entry of the other is simple. If we know neither as in the example below, then the date of the latest artifact, the *terminus post quem* (or the date after which an artifact found its way into the ground) can be used to arrive at an ending date represented by a ceramic sample. If there is no suitable *terminus post quem*, then the ending and beginning brackets should intersect at least 50% of the type bars.

Taking GATEWARD COTTAGE as an example again, the mean date of 1689, having been worked out and entered, the ending bracket was estimated at 1700, since no saltglaze white stoneware (which started c. 1715) was found and should intersect at least 50% of the type bars. Using the mean of 1689 as the middle date, the interpreted occupation date of the site is therefore 1678-1700.

The above occupation dates seem quite likely, as the building is immediately above Fort Charles on Blake Island, Antigua's first true fort (16 guns), built in 1672. Perhaps this house was in some way connected with the fort, possibly as an officer's residence. Falmouth had become Antigua's main town by 1676, but gave way to St. John's at the turn of the century. Before this ceramic study we had no idea of the date of this ruin.

Hungry Hill House

From a map of 1749, Hungry Hill, heirs of Dascent, is marked. There was no trouble finding the site, as ancient road cuttings to it could be traced through the bush. All ceramic sherds were collected. In the older sites there is no problem of how many pieces to collect, as there are so few left on the surface. Sixty-nine sherds produced a mean ceramic date of 1757.

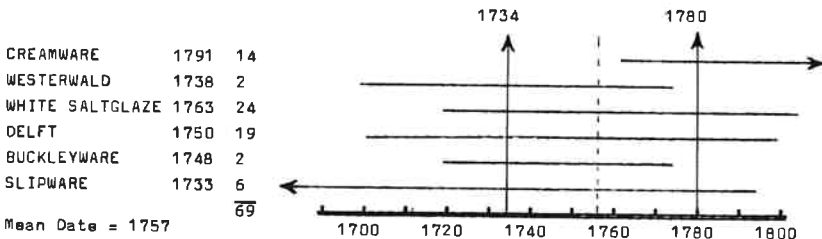


FIGURE 2
Bar Graph for Hungry Hill House

The ending bracket was placed at 1780, following the rule that at least half of the type bars should be intersected. The ending date could not have been later than about 1780, as there was no trace of pearlware, which came in at about that time. The starting bracket was added at 1734, using 1757 as the mean.

We have no historic evidence for testing this interpreted occupation, but it seems as though the house was built around 1734. Dascent died around 1749, but we therefore learn that the house was reoccupied up to about 1780. The highest percentage of sherds were of Chinese porcelain (37%), but these were not used for the ceramic mean, because of their long life thus producing unreliability for dating purposes. They do tell us that the inhabitants of the house were affluent people. This is true, as one member of the family held a government position in Nevis at the time.

Highland House, Barbuda, Bah 1

This house is not mentioned in any records, surprisingly enough, as so much is written about the Codringtons who leased Barbuda from 1685-1870.

Only 28 sherds were collected during a brief visit in March, 1977. The mean ceramic date worked out at 1760, which was plotted on a bar graph.

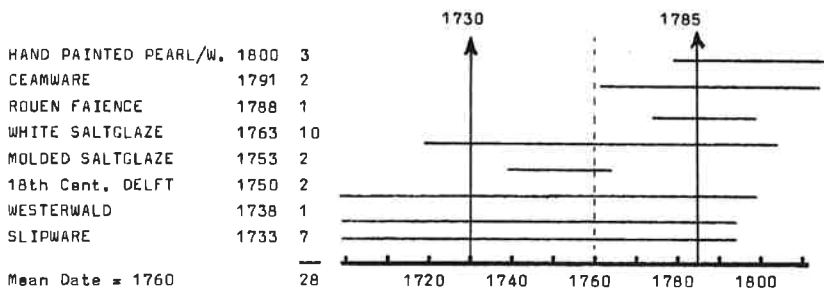


FIGURE 3
Bar Graph for Highland House

The ending bracket was placed at 1785, five years after the advent of pearlware about 1780, for only three or 8% were collected. The beginning bracket could have been either at 1720 or 1740, but it was decided to place it between the two, taking the ceramic mean as a guide.

The occupation of Highland House may have been *c.* 1730-1785. Col. William Codrington rebuilt the Castle in 1728 and according to the bar-graph, may have built Highland House in the same period. His son, William II, was born in 1719 and died in 1792. The house appears to have thrived in the lifetime of this son. Is it a coincidence, or has archaeology told us that this was his home?

Fort Christian Pah—7,

of 9 guns, guarded Marmora Bay to prevent possible rear attack on English Harbour. It is documented first on a map of 1749. Today it is just a pile of rubble in the wilderness.

On the west side, 440 ceramic sherds were collected, representing a complete surface collection. On analysis, the mean ceramic date was 1766.

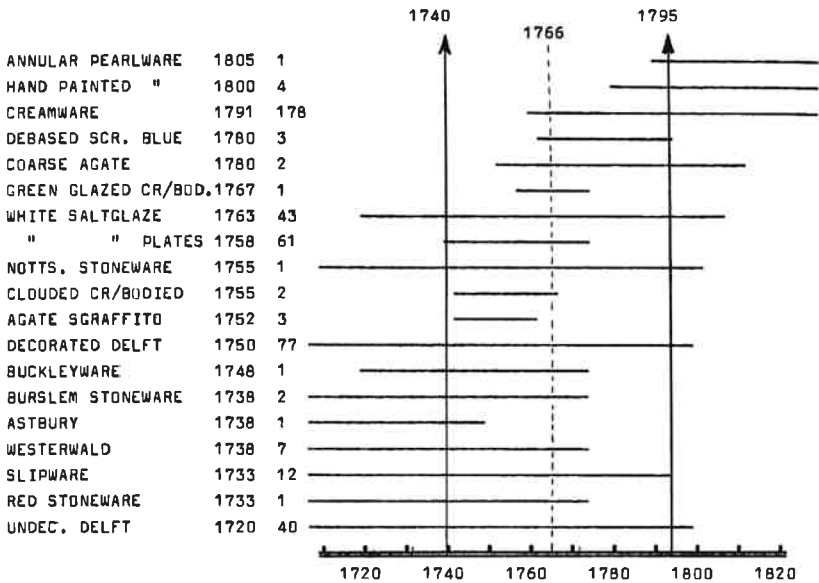


FIGURE 4
Bar Graph for Fort Christian

Since one piece of Annular Pearlware was found, an ending bracket of 1795 was drawn on the bar graph, allowing five years for this style of pearlware to have reached the site and to be dispersed. The beginning bracket was drawn, placing the mean ceramic date approximately half way and where it intersects just over half the bars. This gives an occupation date of this fort as about 1740-1795. Maps already indicate that it may have been built at about this time. 23 pieces of Chinese porcelain were collected on the north-east or wind-

ward and seaward side, which may denote the location of the officer's quarters.

