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PORTABLE CERAMICS FROM THE GENERAL ASSEMBLY SITE, AUCKLAND

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This paper reports the analysis of portable ceramics from the General Assembly site (R11/1595), the former location of one of the major public buildings in colonial Auckland (Smith 1988). It is the first ceramic assemblage to be reported from a series of excavations recently undertaken on 19th century sites in Auckland. Indeed the only analyses of such collections from elsewhere in New Zealand are in unpublished theses or limited circulation reports (e.g. Bedford 1986, Prickett 1981, Ritchie 1986). For this reason it is pertinent to describe briefly the broad range of ceramic artefacts that appear to be encountered on New Zealand sites, and some factors relevant to their interpretation.

Ceramic artefacts can be classified in many ways. A useful distinction in the present context is between building materials and portable ceramics. The former are largely products of the heavy clay industry - bricks, building foundations and various sorts of plumbing - although smaller items such as decorative tiles can also be included. Such items were recovered from the General Assembly site, but they did not form part of this analysis and will be discussed in Smith's final report on the excavations.

Portable ceramics include clay tobacco pipes, and the wide range of vessels and containers commonly described as pottery. The latter can be divided into three broad categories.

Earthenware is generally fired to temperatures between 950 degrees and 1100 degrees Centigrade at which vitrification does not occur (Hamer and Hamer 1986:115). It has a porous fabric which may be glazed or unglazed. More highly fired 'improved earthenwares' or vitreous china was introduced during the 19th century and became increasingly popular towards the end of that period.

Glazed earthenware is often the most useful class archaeologically. It is generally the most common class found in historic sites and has the widest range of vessel types. It also shows a considerable array of decorative styles. These include plain whiteware; slip colouring; relief moulding

