Medieval white-slipped jugs

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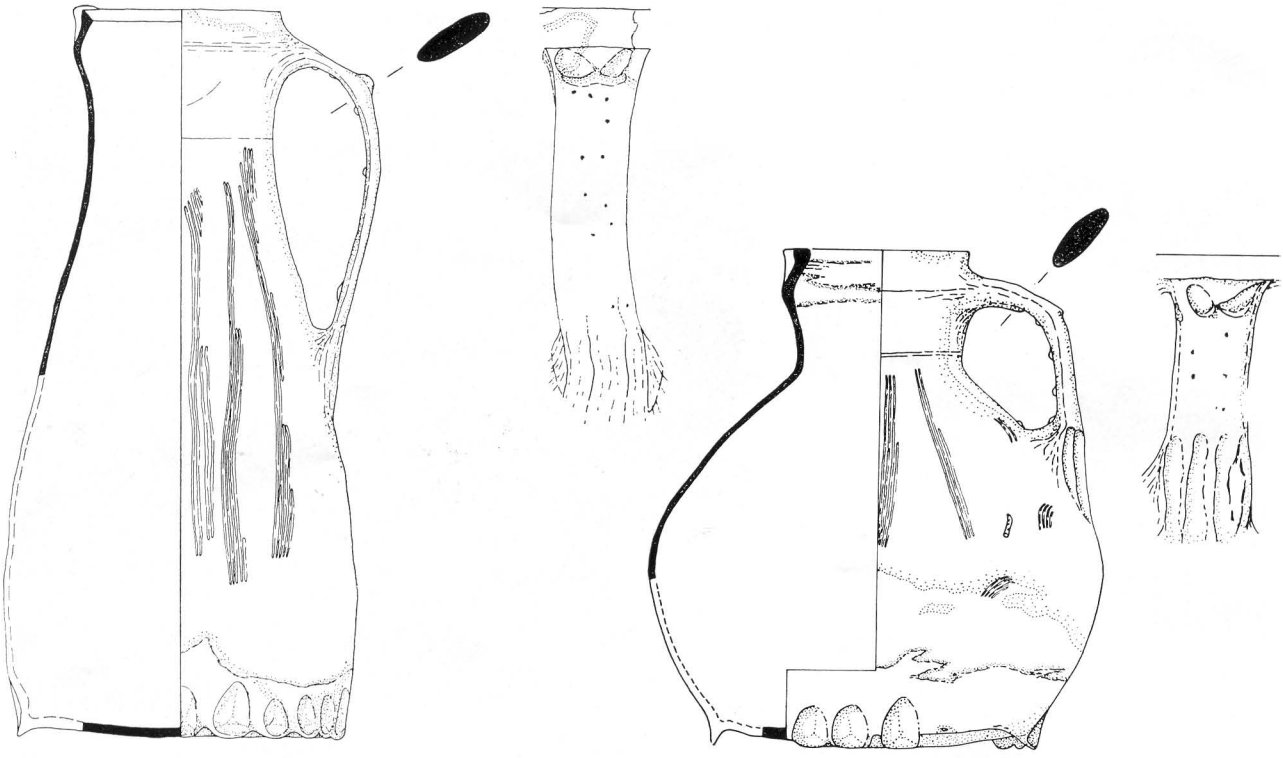


Fig. 1: Late 13th to early 14th century Mill Green ware jugs decorated using the sgraffitto technique. (drawn by Roger White)

ONE OF THE MOST common types of pottery used in the Thames valley in the medieval period was the white-slipped redware jug. These jugs often, but not always, have a bright green glaze, coloured by the addition of copper and the slip is often applied so well that complete pots appear to be made of a white-firing clay. Recent work in the Department of Urban Archaeology allows the history and source of this type to be reconstructed and emphasises the primary position of London in the development of pottery industry.

The Techniques of Application

There are several ways in which a white slip could be applied to a pot. Today, the most commonly used method, if the vessel is a hollowware, is dipping into a large vat of liquid slip, holding onto the base. This produces a thin, even slip cover, although if the surplus is not allowed to drain off before the vessel is turned the right way up then runnels of slip form on the lower part of the pot, sometimes dribbling down onto the unslipped area at the base. Open ware vessels, such as bowls and plates,can be coated by pouring slip into the vessel, swilling it around and pouring the excess away. This process too can leave characteristic runnels of slip.