Land Service Powder Magazine, Pah—28,

is a site located at the head of English Harbour, Ordnance Bay. There is no sign of a ruin, but we are certain we have the correct site, because of the great frequency of musket shot. Several sites of what must have been wooden houses have been found in the area, where there are concentrations of ceramic sherds and mollusc shells, a valuable method of locating former sites of wooden buildings for the historic inventory.

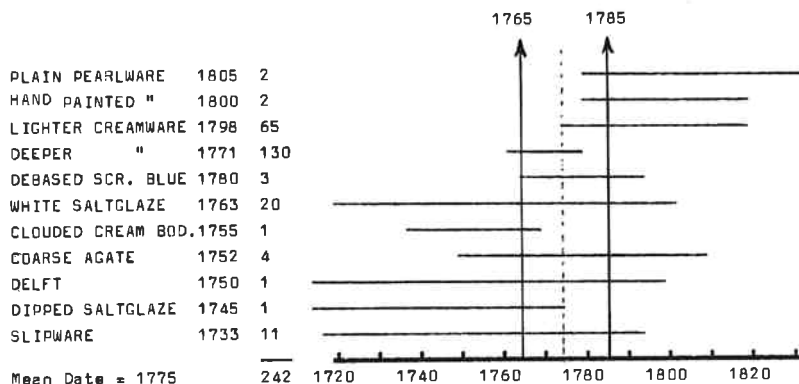


FIGURE 5
Bar Graph for the Powder Magazine

All 242 surface sherds from the magazine site were taken, and a mean ceramic date of 1775 was calculated.

Since only four pieces of 1780 pearlware were noted, the ending bracket was placed at 1785, and using the mean ceramic date as a median date, the starting bracket was drawn at 1765. The interpreted dates are then 1765-85.

A map in the English Harbour Museum, PRO 3071 (WO 78/1336) dated

1823 is a part of a report on the state of the buildings around English Harbour in that year. The key to the map is in the Public Record Office, London, where the entry for this site reads, 'A very old wooden building, formerly a powder magazine, built 1762, 40' x 20', now useless and vacant.'

The same source gives the date of the new magazine nearby, which presumably took the old one's place, as 1788. So, in this case, our dating method is extremely accurate.

Blockhouse Officers' Quarters

at Shirley Heights. In this example, several whiteware types have not yet been dated by the experts. It seems that very little work has been done on the early Victorian ceramics, so we will have to do it ourselves noting when various types appear and disappear in other sites.

In this example, several type ranges have been estimated from the limited local references and manipulated slightly after making a few trial runs.

A sample of 546 sherds was taken from an area vandalized by button and bottle hunters. Not every piece was collected, as there were too many sherds. An approximate representation was taken. Even by using one sample of each type (*i.e.*, using presence-absence alone without quantification) a deviation of ± 8 years on either side of the historic median was attained by South for sites of the 18th century in South Carolina. By using quantification, as we have in our examples, a deviation of ± 4 years is reported by South.

The starting and ending brackets for the site under discussion were placed where they intersect about half of the type bars each, with the mean date of 1833 falling half way between.

The interpreted range of 1810-1855 reflects the ending date of 1855 well, but this officers' quarters was built in 1790. The date of 1810 may possibly be the commencement of that part of the midden.

Future Research

More work will have to be done to test the ranges of whiteware types. For instance, finding and dating sites containing just a few sherds of types needing range dates will tell us when they first appeared in the West Indies. In this respect we can work together, for we need as many documented sites as possible.

It will be necessary for local archaeologists to be able to identify historic ceramic sherds before they can be encouraged to start in local research, so I now append a summary of archaeological types, together with brief descriptions.

This is not a complete list, South gives 26 others. Further relevant types can be added later, when we have had more experience identifying them and demonstrated their usefulness. Other artifacts, such as wine glass stems, could also be listed, as this method need not only be confined to ceramics.

At first glance it may appear an alarming task to learn the 42 types presented, but once the six basic kinds are grasped, the rest will be easy. The basic types are:

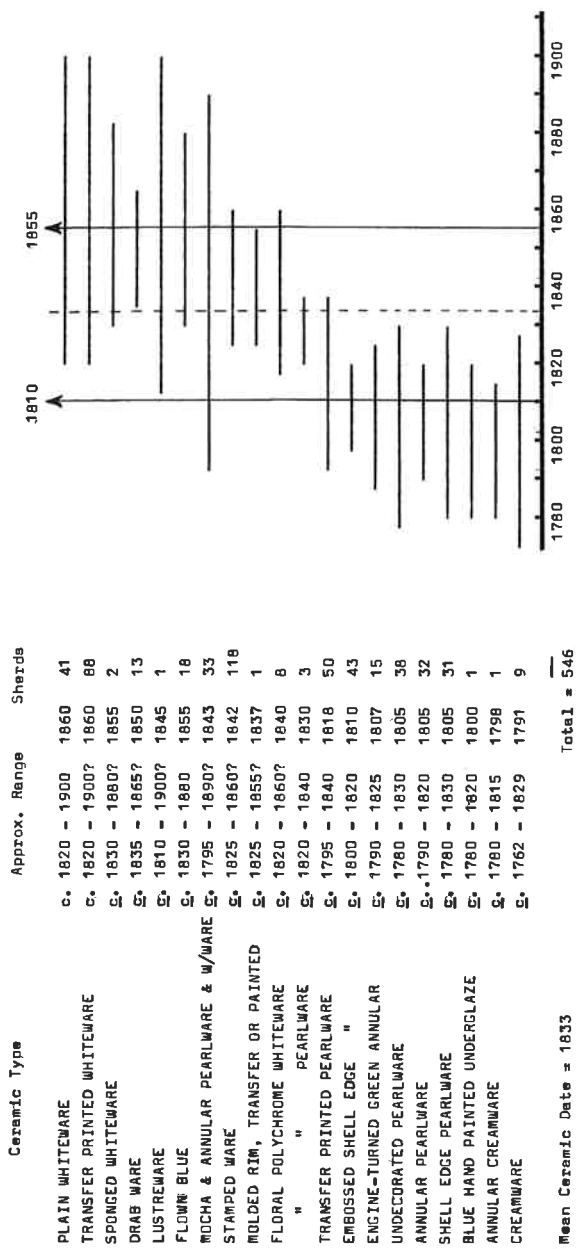


FIGURE 6
Bar Graph for Shirley Heights

- Slipware* —A slip mainly appearing yellow, usually on one side only.
- Delft* —Matt surface, takes pencil very well.
- White stoneware* —Dense white body, with leatherlike texture when held obliquely to the light.
- Creamware* —Cream coloured body and glaze, yellow-green glaze 'build-ups'.
- Pearlware* —Blue tinge to glaze, blue glaze 'build-ups'.
- Whiteware* —Pure white glaze, mostly no 'build-ups'.