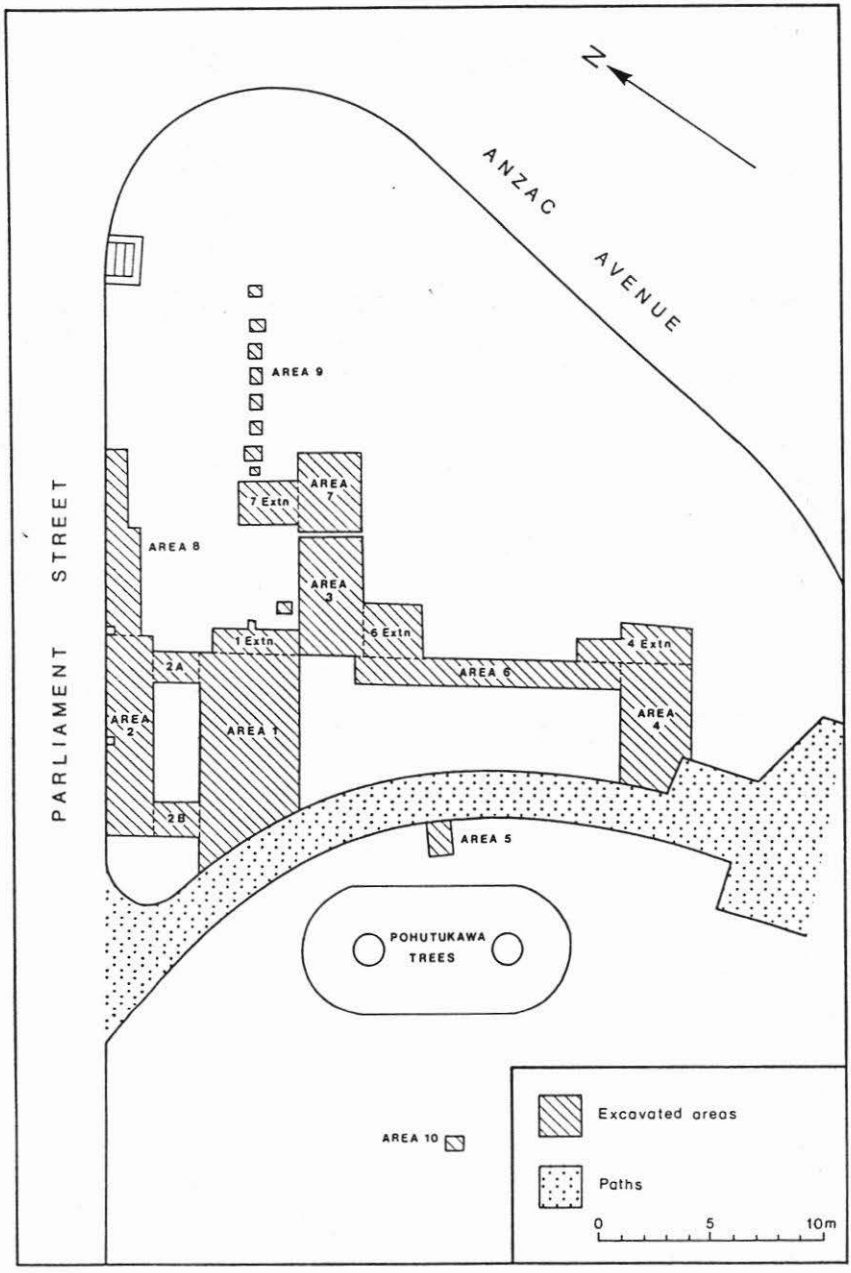

Figure 1. General Assembly Site (R11/1595), showing excavated areas.

(embossing) and applied designs (sprigging); edge-banding, hairlining and gilding; transfer printing and lithographic printing. Innovations and developments in these decorative techniques, along with the frequent presence of makers or other marks enable probable dates of manufacture to be established for many of these wares (see below).

Stoneware is fired at higher temperatures (1200 degrees to 1400 degrees Centigrade) to give a vitrified body which is impervious to water (Oswald and others 1982:16). Nevertheless most 19th century vessels were glazed, using a clay slip and/or a salt glaze. In New Zealand sites stoneware vessels are most commonly utilitarian storage jars or liquid containers. Their undifferentiated body form and simplicity of decoration limit their utility for dating.

Porcelain is more or less translucent. Made of either a soft or hard paste body it is highly fired and fully vitrified (Hamer and Hamer 1986:247). It was used predominantly for tableware and ornaments, and decorated with techniques similar to those used for glazed earthenware. Probable dating can sometimes be achieved.

Clay pipes, made from white ball clay or less commonly terracotta, have been reported more frequently than other portable ceramics in New Zealand (e.g. Foster 1983, Prickett 1981, Rusden 1982). Period of manufacture can generally be established if makers marks are present.

Throughout the 19th century most portable ceramics in New Zealand were imported. Although bricks and some other heavy clay products were manufactured here from the 1840s, local pottery making did not begin until the 1860s (Lambert 1985:i). Place of manufacture is sometimes indicated directly on the artefacts (see below), or can be estimated from vessel form or decorative style. Exhibition and sale catalogues (e.g. Anon 1866) can also prove useful in this regard. Where place of manufacture has been identified the majority of clay pipes and pottery vessels generally derive from Britain. However, Chinese and other oriental ceramics also form an important part of the collections in some parts of the country (Ritchie 1986).

Dates of manufacture can be established or estimated with varying degrees of precision in several ways. Glazed earthenwares and some other vessels often carry marks which can indicate the maker's name and location, brand or ware name, pattern name and date of registration. Major reference works on British ceramics (e.g. Godden 1964), and a preliminary compilation of New Zealand marks (Lambert 1985:143-159), enable precise dating or near estimation from many of these marks. Similar marks occur on many clay pipes (Oswald 1975).

Probable dates can also be estimated by analysis of the style and quality of decoration, particularly in the case of colour decorated earthenwares and porcelain. Although many of the decorative techniques used on these wares were in use well before European settlement of New Zealand, others developed during the late 18th, 19th and early 20th centuries. Of greatest importance was transfer printing, whereby a design engraved onto a copper plate was transferred to the vessel prior to glazing and firing by means of inked paper. This process originated in England during the latter half of the 18th century, and was the predominant decorative style on earthenware throughout most of the 19th century. Technical developments and stylistic changes in designs are well recorded (Coysh and Henrywood 1982:8-11). Although still produced well into the 20th century, transfer printing declined in popularity from 1860 to 1880 as white vessels with decorative borders and brightly coloured slipware increased in dominance. Printed designs were manufactured increasingly by the lithographic process which achieved market dominance by about 1920 (Savage and Newman 1976:180).

