## The *Dartmouth*, a British frigate wrecked off Mull, 1690 4. The clay pipes

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Much of the importance of finds from wrecks of the post-medieval period lies not in the objects themselves but in the fact that these objects are found in a closely dated context. Few sites on land can be closely dated from historical sources, as shipwrecks can be, and most dating is done from the finds themselves. In the case of clay pipes much valuable work has already been done, particularly by D. R. Atkinson, A. Oswald and I. C. Walker, in constructing typologies using documentary material, roughly dated archaeological collections, and, inevitably stylistic analysis, which can become too tidy and too subjective. Valuable as such typologies are, they need to be corroborated or corrected by closely dated archaeological finds. It is, therefore, very important that groups of finds from a dated shipwreck site should be published in their entirety, with standardized drawings, to enable comparison with other similar material.

The Dartmouth wreck was found in 1973 by the Bristol Undersea Archaeology Group, and surveyed and excavated by the group in conjunction with the St Andrews Institute of Maritime Archaeology (Adnams, 1974). The whole collection has now been bought by the National Museum of Antiquities of Scotland.

The finds therefore pre-date October 1690 but, given the rigours of life at sea, they are unlikely to have been more than a few years old when lost. The clay pipes are of particular interest because some at least are likely to have been of Scottish manufacture, and little work has yet been done on Scottish clay pipes of this period. The types found are as follows (Fig. 1):

1. Oswald type 5. Large everted heart-shaped base. Moulded initials I C on sides of base. Milled rim. Well finished, 3 examples.

- Oswald type 5. Small round base with stamped relief initials ML with a crown above. Milled rim. Well finished, 9 examples.
- 3. Oswald type 5. Large heart-shaped base. Milled rim. Slight mould-line on front of bowl and base. 1 example, D7199.
- 4. Oswald type 17. Short spur. Milled rim. Slight mould-line on front of bowl and spur. 1 example, D7116.
- 5. Oswald type 17. Short spur. Faint milled rim? 1 example, D7201.
- 6. Oswald type 17. Short spur. Mould-line on underneath of stem. 1 example, D7141.
- 7. Oswald type 7. Round base. Milled rim. 1 example, D7127.
- Oswald type 7. Oval base. Milled rim. Mould line under stem. Well finished. 1 example, D7188.
- 9. Oswald type 7. Large, slightly heart-shaped everted base. I C moulded on sides of base. Milled rim. Well finished. 22 examples.
- 10. Oswald type 8. Small oval base. Slight mould-lines on both sides of stem and bowl. 1 example, D7202.
- 11. Oswald type 8. Small round base. Slight mould-lines. 1 example, D7203.
- 12. Oswald type 8. Small irregularly-shaped base. Line round rim. Mould-line under stem. Well finished. 1 example, D7204.
- 13. Oswald type 8. Oval base. Well finished. 1 example, D7017.
- 14. Oswald type 9. Large round everted base. Milled rim. 1 example, D7205.
- 15. Oswald type 9? Large round everted base. Milled rim. Other details obscured by concretion. 1 example, D7186.
- 16. Oswald type 9? Large round everted base. Milled rim. Bad mould-lines, particularly on front of bowl. 1 example, D7038.
- 17. Oswald type 9? Round base with indistinct relief stamped mark, ? two standing figures. 1 example, D7081.

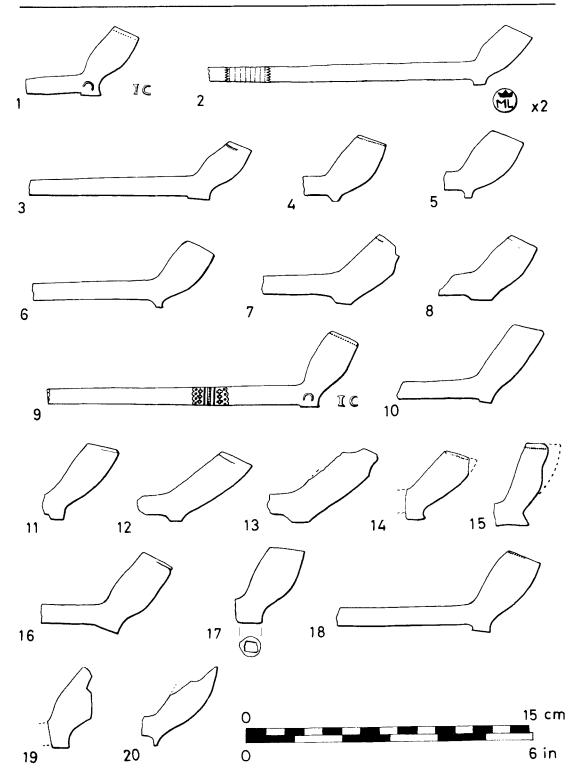


Figure 1. Pipe types found (for explanation see text).