A Summary of Historic Ceramic Types Found in Antigua and Brief Descriptions for Archaeological Purposes.

The best books on the subject are Hume 1968 and 1976, the latter including many other colonial artifacts. After the type name will be found the page in Hume (1976). The typology is from South (1977:210). The number preceding the type is the South type number, useful as a reference and for future computer work.

Slipware

The earliest sites in Antigua show a predominance of this ware. Slipware is most commonly found with a slip only on one side, but the mugs have both sides slipped.

56. LEAD GLAZED SLIPWARE (Combed Yellow) (134/6) A: 1-9, *c.* 1670-1795 (1733)

Buff to yellow bodied, cheap slipwares, decorated with white and brown slip in combed, dotted and marbled patterns. A brown slip is sometimes trailed over a white ground and *vice-versa*, the lead glaze turning the white yellow. Pie-crust edges.

63. NORTH DEVON SGRAFFITO SLIPWARE *c.* 1650-1710 (104/5) A:10-13 (1680)

A red ware with a white slip overall through which geometric and floral patterns were incised. The white appears yellow and the incision brown through the glaze.

70. RED MARBLEIZED (North Italian) SLIPWARE (77 & 140) *c.* 1610 in N. America, 1640-1660 in Antigua (1650) A:14, 15

A red body with white and green marbled decoration covered with a lead glaze. Sometimes the green is left out. Common in old sites.

Tin Enameled Ware

Faience in France, Majolica in Spain, delft in England and Delft in Holland. Just as some of our prehistoric pottery types were thought to have been made in Saladero, and so named, this type of earthenware was once centered around

Delft in Holland. It originated (14th cent.) in Spain and Italy. It is basically a buff, pale yellow and sometimes pink ware hidden by an opaque enamel. The enamel or lead glaze contains tin oxide, hence the generic name.

Pictorial or floral ornament of cobalt blue is most predominant and was painted on the receptive unfired surface. Sometimes other colors, red, purple, yellow and green are found. Delft is very easy to distinguish as sherds have a matt surface, having been in the soil a long time, taking a lead pencil very well. Edges have the enamel chipped off, and the soft buff body is distinctive.

49. DECORATED DELFTWARE (105/11) B: 1600 in N. Am. *c.* 1640 in Antigua—1802.

17th cent. delft 1640-1700 (1670). 18th cent. delft 1700-1802 (1750). For mean ceramic data calculations, in 17th century sites the median date of 1670 is used and for 18th century ones, 1750 is utilised.

65. PLAIN WHITE DELFTWARE (109) *c.* 1640-1800 (1720)

Also datable are:—ointment pots, apothecary jars, blue dash chargers, Mimosa pattern delft and chamberpots. Not common enough to warrant a description.

White Saltglazed Stoneware

This stoneware was made from a mixture of refined clay and flint and was fired to a high density in a very hot kiln. The body was whitened by the addition of china clay from the West Country. The resulting ware was extremely thin and graceful. When common salt (sodium chloride) was thrown into the kiln, its vapour settled on the wares, the sodium combining with the silicates to form a sodium silicate white glaze. The surface, when held obliquely to the light, has a texture like leather or the skin of citrus fruits. Sherds of this type are easy to identify by the white, dense and stonelike body with the textured white glaze.

40. WHITE SALT GLAZED STONEWARE (Excluding moulded and plates) (115/17) *c.* 1720-1805 (1763)

48. SLIP-DIPPED WHITE SALT GLAZED STONEWARE (114/115) C: 8, 9, *c.* 1715-1775 (1745)

This is a slightly older variety, but it carried on through the white salt-glazed temporal range. Cornwall's clay export market had not got under way yet. Its body having no white (pipe) clay in it, it is of a drab, gray color. Unfortunately the white glaze slipped away from rims to expose the gray body, so to make a virtue out of what was actually a mistake, the rims were dipped into a brown oxide slip. Vessels of this type were heavier and not as graceful as the white bodied type. These sherds are quite common in sites dating before 1750.

43. WHITE SALTGLAZED STONEWARE PLATES (115/7) C:1-7, 12. *c.* 1740-1775 (1758)

The most common rims are moulded with patterns known as 'Dot, basket & diaper', 'Barley' and 'Bead & Reel'.

Found in two sites of Antigua are 'King of Prussia' moulded rims, C: 5-7, 12. These were manufactured in the 1750's during the Seven Years War, when Britain was allied to Prussia. The full inscription around the rim reads: 'Success to the/King of Prussia/and his Forces'. Between the groups of words is a cannon, portrait of Frederick the Great, an Eagle and a Military Trophy.

16. MOULDED WHITE SALT GLAZED STONEWARE (115) C:10, 11. *c.* 1740-1765 (1753)

Tea pots, caddies, *etc.* were cast with an elaborate moulded relief decoration.

55. SCRATCH BROWN OR TRAILED WHITE SALT GLAZED (117) C:13 *c.* 1720-1730 (1725)

34. SCRATCH BLUE WHITE SALT GLAZED STONEWARE (117) C:14 *c.* 1744-1775 (1760)

White salt glazed stoneware was sometimes decorated with incised lines that were filled with a brown oxide or manganese (or cobalt blue later), then wiped off to leave the color in the incisions. Rarely found.

Scratch blue has been found in Antigua on chamberpot sherds of the later creamware and pearlware.

24. DEBASED SCRATCH BLUE WHITE SALT GLAZED STONEWARE (118) C:15, 16, 18 *c.* 1765-1795 (1780)

Similar to the last type but the blue was left in the vicinity of the incisions and not wiped off. Common as chamberpots, pitchers and mug sherds. This style was an attempt by English potters to recover the market from the Germans who held the monopoly of a strong grey stoneware export trade to England and her colonies. (See 'Westerwald'). Medallions of George III on their sides.