THE GENERAL ASSEMBLY SITE

Excavations took place on the General Assembly Reserve, Anzac Avenue, Auckland, in February and March 1988 (Smith 1988). They were undertaken, in part, to provide information for landscaping the reserve in conjunction with the Justice Department's redevelopment of the adjacent High Court complex. However, they were also intended to recover artefactual material from the various public institutions based at this locality from 1854 until 1918.

The original buildings on the site served as New Zealand's first parliament until 1865 when the General Assembly was transferred to Wellington. From 1856 meetings of the Auckland Provincial Council were also held there, and between 1865 and 1876 their sole use was as the Provincial Council Chambers. They were then used as offices for the Departments of Immigration, Survey and Crown Lands until 1890, when they were given over to the Auckland University College. The original buildings, along with subsequent modifications and additions, were demolished in 1918 prior to construction of Anzac Avenue. Since that time the site has remained vacant, with only minor modifications through landscaping in 1956 when it was taken as reserve land for historic purposes.

Ten areas, totalling 144 m^2 were investigated (Fig. 1). These revealed two artefact bearing layers. A small amount of material was found at the base of the turf (Layer 1), but most derived from Layer 2. In places the lower layer comprised up to three discrete lenses (2a, 2b, 2c). The investigations also showed clearly that when the buildings were demolished the site

Table 1

MATCHING AND JOINING SHERDS BETWEEN LAYERS AND AREAS

	1/1	1/2	1ext	2/2c	3/1	3/2	4/1	4/2	6/1	6/2	6pit	7/1	7/2	7pit
1/1														
1/2	3*													
1ext.		1												
2/2c		1												
3/1	2	2		1*										
3/2	1	3		1	3									
4/1					1									
4/2		2			1	1								
6/1		1												
6/2	4*	4*		1	2	1		1						
6pit	2	4**	2*	2	4*	2	1			3				
7/1					1						1			
7/2	1	1		1	1					1	1	1		
7pit	1	1			3	1				2	1			

Numbers = matches
* = joins

was levelled. This process redeposited material from the higher central portion of the site over most of the lowlying ground. This raises the possibility that material from each phase of the site's occupation was mixed through all the excavated lenses and layers.

OBJECTIVES AND METHODS OF ANALYSIS

Analysis of the portable ceramic assemblage was directed towards three principal objectives:

(a) to test the hypothesis that material from the various lenses and layers constitute a single homogeneous assemblage;

(b) to describe this assemblage in terms of vessel types, decorative techniques and where possible the date and place of manufacture, and

(c) to assess whether components of the assemblage could be ascribed to specific functions of the various public institutions known to have occupied the buildings.

All material had been hand-picked from the matrix during excavation, and included a high proportion of small fragments suggesting a good rate of recovery. It was cleaned, separated from non-ceramic materials, numbered, then sorted into the basic earthenware, stoneware, porcelain and clay pipe components. Each of these was closely examined to find joining or matching sherds, in order to assess mixing between areas and layers.

Each component was further sorted on the basis of body form, size and decoration into probable vessel types. This was achieved largely through the experience gained in dealing with ceramics from other Auckland sites. Standard reference works were also consulted, as was Greg Smith, an experienced antique dealer in Auckland. The minimum number of vessels (M.N.V.) of each type was calculated, and where possible precise or probable period of manufacture established. The most likely 10 year period could be established for all decorated earthenware and porcelain vessels. Only some of the stoneware could be dated at all precisely, principally because stone bottles have changed little with time, and some manufacturers operated for many years.

RESULTS

Table 1 shows the number of joins between sherds from different areas and layers, along with matches suggested by size, texture and/or pattern. This indicates clearly that the various collections from the site should be treated as a single assemblage.

Table 2: COMPOSITION OF ASSEMBLAGE

	Sherds	Minimum number of vessels
Earthenware	331	107
Stoneware	86	47
Porcelain	9	9
Clay Pipes	12	6
	438	169

Table 3: FUNCTIONAL GROUPING OF POTTERY VESSEL TYPES

	Earthenware	Stoneware	Porcelain	Total
Tableware	77	3	7	87
Drink bottles		22		22
Ink containers		17		17
Kitchenware	9	3		12
Flowerpots	10			10
Lab equipment	4			4
Bathroomware	4			4
Ornaments	1		2	3
Bedroomware	1			1
Water carafe/ lampshade	1			1
Unidentified		2		2
	107	47	9	163