- Oswald type 9? Large oval everted base. Milled rim. Bad mould-line on front of bowl. 1 example, D7090.
- 19. Oswald type 9? Large, round, slightly everted base. Other details obscured by concretion. 1 example, D7088.
- 20. Oswald type 21? Small spur. Front of bowl very curved.

There were also 18 bowl fragments, and 9 pieces of stem including all or part of a base. but none of these can definitely be assigned to any particular type. Some of the examples of type 2 have several inches of stem surviving, showing one band of pattern. Eighteen stem fragments with this pattern were also found. These pieces of stem are all of approximately the same diameter, suggesting that the band of pattern occurred only once along the length of the stem. Some of the bowls of type 9 also have several inches of stem surviving, the longest of which shows one band of pattern close to the bowl, and the beginning of another. The 51 stem fragments bearing this decoration are found in three groups, one corresponding in thickness to the band near the bowl, one to the middle band; and the third group, including some stem ends, is thinner, and suggests a third band of decoration near the end of the stem. This evidence provides a total reconstructed stem length of about 0.33 m. There were also 200 pieces of undecorated stem, showing a variety of degrees of finish, and with external diameters ranging from 0.011 m to 0.004 m. It would have been interesting to have measured the bore of the stems to test the statistical dating method (Walker, 1967), but the sample was too small to be valid.

Twice as many marked pipes were found as unmarked, but there are only four different marks, whereas the 16 unmarked types are each represented by one example only. Two slightly different types, 1 and 9, are marked with the initials I C fairly high on the sides of the base. It is probable that these initials stand for James Colquhoun. A James Colquhoun is known to have started work as a potter and pipe-maker in Glasgow in 1668 (Fleming, 1923:119), and a James Colkoun is recorded as supplying eight casks of pipes to the Second Darien Expedition in 1699 (Insh, 1924:140-1). These two may be the same, or they may be father and son. In March to May and July to August 1690 Dartmouth took on stores at Greenock (PRO ADM. 51/345), so it is likely that the majority of pipes on board would have come from Glasgow. It is interesting, therefore, that there are no marked pipes from the other known Glasgow pipe-makers of this date such as William Hyndshaw, who also supplied pipes to the Darien Company (Insh, 1924:140–1). Perhaps rather than each man going ashore and buying one or more pipes the ship's purser took on a large number and sold them to the men as required. Or it could be that Colquhoun was the main supplier for the Greenock area, or that other makers did not mark their pipes.

I C is a common mark on Scottish pipes of this date. In the group of pipes from Linlithgow palace there are two pipes with I C moulded on the sides of the base, but neither of them is identical to either of the Dartmouth types. There is also a stem fragment which appears to bear the same decoration as the stem of Dartmouth type 9, and also a stem with COL-HOWN written round it (Laing, 1966-7:127, nos 4, 12, 16, 17). In the National Museum of Antiquities of Scotland there are 18 examples of Dartmouth type 1, one example of Dartmouth type 9, and eight examples of yet another, very similar, type of pipe with I C moulded on the sides of the base. Both pipe types and marks are so similar that they must surely represent a variety of moulds used by one major manufacturer, or perhaps one man who was owner of, and retailer for, several small workshops.

M L is not a common combination of initials, and I can find no likely maker in any list. The use of a crown above a pair of initials is said to be a characteristic of Dutch pipes. *Dartmouth's* previous port of call, in January 1690, had been Plymouth (PRO ADM. 8/2), where a number of Dutch pipes have been found. But there is no obvious difference in quality or texture between these and other pipes in the group which might suggest that this type was not British. Also, when compared with Dutch pipes, the type corresponds most closely with pipes slightly earlier in date (Atkinson & Oswald, 1972:181, 176, fig. 78, nos 8, 14).

It appears, therefore, that the 25 I C pipes are probably Scottish, and the 9 ML pipes are probably not. Oswald (1975:43) lists four distinguishing features of clay pipes made in Scotland.

- 1. The inward kink above the base or foot of the bowl, resembling that on the Bristol bowls of c. 1650 called 'chinned' bowls by Walker. In the Scottish examples the foot is deeper and projects a little forward.
- 2. The splayed foot, which is much deeper than in any other types.
- 3. The marked forward slope of the barrelshaped bowls.
- 4. The pipes from Scotland are in the main yellowish and not as a rule polished, and the trimming of mould lines is poorly finished.