Other Saltglaze types not found in Antigua so far are:

Transfer Printed 1755-1765

Littler's Blue 1750-1765. Cobalt blue mixed with clay and frit to produce a lustrous blue. (Also found on Creamware and Porcelain).

Cream Colored Earthenware

In the 1740's two innovative potters, Whieldon, in partnership with a young man named Wedgwood (b. 1730), found that the refined mixture of refined clay and flint of white stoneware, when fired to a less intense temperature produced a cream colored earthenware.

When a clear lead glaze was developed, which could be applied as a liquid dip to evenly coat this cream body, the following types appeared:—

36. CLOUDED, TORTOISESHELL, MOTTLED GLAZED CREAM COLORED WARE (123) D:12. *c.* 1740-1770 (1755)

The Whieldon-Wedgwood partnership, which lasted up to 1759, produced much experimentation with the new glaze and ware by applying a variety of colors under the glaze producing tortoiseshell, clouded and mottled effects,

'Barley pattern' moulded plates continue in this ware, often clouded on top in gray and combinations of yellow-brown, blue and purple on top, while the backs were stippled manganese tortoiseshell. Look out for green and deep orange-yellow moulded sherds of teapots imitating pineapples and cauliflowers. D: 8, 9.

33. GREEN GLAZED CREAM BODIED WARE (124/5) D: 3, 4, 5. *c.* 1759-1775 (1767)

In 1759 Wedgwood set up his own business at Burslem and initially produced a new green glaze. This must not be confused with an engine turned green glaze of the early 19th century. Wedgwood's was a richer, yellower and darker green. It is often moulded; for example, the 'Barley pattern' from saltglaze is used.

Creamware

Wedgwood, having set up his own pottery in 1759, had by 1762 perfected his creamware, sherds of which are now so common in the West Indies. This was a further refinement of the cream colored ware, it has a cream colored body with a cream colored clear glaze.

22. CREAMWARE (125/6) E:1, 7. *c.* 1762-1820 (1791)

It is possible to classify two different shades of the cream color; generally speaking the deeper is the older.

25. DEEPER YELLOW CREAMWARE (126/8) *c.* 1762-1780 (1771)

15. LIGHTER YELLOW CREAMWARE *c.* 1775-1820 (1798)

14. 'ANNULAR WARES' CREAMWARE (131) E:14. *c.* 1780-1815 (1798)

This has banded, usually narrow, decoration in several colors.

18. OVERGLAZE ENAMELLED HAND PAINTED CREAMWARE. E:9, 10. *c.* 1765-1810 (1788)

23. TRANSFER PRINTED CREAMWARE: E:12. *c.* 1765-1815 (1771)

The last three are rather rare in middens; care must be taken not to let them pass as pearlware.

8. 'FINGER PAINTED' WARES (polychrome slip on creamware & pearlware) A "swirled slip" in several colors. *c.* 1790-1820 (1805)

Pearlware

In the early 1770's Wedgwood experimented in whitening the body of creamware, by adding Derby chert. Just as washer ladies add blue to their laundry to whiten it, Wedgwood added cobalt blue to the glaze of his creamware to negate the natural yellow tint. By 1779 Wedgwood called his new ware 'pearl white'. Archaeologically then, we find a large range of pearlware dating from

about 1780. Up to now decoration or patterns have not played such an important part in the typology, but from now on, they will be very important.

23. UNDECORATED PEARLWARE *c.* 1780-1830 (1805)

Pearlware is characterised by a bluish tinge to the glaze. Sometimes this is very difficult to distinguish, but often 'build-ups' or 'puddles' of glaze on rims, in crevices of handles and footrims show the blue more easily. Light colored creamware will show a yellow or greenish tinge, whereas a later type 'Whiteware' will show a greyish tinge or none at all. The first pearlware was plain except the following type:—

19. BLUE & GREEN (SHELL) EDGED PEARLWARE (131), F:2, 3. *c.* 1780-1830 (1805)

These are perhaps one of the most common archaeological sherds found in the West Indies. They were from plates with 'shell edge' cockled rims in green or blue and sometimes red or wine colored. These last are very rare, only one having been found in over a year's study. Archaeologically, however, they are not important. After *c.* 1800, as the market for this pattern became great, the craftsmen were not as careful with their inward strokes of the brush, but quickly brushed laterally, to produce a mere stripe, F:3. Also, from *c.* 1800, painted rims were embossed with featherlike devices, fish scales, floral garlands and even human and animal figures, producing:

9. EMBOSSSED FEATHERS, FISH SCALES, *etc.* ON PEARLWARE F:4, 5 *c.* 1800-1820 (1810)

17. UNDERGLAZE BLUE HAND PAINTED PEARLWARE (128/9) F:1 *c.* 1780-1820 (1800)

Various blue hand painted designs have been collected but the most common is the 'Chinese House & Fence' design. This design had also been used earlier on creamware. The English were continually trying to emulate the Chinese, for their porcelain was the best. Another name given the new pearlware was 'China Glazed Ware'.

A common sherd in sites of 1790-1810.

13. ANNULAR PEARLWARE (131) F:14, 15. *c.* 1790-1820 (1805)

Bowls, jugs and mugs were decorated in horizontal bands of light brown and blue, green, black, etc. These bands were sometimes used to fill grooves, and 'broken' grooves and various patterns which were produced by engine turning. Another type which occurs with annular rings is known as:

8. 'FINGER PAINTED' and has the same date bracket, so archaeologically they may be lumped together. This decoration occurs in zones of cloudlike swirling lines, mostly in black, white, blue and grey. F:17 Collectors call this snailing, worming or finger trails. Yet another decoration is MARBLED SLIP, F:16, a polychrome slip, which is included in this type. It is