Table 4: TABLEWARE VESSEL TYPES

	Earthenware	Stoneware	Porcelain	Total
Saucer	20		3*	23
Cup	17		2	19
Plate	15		1*	16
Jug	6	1		7
Bowl	3	2	1	6
Cup/Bowl	5			5
Ashette	3			3
Tureen	3			3
Tureen Lid	2			2
Mug	2			2
Egg Cup	1			1
	77	3	7	87

* Includes 1 miniature

This assemblage was dominated by earthenware, which made up 75% of total sherds and 63% of total M.N.V. (Table 2). Stoneware vessels (28%) were the only other major component, with porcelain and clay pipes relatively infrequent. Broad functional groupings of pottery vessels are shown in Table 3. Only 26 earthenware sherds could not be assigned to a specific vessel type, but these almost certainly belong to the predominant tableware group. Two stoneware sherds were also not assigned, but in this case they appear to represent additional unidentified vessel types.

Earthenware

The total number of sherds was evenly divided between glazed (48.9%) and unglazed (51.1%), but the former dominated in terms of M.N.V. (85%). The 15 unglazed items include 10 terracotta flower pots; laboratory equipment, comprising two small beakers, a burner mantle and a small container; and two pieces of a possible ornament.

Most of the glazed vessels were tableware. Of the minor categories, kitchenware was most common, with six processed food containers and three bowls. Bathroomware included three chamberpots and a toothpaste jar, and bedroomware was represented by a possible dressingtable pot. A globular white vitreous china vessel may have been a water carafe or lampshade. All but two of these items lacked decoration. The exceptions were both chamberpots, one embossed whiteware, and the other embossed with a light blue slip glaze.

The tableware includes a wide range of vessel types (Table 4) with saucers, cups and plates predominating. The fragmentary nature of most of these items prohibits clear definition of subtypes. However, among the plates it was possible to identify one soup plate, and both large dinner plates and small side plates also appear to be represented. Cups of at least two shapes were present. One had an outward-flaring rim, similar to either Shape 2 or 4 in Brassey's (1989) classification. Another two straight-rimmed examples fall clearly into his Shape 5, while three others could be Shapes 5 or 6.

In contrast to the rest of the earthenware, most (82%) of the tableware was colour decorated (Fig. 2). Transfer-printing was by far the most common form of decoration, occurring on all vessel types except the mugs and eggcup. Examples of edge-banding and/or hair-lining decoration were noted on examples of half the range of vessel types, while flown blue and imitation jasper were observed only on saucers, cups and plates. All but one of the slip decorated vessels were also embossed.

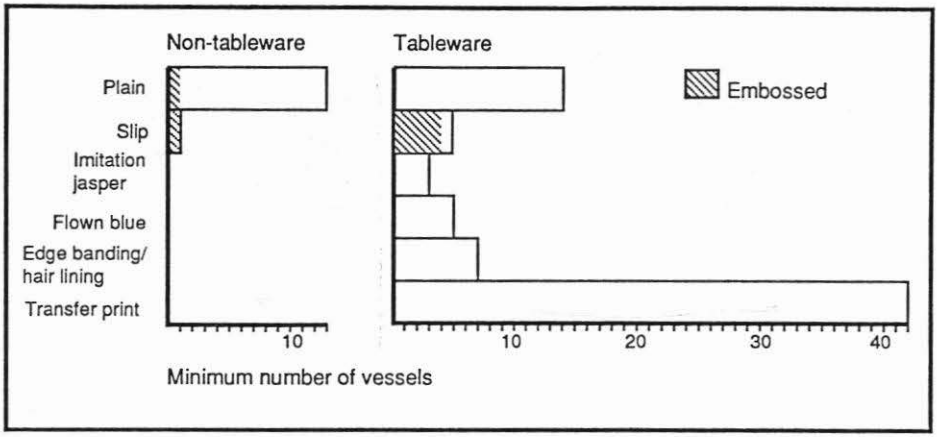

Figure 2. Decoration on Glazed Earthenware Vessels.