Another technique used today by craft potters is to paint the slip onto the vessel. This method can produce as even a cover as dipping if the potter is careful. The slip does take longer to apply but an advantage, if white clay is expensive, is that the method uses much less clay and there is no danger of the slip being contaminated with red-firing clay, as is the case with dipping.

Slipped jugs in the Museum of London reserve collection have been examined to see if the method of application can be distinguished. The results of this analysis were unexpected. Firstly, not one medieval jug in the collection could be shown to have had a slip applied by dipping, although this was the standard if not the only, method used by the 16th cen-

tury[1]. The majority of the vessels, although at first thought to be painted, appear on closer examination to have had the slip smeared on with the hands. This is shown by the absence of the very fine brush marks which should be found on vessels with painted slip and by the treatment of the area around the handle. In virtually every example, no matter how careful the application on the rest of the body, the junctions between the handle and the body show handprints, some times leaving a rough thumbprint to one side of the handle. The reasons for using this technique are not known. It is possible that the potters found that a brush clogged up with slip too quickly. Neither is it known how widespread the technique was. The vessels on which it has been identified have been of two wares, London-type ware[2] and Mill Green ware[3]. The method of application is seen most clearly on London-type baluster jugs of the late 13th to 14th century but may have been used from the later 12th century onwards (Figs 2, 4 & 5).

Six other groups of white-slipped redware jugs have been isolated and many others await characterisation but their methods of slip application are not known.

A related technique, noted in three medieval pottery industries was to apply white slip just around the inside of the neck of a redware jug. This could have been applied with the hand or a brush.

Methods of Decoration

The use of a white slip on a jug makes certain types of decoration easier to produce, for example the white slip can be scratched away to show the red colour of the underlying body. This technique is

1. Dawson, G. J. (1979) Excavations at Guy's Hospital 1967, *Res. Vol. Surrey Archaeol Soc* **7**, 27 - 64. 'Guys ware' is thought by Dawson to have been made in imitation of contemporary Low Countries wares, either by English potters copying imported vessels or by Dutch immigrants. At the earliest, this style of dipped slipware may be of late 15th century date although it was at its height of popularity in the 16th to early 17th centuries.
2. J. E. Pearce and A. G. Vince with K. H. Armitage, M. A. Jenner and R. Rattray (forthcoming) A Dated Type Series of London Medieval Pottery: Part 2. London-type ware. *Trans London and Middlesex Archaeol Soc* **34.**
3. J. E. Pearce, A. G. Vince and R. White (1983) A Dated type series of Medieval Pottery from London: Part 1. Mill Green ware. *Trans London and Middlesex Archaeol Soc* **33.**

Fig. 2: London-type ware jugs decorated using the sgraffitto technique. (left) Late 12th century standard jug, (right) late 13th to early 14th century baluster jug.

(drawn by Jacqui Pearce)

known as sgraffitto and is best developed on Cambridge Sgraffitto ware[4]. In the London area sgraffitto decoration is most common on Mill Green ware jugs (Fig. 1). Two patterns were used; simple vertical lines and vertical lines alternating with short diagonal lines. Both were applied with a narrow 'comb', usually less than 10mm wide with 5 or 6 teeth. Sgraffitto decoration also occurs on London-type jugs, from at least as early as the late 12th century (Fig. 2). The designs used were more elaborate than those at Mill Green and the technique was carried out more carefully. Another decorative technique used on white slipped jugs, but not exclusive to them, was the use of individual stamps, often of the 'ring and dot' type. These were used, for example, on London-type jugs and on jugs made at Earlswood, in Surrey[5]. On a white slip the stamp would cut into the red body and show up more clearly than on a single-coloured jug.

The remaining decorative techniques used are not limited to slipped jugs. They include applied lines of white or red clay slip, used on London-type and Earlswood jugs; roller-stamping, used on London-type jugs and 'stamped bosses' pushed out from the body of the pot into a mould held on the surface. The latter technique is found mainly on white-slipped jugs imported from the Low Countries, so-called Aardenberg ware[6].