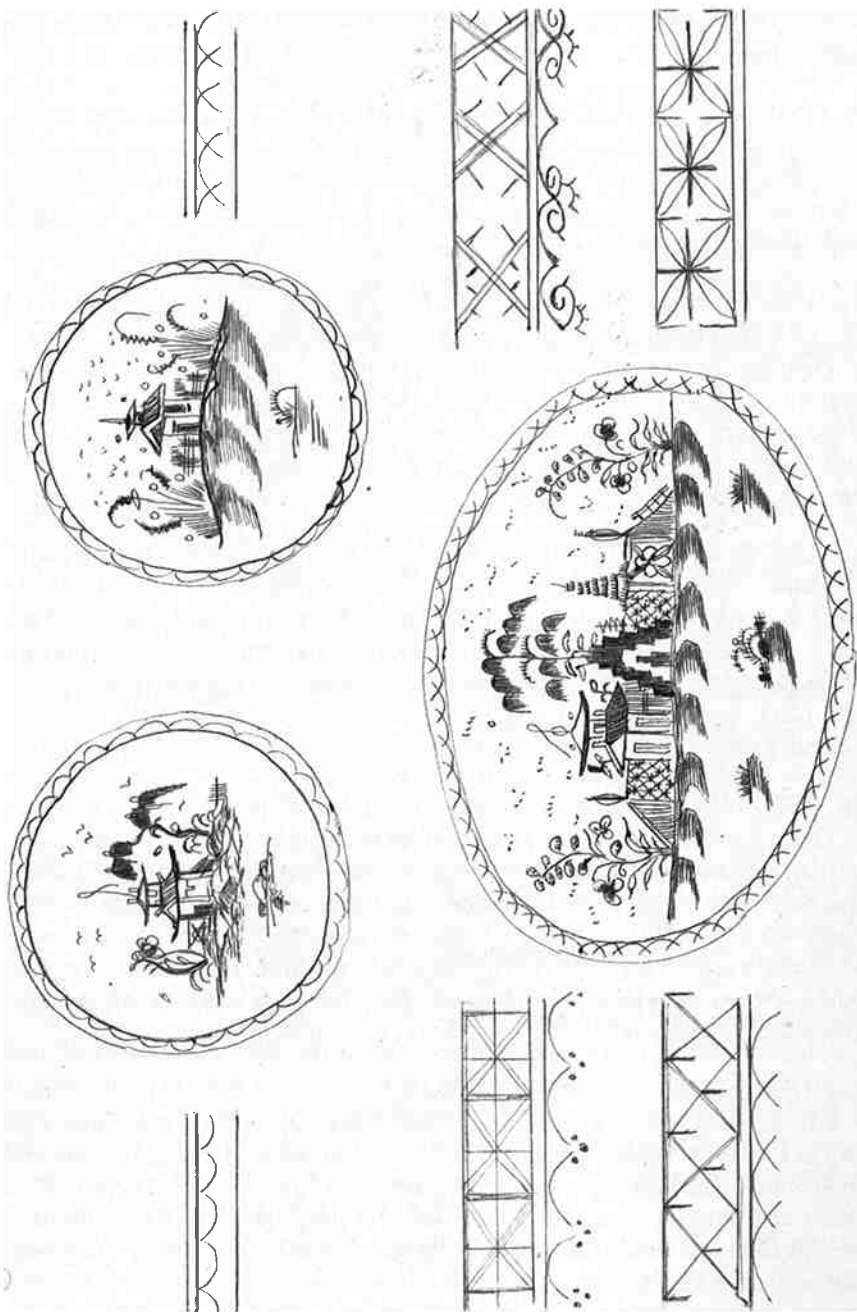


FIGURE 7

created by the swirling together of different colored slips, mainly green and light brown, but this is not as common as the others of this type.

4. UNDERGLAZE POLYCHROME PEARLWARE (129). F:6, 7 & G. c. 1795-1815 (1805)

A delicately decorated type of good taste, generally executed in floral or geometric designs using pastel colors of orange ochre, pale yellow, blue, black and olive green.

12. UNDERGLAZE POLYCHROME FLORAL PATTERNS IN BRIGHTER COLORS (129) F:11, 12, 13 c. 1820-1840 (1830)

This type seems to have evolved from the foregoing. As brighter colors were found that could withstand a hot kiln, taste became more garish. Symmetrical floral patterns were common; the colors used were bright blue, orange, green and pinkish-red, and the flowers were bold. Do not confuse with the same decoration on Whitewares.

11. TRANSFER-PRINTED PEARLWARE (128/30) F:8 c. 1795-1840 (1818)

Transfer printing on earthenware was probably first used as far back as 1753 on creamware, but rarely found on that ware. However, towards the end of the century it became very popular. It is one of the most common sherds in the soils of the West Indies. The most common color is blue, but it is also found in purple, black, brown, rose.

Under the same date bracket, comes the

10. WILLOW TRANSFER PATTERN ON PEARLWARE. F:9, 10.

This is a pseudo-Chinese design, another example of the English potters imitating the Oriental style. It is supposed to have been conceived by Minton at Caughley about 1780. It was then sent to China to be copied onto Chinese Porcelain destined for the English market. The first consignment arrived in 1792 and it started on pearlware at about the same time. It provides a *terminus post quem* for us (a date after which an object found its way into the ground). The pattern has been used without break, up to the present.

6. MOCHA (131). F:18. c. 1795-1890 (1843)

This decoration is found on inexpensive mugs, jugs, bowls, vases and cups, and is a moss or fernlike ornament. It appears on otherwise annular ware and was formed by dropping 'mocha tea' on the wet unfired ware. The acidic tea consisted of black coloring mixed with tobacco juice and urine. One drop on a wet alkaline surface diffused into a shrublike image, by capillary attraction. The ware had a long range. Mocha on a brown ground tends to be older than mocha on blue. Mocha is also found on creamware and whiteware and is the same type for archaeological purposes.

Whiteware

By 1820 pearlware was on its way out, with various forms of Ironstone china, hard whitewares and European common porcelains taking its place.

2. WHITEWARE. (130/1) *c.* 1830-1900+ (1860)

This is distinguished by its hardness, whiteness of glaze and body and no color in the glaze buildups; actually, some types have no buildups at all.

Whiteware archaeologically includes Ironstone and Granite china. They are usually a harder ware but not always so. Their range started about 1813 and continued on up to about 1900, thus similar to whiteware. For these reasons it is usual to consider all these as one type.

There are many variations of decoration in Whiteware, many of the pearlware styles continuing. Generally they are of a 'Victorian' taste which today, would be rated poor. This ceramic era is not as well researched as the former, so no range dates are given below on the Whiteware types. For a guide, refer to the ceramic analysis for Blockhouse, which we used to some success. We must work together in determining whiteware temporal ranges in the West Indies, so that we will be able to date 19th century sites.

Various varieties of whiteware may be listed as follows:—(Based on South 1974: fig. 62)

PLAIN & EMBOSSED

SPONGED in Blue, Green & Red
H: 11, 12

POLYCHROME PAINTED H: 1, 2
(Similar to the later pearlware type,
bold flowers).