More than half (57%) of the transfer prints were in blue, with black (26%), green (7%), and single items in red, grey, purple and brown, making up the remainder. For 11 sherds it was possible to identify the actual pattern by name. Single examples were found of 'Albion' (in blue), 'Wild Rose' (blue), 'Persian' (green) and 'Rhine' (grey). 'Seaweed' occurred on two sherds, one in blue, the other green. Not unexpectedly the 'Willow' pattern was most common, with five examples all in blue. However, these do not appear to represent a 'set', as the quality of printing suggests different periods of manufacture for each item. The only vessels which do seem to form sets are two pairs of cup and saucer, each pair sharing an unnamed black transfer print.

None of the earthenware sherds had complete makers marks. However, one black transfer-printed plate fragment bore part of a crown (Fig. 3a) similar to two marks illustrated by Godden (1964:495, 533-4). The marks of both John Ridgway of Cauldron Place, Shelton Hanley (ca. 1830-1855), and Pinder, Bourne and Hope, Nile Street, Burslem (ca. 1851-60), contain a crown in the relevant position. There are reasons to suspect that both of these firms may have been exporting material to New Zealand. Prior to 1830 John Ridgway was in partnership with his brother William, and their firm was active in the export trade to America (Coysh and Henrywood 1982:302). Examples of William Ridgway's products in other Auckland sites (e.g. NZI - R11/1589) demonstrate that after their separation at least one of the brothers continued in the export trade. After 1860 Pinder, Bourne and Hope became Pinder, Bourne and Co., and examples of their ware have also been found at the NZI site (Fig. 3b).

a.

b.

c.

d.

e.

f.

Figure 3. Makers Marks. (a) Part of printed mark on earthenware plate [GA 18-12]. (b) Complete mark similar to 3a 'Pinder, Bourne and Co.' [NZI] F7-4346. (c) Impressed mark on stoneware bottle [GA 50-32]. (d) Impressed mark on stoneware bottle 'Thomas Smith and Co, London' [GA 57-20]. (e) Impressed mark on stoneware bottle [GA 1-20]. (f) Part of printed mark on porcelain saucer [GA 56-10].

One further earthenware item can be attributed to a probable maker. This portion of chamberpot is identical to vessels made by Johnson Brothers of Hanley, who commenced operation in 1883 (Godden 1964:355). From 1850 to 1882 this firm was known as J W Pankhurst. The particular design of this chamberpot was introduced in the 1860s, but continued to be manufactured until the 1920s (G Smith pers. comm.).

Probable dates of manufacture could be estimated for 80% of the tableware (Fig. 4). Of these 26% were made between 1830 and 1855, 33% in the 1850s, and the remainder in the 1860s. In addition to the chamberpot described above, only three of the non-tableware vessels could be assigned dates of manufacture. The toothpaste jar and one chamberpot were probably produced in the 1860s, while the third chamberpot was made at some time after 1860. None of the unglazed earthenware could be dated.

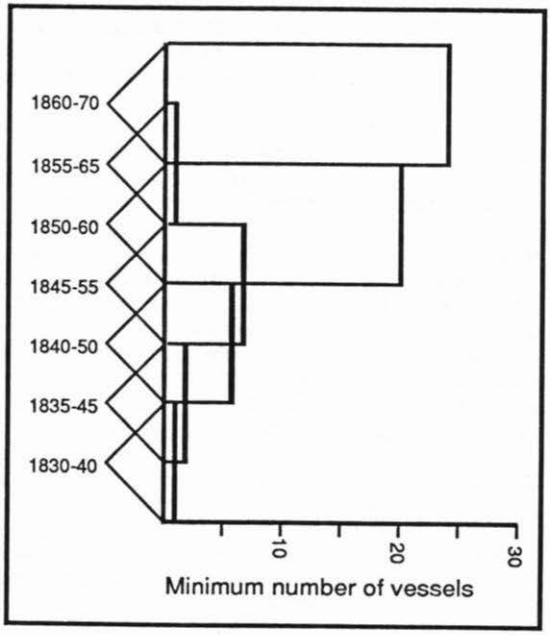

Figure 4. Earthen Tableware - probable dates of manufacture.

Stoneware

Drink bottles and ink containers were the predominant vessel types in stoneware (Table 5). Gingerbeer bottles were most common, but the former category also included part of a vessel typical of the Bols type used by at least two Dutch gin manufacturers (Roycroft 1976:55; 1979:46). Ink containers came in three sizes. Bulk containers (8 - 10 cm basal diameter, ca. 20 cm maximum height) were most common. One of the two rims assigned to this vessel type was shaped for pouring. Small (ca. 4.5 cm diameter) bottles included both the squat (ca. 5 cm maximum height) 'penny ink' variety and somewhat taller (? 8 - 10 cm) 'medium' sized bottles. Remaining items included a jug, four bowls, a stove-blacking or grease jar, and two unidentified vessels.