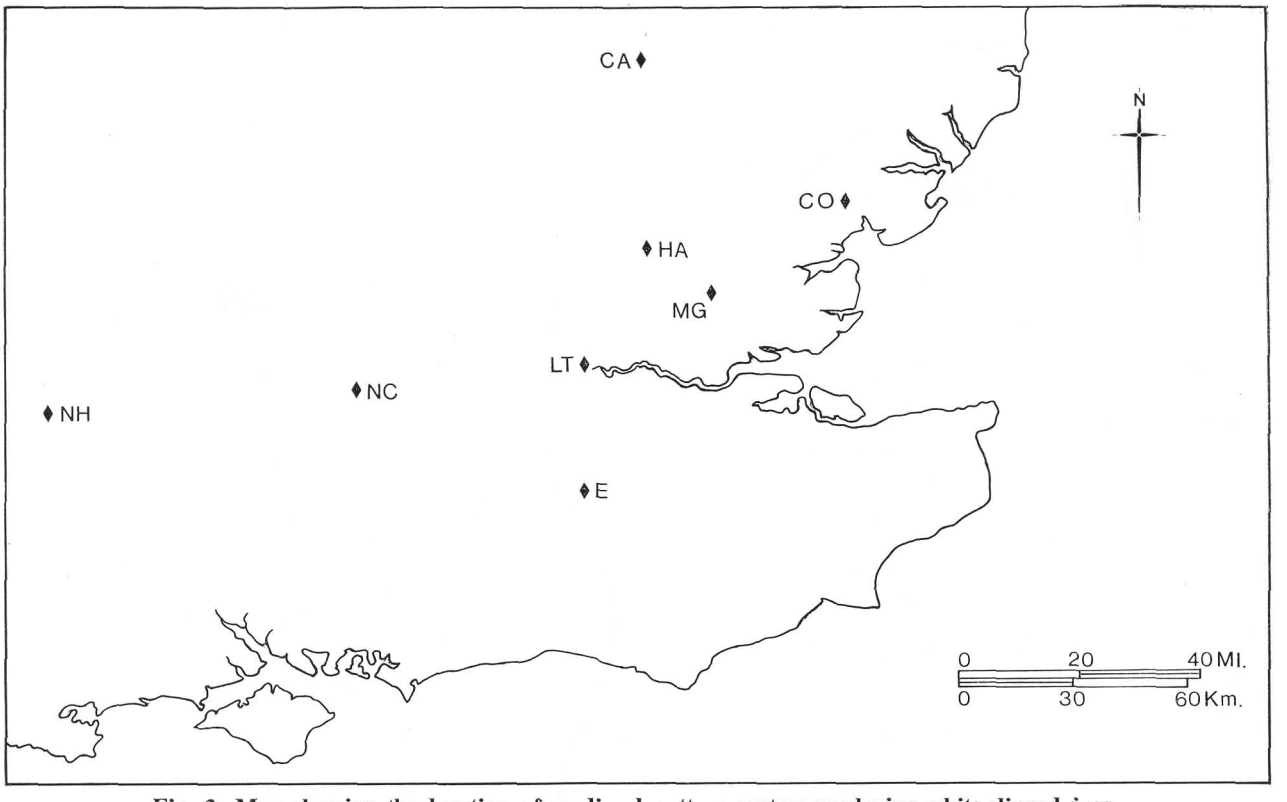
Sources

White-slipped jugs occur over a wide area of southern England but are not universal in their disti-

4. Cambridge Sgraffitto ware. Dunning, G. C. (1950) Notes on the Trinity College jug, *Proc Camb Antiq Soc* **44,** 49-50. Bushnell, G. H. S. & Hurst, J. G. (1952) Some further examples of sgraffito ware from Cambridge, *Proc Camb Antiq Soc* **46,** 21-30.

5. Turner, D. J. (1975) Medieval Pottery Kiln at Bushfield Shaw, Earslwood: Interim Report, *Surrey Archaeol Coll* **70,** 47-54.

6. Dunning, G. C. (1968) The trade in medieval pottery around the North Sea, pp.35-58, in Renaud, J. G. N. (ed.) *Rotterdam Papers* **1.**



Fig, 3: Map showing the location of medieval pottery centres producing white-slipped jugs.
NH = Nash Hill, Lacock, Wiltshire
NC = Newbury Group C
E = Earlswood
LT = London-type
MG = Mill Green
CO = Colchester
HA = Harlow area
CA = Cambridgeshire sgraffitto

(drawn by Anne Jenner)