LUSTERWARE in Copper, Silver &
Pink, *c.* 1790-1840. H: 13

BLUE PAINTED

STAMPED WARE. H: 2, 3

ANNULAR & MOCHA H: 14

TRANSER PRINTED, Blue, Green,
Brown & Purple H: 8, 9

EDGE DECORATED, Blue & Green,
etc.

TRANSFER PRINTED with overglaze
enamel

EDGE DECORATED, Embossed.

TRANSFER PRINTED Willow Pattern
TRANSFER PRINTED FLOWN BLUE
H: 10

FLOWN BLUE was evolved by the Wedgwood firm about 1830 and was popular until about 1880. A special glaze was used which gave a rich flowing appearance. The blue flowed into the surrounding glaze, with an effect suggesting a halo. Apparently a manufacturing mistake was made, and a spoiled shipment was sent away to America, where it became very popular. We have now listed the main ceramic types, but there are a few others of lesser importance which are nonetheless useful in dating a site.

37. RED STONEWARE, UNGLAZED, SPRIGGED. (120/1) D:10 *c.* 1690-1775 (1733)

A hard dry bodied redware, usually with thin molded sprigged rococo motifs. Common as teapots, copying silver forms.

28. ENGINE TURNED UNGLAZED RED STONEWARE (121) D:11
c. 1763-1775 (1769)

The same ware as above, but with engine turned decoration introduced by Wedgwood in 1763.

27. BLACK BASALTES (121/2) D:12. c. 1750-1820 (1785)

Another hard dry bodied ware, but in black. Made famous by Wedgwood about 1750. Sometimes the interiors were glazed black. Teapots commonest. After 1763, engine turned designs were made. The ware lasted in fashion a longer time than red stoneware as it was often used in times of mourning.

29. JACKFIELDWARE (123) D:13. c. 1740-1780 (1760)

A thin red, purple or gray ware with a deep black glaze used for tea ware and pitchers.

51. ASTBURY, WHITE SPRIGGED AND TRAILED (123). D:14, 15.

c. 1725-1750 (1738)

A lead glazed type with a ginger or light chocolate-brown surface on a hard red body often with sprig molded decorations of flowers, royal arms, birds, etc. in white pipe clay. Only white trailed examples have been found in Antigua. *Not* common. Do not confuse with slipware.

35. COARSE AGATE (132). D:16, 17. c. 1750-1810 (1780)

Coarse agateware was the result of mixing pale yellow and pink firing clays, which created decorative veins on the surfaces. The lead glaze changed the pale yellow & pink colors to dark yellow and red brown, and the rims of bowls and dishes were often decorated with yellow rouletted bands. A variant is AGATE SGRAFFITO. D:18, 19. c. 1740-1765

in which a white slip was pared away to form checkered patterns to expose the agate-like body beneath. Fairly common in mid 18th century sites. Scrub the sherds well to detect the two colors in the body of the two of the following agate types.

47. BUCKLEY WARE (132/3) c. 20-1775 (1748)

The mixing of two clays was not always done for ornament, but also for making a poor clay workable. In Buckley, North Wales, coarse kitchen wares were made by the blending of yellow and red clays producing a red to purple body, which was covered with a thick black glaze. The walls of these vessels are sometimes horizontally ribbed.

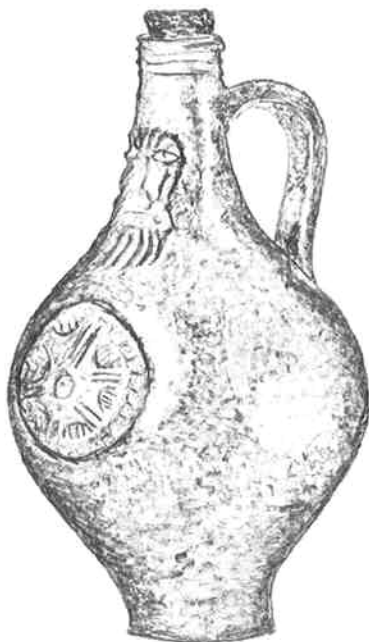
Non-British Ceramics Found In West Indian Sites.

66. DETERIORATED BELLARMINE FACE BOTTLES (56/7) I:1, 2, 3.

c. 1620

in North America c. 1640-1700 (1670)

A Bellarmine is a brown mottled stoneware bottle, having a handle behind the neck and usually a mold-face in front and a meaningless medallion below. The Bellarmine of the above date have deteriorated quality moldings. The



C. N. C. G. S. M. 2

FIGURE 8
Bellarmine
c. 1650-1670

iron oxide mottle has erroneously given them the popular name of tigerware. We have collected several pieces of medallion and one piece of molded face from several of the oldest sites in Antigua. They were originally made in Rhineland, but it has now been discovered that the bottles were imitated in England.

58. SPRIG MOLDING, COMBED LINES, BLUE & MANGANESE DECORATED RHENISH STONEWARE (280/1). I:9-12. c. 1650-1725 (1668)

This gray stoneware is quite common in the older sites. Manganese purple decoration is earlier, and would place the sherd as 17th century.

44. WESTERWALD, STAMPED BLUE FLORAL DEVICES, GEOMETRIC DESIGNS (284/5) I:4-8. c. 1700-1775 (1738)

A gray saltglazed stoneware with the above blue purple designs. The Germans held a monopoly in making strong barrack room and tavern ware in the 18th century and many beer mugs, jugs, storage jars and chamber-pots found their way to the colonies. To help hold this market, the Germans incorporated the British king's initials into the design. To combat this market, the English potters produced debased scratch blue saltglaze, also complete with the King's medallion (*q.v.*). A high percentage of Westerwalk sherds in a site might indicate that it may have been a tavern or barrack room, although it was universally used.

21. DEBASED ROUEN FAIENCE (141/2). I:13, 14. c. 1775-1800 (1782)

This became common in colonial sites when the Navigation Act was lifted in 1775. A heavy red bodied tin enamelled ware, often brown glazed on the exteriors and white on the interiors. Dishes were decorated with simple baskets of flowers in the middle and bands of hatched and dotted zones divided by sprays of short radiating lines around the rims. The white glaze on sherds does not become as matt as delft does after years in the ground. Common in late 18th century sites.

Chinese Porcelain

Apparently the Chinese invented the art of making porcelain somewhere around 900 A.D., when prehistoric peoples were still roaming the West Indies. It was not until the 1740's that Europeans started to manufacture it in quantity, though they had been trying to crack the Chinese secret for a long time. Not being able to make the body, at least the English potters imitated the Chinese designs. Chinese rim and other patterns are often encountered on English delft, the Chinese House and Fence and Willow patterns on pearlware.