All the stoneware was glazed, with a more or less even division between slip and salt glazed wares (Table 5). All of the latter had also been coloured with an underglaze slip. The ink and gingerbeer bottles were all in various shades of brown, or clear glazed. Other colours occurred only on the table and kitchenwares, and the gin bottle. One of the table bowls was also embossed.

Three of the bulk ink containers were stamped with their maker's name. One was by Doulton and Co., who worked out of the Lambeth Pottery, London, from 1858 (Fig. 3c). The present example must have been made before 1891 as it lacks the word ENGLAND, which was added to their mark in that year (Godden 1964:214). The second maker was Thomas Smith and Co., London (Fig. 3d). Established in 1836, this company traded from various addresses until ca. 1893 (Oswald 1982:84). Unfortunately the mark in this assemblage was incomplete, lacking the address which would have narrowed its possible date range. The third item is by Bourne, of Denby (Fig. 3e). This title was used from ca. 1833 to 1857 when Bourne's son joined him in business, with a corresponding change in mark (Godden 1964:89-90). This item has a distinctive light-greenish banding within its predominantly grey fabric. This characteristic has been observed on items from other Auckland sites, and whenever these have been marked they were made by Bourne or Bourne and Son. On this basis another four unmarked vessels can probably be attributed to this maker. These include the blacking jar, one bulk and one medium ink container, and a gingerbeer bottle.

Yet another of the bulk inks was transfer printed with the letters MEEK. These refer to the Dunedin company W J Meek Ltd, manufacturers of ink. Founded in 1886, they traded under this name until becoming Stephens Ink Ltd in 1932 (*NZ Herald* 15/11/1969).

Table 5

STONEWARE VESSELS: FREQUENCY AND DECORATION

Vessel Type		Glaze Type and Slip Colour					
		Salt Glaze		Slip Glaze			
		Brown	Other	Brown	Clear	Other	Comment
INK BOTTLES	small	2					-
	medium	2					-
	bulk	5		1	7		-
DRINK BOTTLES	ginger beer	11		9	1		-
	gin		1				Red/brown
KITCHEN WARE	blacking jar	1					-
	bowl					2	Lemon, yellow
TABLE WARE	jug					1	Fawn with brown rim
	bowl					2	Fawn; blue embossed
Unidentified				1	1		
		21	1	11	9	5	

Probable dates of manufacture could be estimated from decorative style for the three items of tableware. The jug was probably made in the 1870s, one of the bowls in the 1860s and the other in the 1890s. No precise estimates of age could be made for the remaining 36 (77%) stoneware vessels.

Porcelain

Ornaments and fine tableware were the only items in porcelain (Table 3). The former were small broken figurines; a madonna, and part of a head. The latter comprised plates and saucers (including a miniature of each), cups and a small (? sugar) bowl (Table 4). Examination of the body, glaze and decoration of these items indicate that three were of Asiatic origin, two made in Japan and one probably Chinese. The remainder were almost certainly British. Nearly all were decorated with a combination of techniques.

The Japanese miniatures both had multi-coloured, hand-painted overglaze decoration, in one case combined with hair-lining, and in the other with an underglaze transfer print. The Chinese saucer fragment has a blue-green glaze with hair-lining. All of the British tablewares were embossed. Two were without added colour, but the other two had multi-coloured underglaze and overglaze transfer prints, one with additional gilding on the rim.

One of the miniatures had MADE IN JAPAN (Fig. 3f), along with some indecipherable Japanese characters, printed on the base. The American McKinley Tariff Act of 1891 required manufacturers to indicate country of origin. However, compliance with this Act in England was not complete before 1900 (Godden 1964:11), and the same may be the case for Japanese wares.

The four other items for which dates could be estimated appeared to be earlier, two being assigned to the 1860s and two to the 1870s.