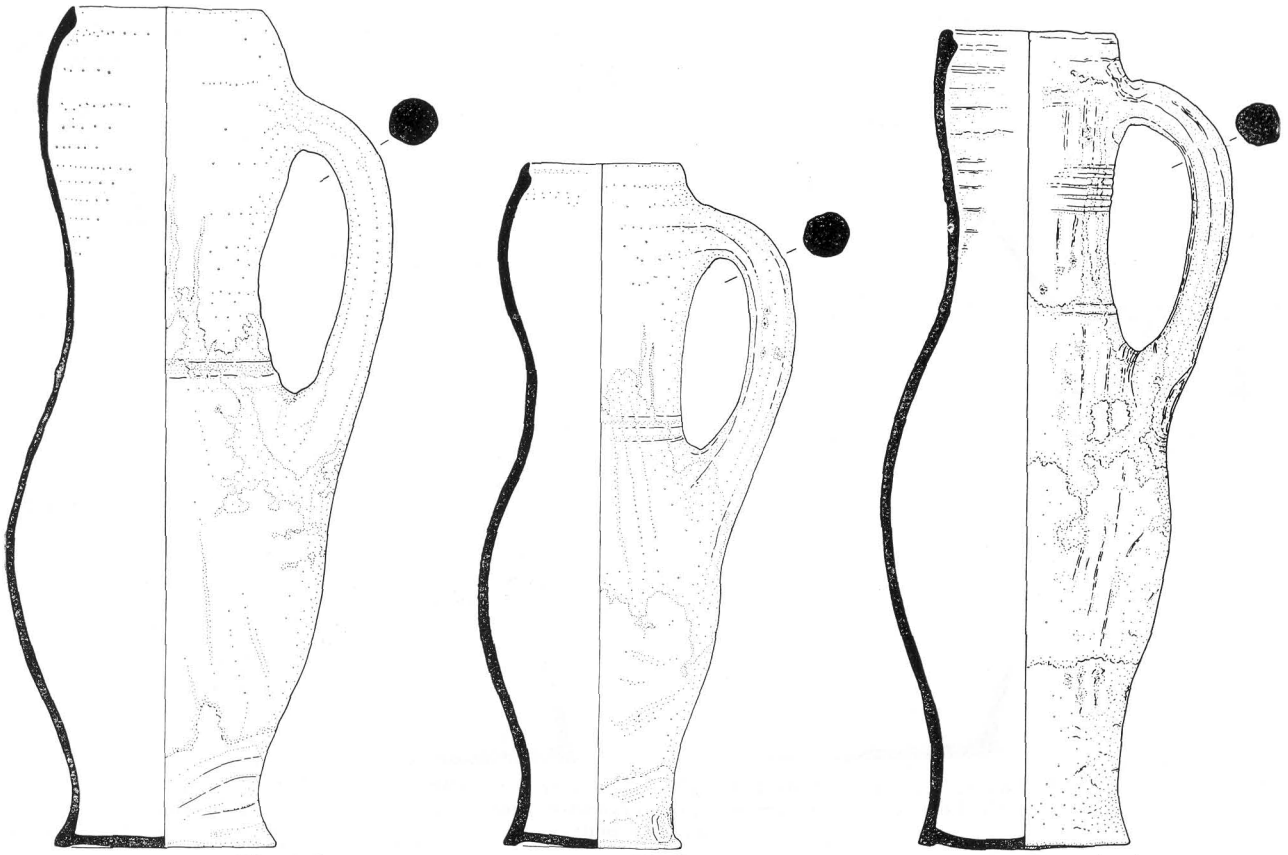


Fig. 4: Late 13th to early 14th century London-type ware baluster jugs. (drawn by Anne Jenner)

bution. The type is not found, for example, in Wales, the West of England nor in Devon or Cornwall. The approximate location of the centres producing white-slipped jugs is shown in Fig. 3. Many of these wares are roughly datable through the occurrence of sherds in stratified sequences. This shows an interesting pattern, no doubt incomplete and open to revision in detail, but nevertheless probably quite accurate in outline.

The earliest centre to produce white-slipped jugs was in the London area and the product is known as London-type ware. Jugs with a white slip covering the whole of the exterior of the vessel, excluding the base, have been found at Seal House, in the City of London, in a waterfront revetment dump securely shape very similar to those of late 12th century dated to the late 12th century[7]. These vessels have a Developed Stamford ware jugs, which were made in a white-firing clay[8].

In the early 13th century the use of a white slip cover became much more common on London-type ware jugs, although it was not the standard method of decoration, which was to apply strips and pellets of white or red-firing clay to the plain body of the pot. The white-slipping techniques came into its own in the London-type industry in the mid-13th century, when the majority of London-type ware jugs were white-slipped. Some of these vessels are undecorated baluster jugs (Fig. 4), a type which was to become extremely common in the late 13th to

7. Seal House Waterfront II. The dating is discussed by J. Schofield and R. Morgan 'Tree-Rings and the Archaeology of the Thames Waterfront in the City of London' *in* J. Fletcher (ed) *Dendrochronology in Europe* (1978) 223-38.