Although Chinese porcelain is very common in the West Indies, I do not use it for the ceramic mean as it has a long range and I find the different types difficult to identify, though there is an admirable chapter in Hume (1976). Chinese Porcelain must be more common in the Virgin Islands, as in the 1780's it is known that St. Croix supplied the American colonies. Then, as a Danish West Indian island, it may have traded in porcelain received from the Spanish and Dutch.

It was an expensive ware; one can judge the affluence of the people that lived in a site by the quantity of porcelain sherds in it. It is distinguishable by being translucent, with the glaze being fused to the white body.

Bibliography

Hayden, Arthur

1922 *Chats on Old English Earthenware*. London: Ernest Benn Ltd.

Hughes, G. Bernard

1970 *The Collector's Book of China*. London: Tandem Books.

Hume, Ivor Noël

1976 *A Guide to Artifacts of Colonial America*. New York: Alfred A. Knopf.

1969 *Pottery and Porcelain in Colonial Williamsburg's Archaeological Collections*. Colonial Williamsburg Series.

South, Stanley

1972 Evolution and Horizon as revealed in Ceramic Analysis in Historical Archaeology. *Historical Archaeology Forum* (Conference on Historic Site Archaeology Papers 1971), Vol. 6.

1974 Palmetto Parapets. Exploratory Archaeology at Fort Moultrie, South Carolina, 38CH50. Institute of Archaeology and Anthropology, University of South Carolina, Columbia: *Anthropological Studies*, no. 1.

1977 *Method and Theory in Historical Archaeology*. New York: Academic Press.

Walker, Iain C.

n.d. Comments on Stanley South's "Evolution and Horizon as Revealed in Ceramic Analysis in Historical Archaeology". *Historical Archaeology*



FIGURE A

1, 2, 5, Combed Iron Oxide Stripes; 4, Trailed White Slip appearing Yellow, *c.* 1750; 3 and 9, Dot Decoration; 7, Green, Lt. Yellow, Brick Red Marbled; 6, Brown and Yellow Marbled; 8, Bat Molded; 10-13, Sgraffito Slipware; 14 and 15, Red Marbleized Red (North Italian) Slipware (14 with Green splashes).

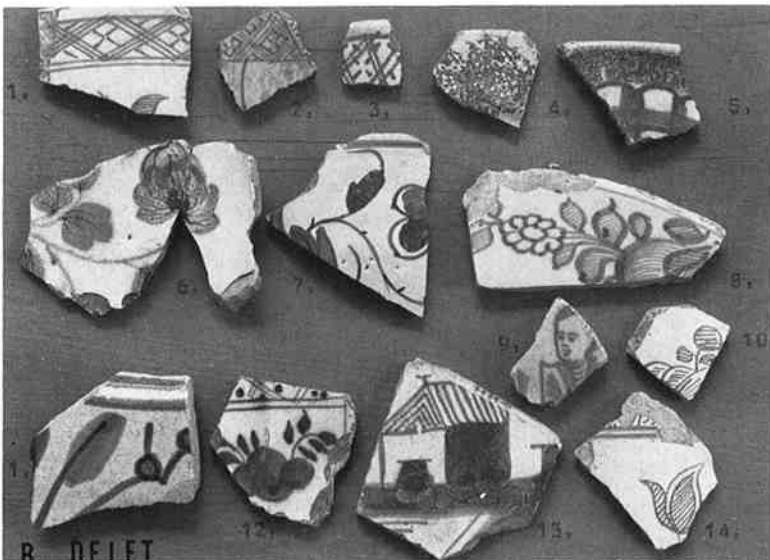


FIGURE B

Decorated delft. B: 1, 2, 3, 12 and 13. In imitation of Chinese Porcelain; 4 and 5, Powdered Manganese Purple; 6, Fazackerly Colours, Yellow, Magenta, Lt. Green, 1750-65; 17, Blue Red, Green, *c.* 1720; 11. Early Context *c.* 1680, Blue Decorated (black coated without tin, to conserve; characteristic of 17th century); 10, Red Decorated.

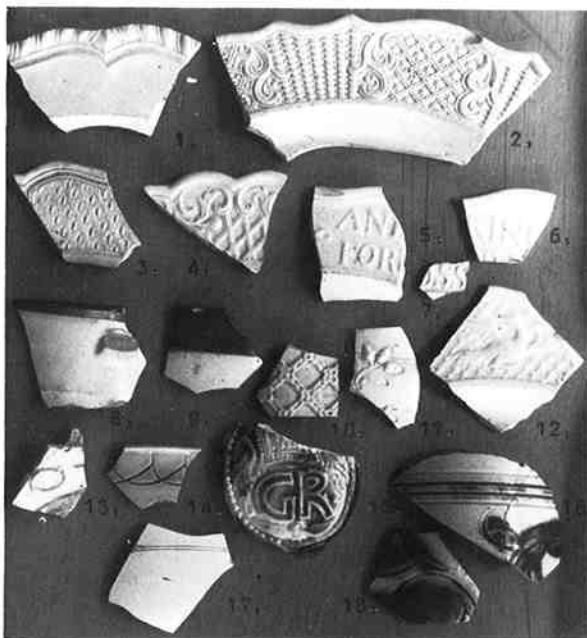


FIGURE C

White Saltglaze Stoneware. 1-7 and 12, Molded Plates (1, Bead and Reel; 2, Dot, Diaper and Basket; 3, Barley; 5-7, and 12, King of Prussia Plates); 8 and 9, Slipped Dipped, (note dark body at break of handle); 10 and 11, Molded; 13, Scratch Brown; 14, Scratch Blue; 15, 16 and 18, Debased Scratch Blue; 17, Plain Sherd.