The details which he gives of Scottish styles of marking pipes do not refer to any of the pipes in this collection, except the observation that relief initials appear higher up the sides of the bowl on Scottish pipes. The example which Oswald uses to demonstrate this is very similar to *Dartmouth* type 9.

If one examines the pipes in the *Dartmouth* group which are probably Scottish, nos 1 and 9, they fit Oswald's first two criteria well. The third criterion refers to pipes slightly earlier in date to most of this group. But the fourth does not apply to these two pipe types. Although most of the examples are discoloured by association with iron objects underwater, there are enough traces of original colour for me to be sure that these two types were white, and were polished and well finished.

As two of the distinguishing features listed by Oswald do apply to the assumed Scottish pipes in the group, can these features be used to identify any other Scottish pipes among the collection? An inward kink above the base appears on nos 1, 3, 9, 14, 15, 16, 17, 18, 19. These same pipes have a splayed foot. Perhaps no. 3 shows a particularly forward-sloping bowl. As stated above, colour is difficult to assess. Many are definitely white, and 16 and 18 are the only two whose yellowish colour might be original. Slight mould lines appear on nos 3, 4, 6, 8, 10, 11, 12, 14, and a very marked line on the front of the bowls of nos 16 and 18. Thus pipes 3, 14, 15, 16, 17, 18, 19, may well be of Scottish manufacture, while the others, including 2, may well come from elsewhere. perhaps Plymouth, where Dartmouth took on

stores in January 1690. Therefore 25 pipes of two types are almost certainly Scottish, and a further seven types are probably also Scottish. The only large published group of Scottish pipes of a similar date is the group from Linlithgow palace (Laing. 1966-7:126-8). None of the pipes found there is identical to any from the Dartmouth, but there are many general resemblances. The pipes from the Dartmouth group which differ most from the Linlithgow pipes are nos 7, 10, 12, 13, 20. A pipe in the collection of the Anthropological Museum of the University of Aberdeen closely resembles no. 13, and is said to have come from England. In the collection of the National Museum of Antiquities of Scotland there is one pipe identical to no. 12, and one similar to but slightly longer than no 7. These were both found in London. So as well as the negative evidence that they do not fit Scottish types as so far defined, it seems reasonable to assume that nos 7, 12 and 13 at least may be English. Number 20 is very different from the rest, and looks as if it should be post-1690 in date. But it was excavated from a sealed deposit of wreck material, and is therefore very unlikely to be intrusive.

The pipes in this collection show a remarkable variety of shapes and sizes. They are interesting because if they had not been found in a dated context they might well have been dated as ranging from 1640-60 (no. 1) to post-1700 (no. 20). Pipes themselves do not normally have a very long life, but moulds may well remain in use for some time. Typologies, essential as they are, tend to be too tidy. Perhaps the continued use of old-fashioned moulds was an economic necessity. Perhaps smaller firms were able to buy new moulds less often than larger firms. Perhaps there was a varied demand, some people wanting the latest fashionable shape, others preferring the shape they had always used. There were English sailors and Scottish soldiers on board the Dartmouth, from a wide variety of places and social backgrounds, and the variety of the pipes may reflect regional styles or personal choice.

It will be interesting to see whether the other known British naval wrecks of this general period, the *Mary* (1675), the *Sapphire* (1696), or the *Association* and the *Tearing Ledge Site* (1707), yield similarly varied groups of clay pipes.

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## References

Adnams, J. R., 1974, The Dartmouth, a British frigate wrecked off Mull, 1690. Int. Naut. Archaeol., 3: 269–74. Atkinson, D. R., & Oswald, A., 1972, A Brief Guide for the Identification of Dutch Clay Tobacco Pipes Found

in England. Post-Med. Archaeol., 6: 175-82.

Fleming, J. A., 1923, Scottish pottery. Glasgow.

Insh, G. P., 1924, Darien Shipping Papers, relating to the ships and voyages of the Company of Scotland Trading to Africa and the Indies, 1696–1707. Scottish History Society, 3rd series, VI. Edinburgh.

Laing, L. R., 1966-7, Excavations at Linlithgow Palace, West Lothian, 1966-7. Proc. Society of Antiquaries of Scotland, XCIX: 111-47.

Oswald, A., 1975, Clay Pipes for the archaeologist. British Archaeological Reports, 14.

Walker, I. C., 1967, Statistical methods for dating clay pipe fragments. Post-Med. Arch., 1: 99-101.