Clay Pipes

A total of 12 clay pipe fragments were recovered during excavation. Six of these were unmarked fragments of stem, and another two unmarked bowl and stem portions (Figs. 5a, b). One of the latter included a spur. Marked items included part of a bowl with vertical ribbing (Fig. 5c), and three stems with complete or partial makers marks. These were all made by Glasgow-based factories with long operational periods: McDougall (1845-1968), William White (1857-1955), and Davidson (1863-1910) (Oswald 1975:205-6) (Figs. 5d, e, f).

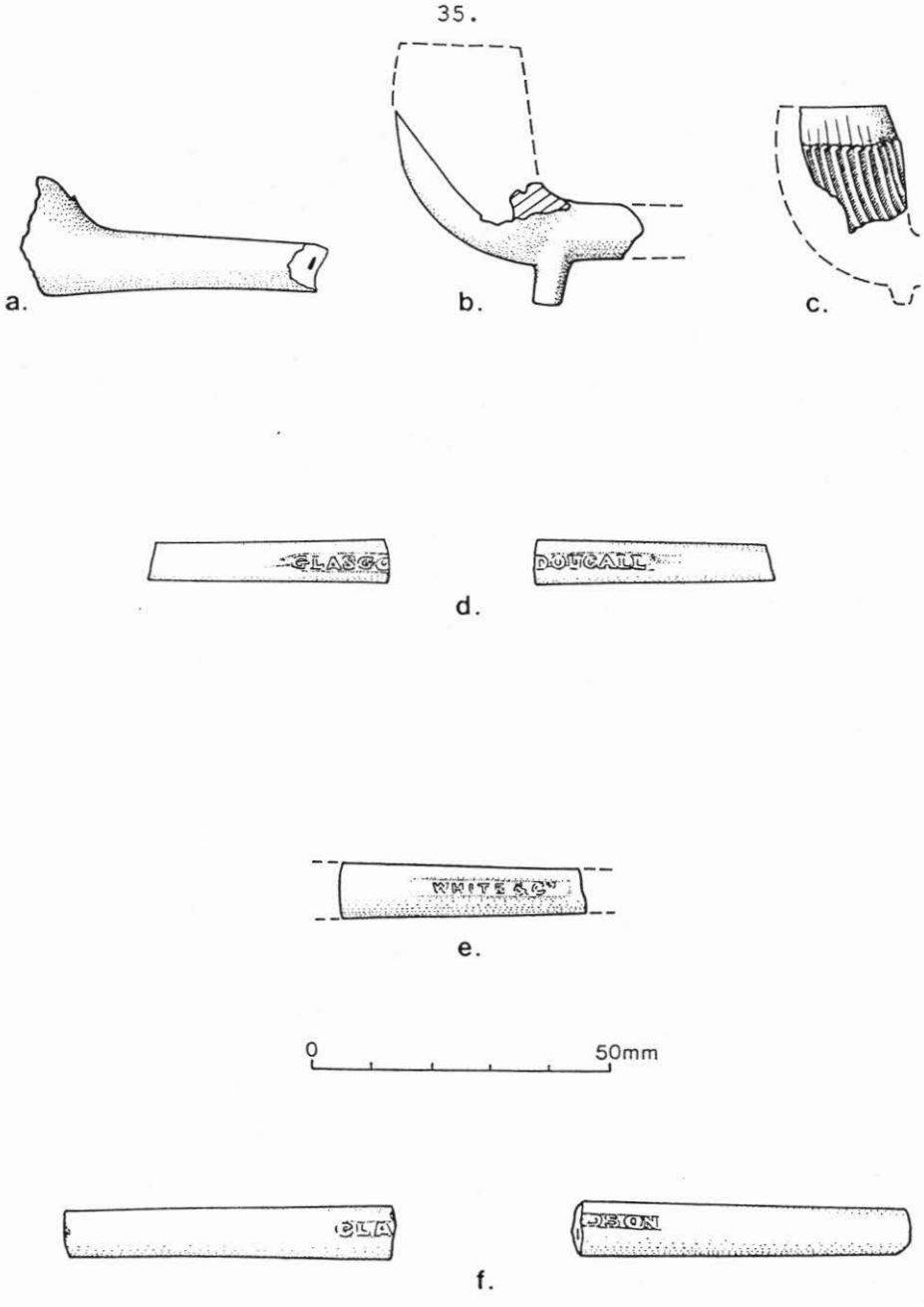

Figure 5. Clay Pipe Fragments. (a) GA 18-66. (b) GA 34-11. (c) GA 27-17. (d) GA 32-10. (e) GA 18-67. (f) GA 27-18.