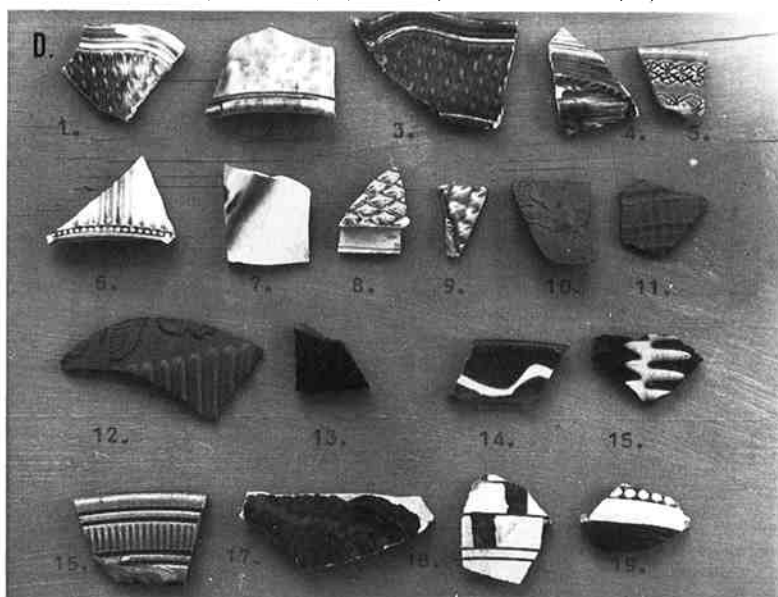


FIGURE D

1, Barley Pattern molded rim of Whieldon type plate (clouded glaze in gray, green, yellow and brown with tortoise-shell stipple on the reverse); 2, Cream colored earthenware tortoise-shell stipple; 3, 4, 5, Green-Glazed; 6 and 7 Cream colored ware 1765-1780; 8 and 9, Cream colored ware molded pineapple decoration in green with a deep orange yellow; 10, Sprig molded red stoneware; 11, Engine turned red stoneware; 12, Black Basaltes stoneware; 13, Jackfield; 14 and 15, Astbury ware; 16 and 17, Coarse Agate; 18 and 19, Sgraffito coarse agate.

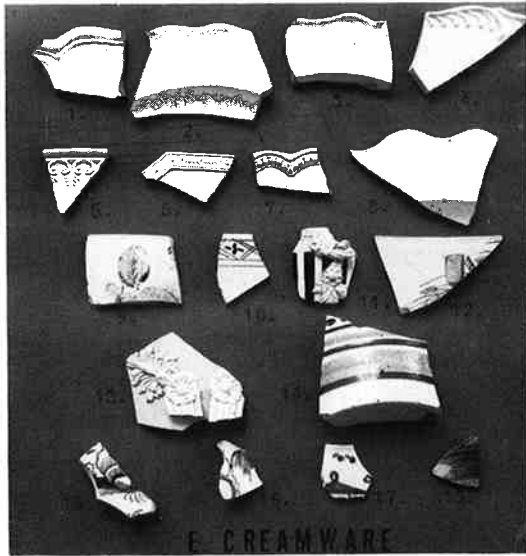


FIGURE E

Creamware. 1, Queen's shape plate; 2, Royal pattern; 4, Feather edge; 5-7, Typical creamware rims; 8, Shell edge (paint has disappeared); 9 and 10, Overglaze enamelled hand painted (9, Blousy Rose in Green, Yellow and Red, c. 1775-7785); 12, Transfer decorated; 14, Annular ware; 15-16, Chinese House-and-Fence design on creamware.

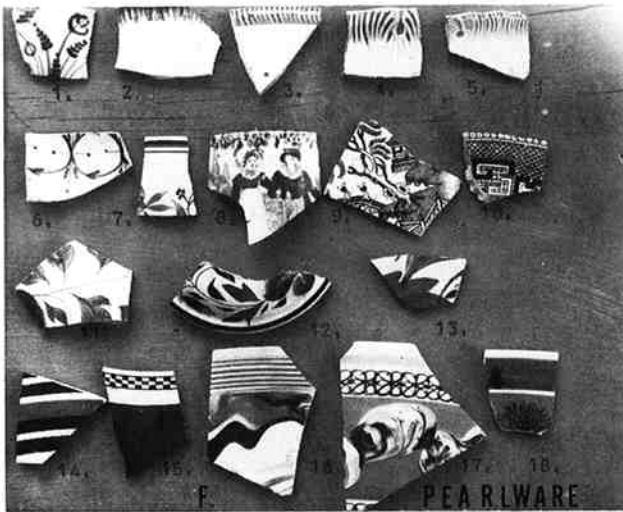


FIGURE F

Pearlware. 1, Chinese House-and-Fence Design; 2 and 3, Shell Edged; 4 and 5, Embossed Shell Edged; 6 and 7, Underglaze polychrome; 8-10, Transfer pattern (9 and 10, Willow pattern); 11-13, Underglaze polychrome, bold flowers and colors; 14 and 15 Annular ware; 16 Marbled slip; 17, 'Finger painted'; 18, Mocha.

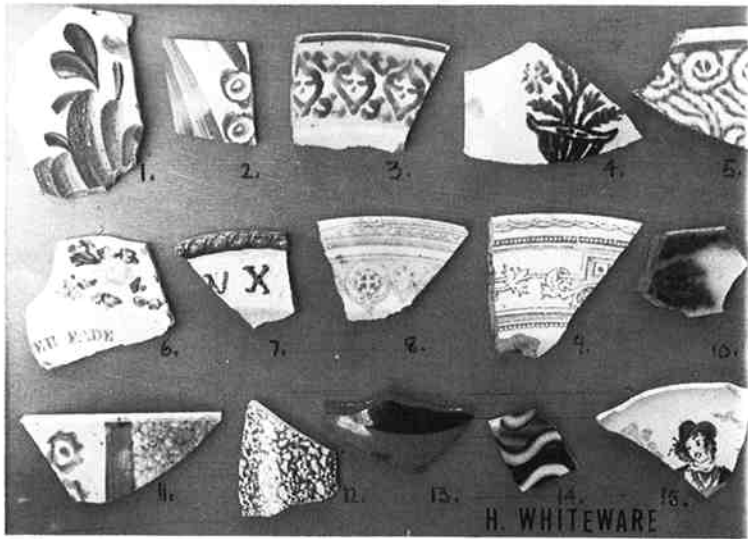


FIGURE H

Whiteware. 1, Polychrome painted; 2-5, 'Cork' Stamped; 6 and 7, Molded Rim with hand painting; 6, Transfer decorated 'Old Soldiers Never Fade'; 8 and 9, Transfer printed; 10, Flown Blue; 11 and 12, Sponged; 13, Lustreware; 14, Annular.



FIGURE I

1-3, Deteriorated Bellarmine, (medallion and face); 4-8, Westerwald grey stoneware; 9-12, Rhenish Stoneware; 9, Manganese decorated; 12, Combed lines.

[Editor's Note: There is no Figure G in this article.]