DISCUSSION

Both the stratigraphy encountered during excavation, and subsequent matching and joining of sherds, indicate that portable ceramics from throughout the occupation of the General Assembly building had been thoroughly mixed by demolition and levelling of the site. In these circumstances the functions and dates of manufacture of the objects provide the only clues as to the period from which they derived.

One of the major components was clearly in use throughout. The stoneware ink and drink bottles fall into this category on functional grounds, and the small number of dated examples is consistent with that view. At least one of the Bourne vessels dates from the Parliamentary period. The Doulton and Smith examples are probably also pre-University, while the Meeks ink is from the latter phase.

A more restricted time-span is indicated for the earthen tableware. Probable dates of manufacture were estimated for 80% of these items. These all fell between the 1830s and 1860s, with the vast majority assigned to the last two decades of this period (Fig. 4). This corresponds closely with the period (1854-65) during which Parliament met at the General Assembly building. Adams and Gaws (1977) have proposed an early biasing factor of up to 20 years when dating from ceramic material, and there is little reason to doubt that some of these items were discarded during the Provincial Council period (1865-1876).

Restaurant facilities were provided soon after the opening of Parliament. They were not available at the outset, as three days later (27 May 1854) a member called on the House Improvements Committee "to attend also to the needs of the inner man and provide a refreshment room" (Fitzgerald 1885:15). Less than a month later the Licensing Amendment Act became the first statute rushed through all its stages in a day, to permit the sale of liquor to members on the premises (Fitzgerald 1885:181). By September there is mention of members "dining at Bellamy's" (Fitzgerald 1885:418). While Parliament sat in Auckland these services appear to have been provided by private caterers under contract for each session (McGee 1985:46). It also appears that they were maintained during the Provincial Council period, as "councillors enjoyed the usual amenities of Parliament. Bellamy's flourished in 1870" (Schofield 1929:17).

After 1876 tableware is unlikely to have been common in the buildings as they were Government offices. Some may have been used by the University after 1890, but only the heavier stoneware jugs and bowls can be dated to that period.

No decipherable makers marks were found on the remnants of Parliamentary tableware. However, there can be little doubt that they were imported from Britain, almost certainly from Staffordshire potteries. In this respect they are similar to other 19th - early 20th century New Zealand assemblages (e.g. Bedford 1986:58; Ritchie 1986:287). Likewise, decorated items predominated, but there is little evidence that Bellamy's was furnished with 'sets' of tableware. This contrasts with the assemblage from the Halfway House Hotel in the Cromwell Gorge (Bedford 1986:58), but parallels the situation with European tableware from Chinese goldminers sites in Central Otago. Ritchie (1986:320) has explained the latter case in terms of the probable expense of dinner sets and their lack of suitability for serving Chinese meals, but these arguments would not seem to be relevant in the present context. The contrast between the General Assembly and Halfway House assemblages may be due, in part, to the greater size of the latter (ca. 360 tableware vessels, compared with 77). However, almost all the dated tableware from the hotel derives from the period after 1880 (Bedford 1986:Figures 16-19) and thus could indicate a greater availability of complete 'sets' towards the end of the 19th century. Bellamy's may have been stocked with mismatched tableware simply because that was all that was available in the 1850s and 60s.

Other datable earthenware includes only the bathroom vessels. Three quarters of these postdate 1860. The three chamberpots are strongly suggestive of a residential presence on the site. Perusal of available street directories (1865, 1866, 1882, 1912-18) indicates presence of a resident caretaker only during the University occupation.

Several other items can be assigned to this final period. On functional grounds this is the case for the beakers, burner mantle and other laboratory ware. Dating of the porcelain miniatures suggests that they may have graced some professor's mantlepiece.

CONCLUSION

Portable ceramics from the General Assembly site include fragments of the tableware used in Bellamy's from 1854 until the Provincial Council Chambers closed in 1876. This was nearly all transfer-printed Staffordshire earthenware. There were few shared patterns represented, suggesting that Bellamy's was not furnished with 'sets' of tableware. This could reflect limitations in the supply of expensive china during the period. Other major components include laboratory ware, decorative items and chamberpots from Auckland's first University campus, and stone ink and drink bottles from throughout the site's occupation.

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