8. Kilmurry, K. (1977) An Approach to Pottery Study: Stamford Ware, *Med Ceram* **1,** 51-62. Kilmurry, K. (1980) The Pottery Industry of Stamford, Lincolnshire, *c.*A.D. 850-1250: its manufacture, trade, and relationship with continental wares, with a classification and chronology, B.A.R. **84.**
It seems that Developed Stamford ware jugs rapidly replaced the yellow-glazed Stamford ware pitchers of the late 11th to 12th centuries *c.*1150. The earliest stratified examples occur in contexts at Stamford Castle thought to be associated with preparations for the siege of the Castle in the Anarchy.

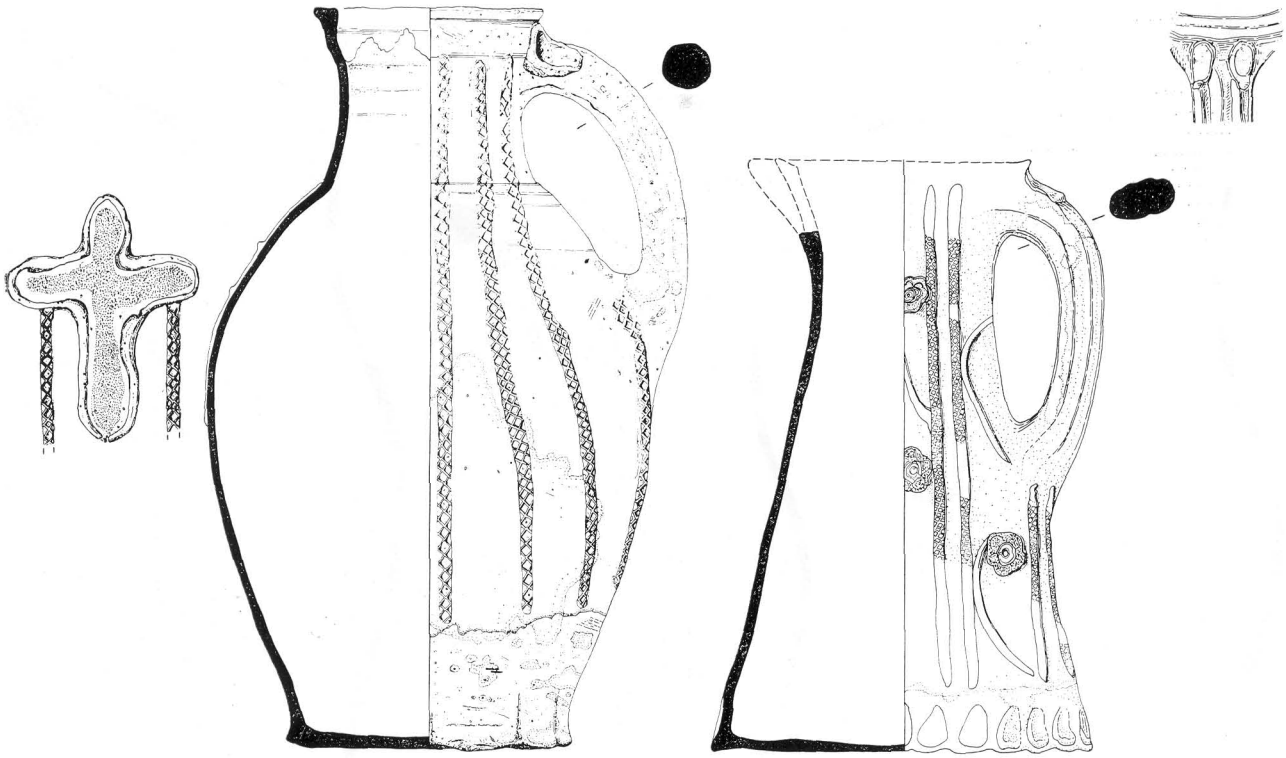


Fig. 5: London-type ware (left) Early 13th century or later large rounded jug, (right) late 13th to early 14th century conical jug, both decorated with applied clay strips over a white slipped body. (drawn by Kate Armitage and Anne Jenner

early 14th century, while others are green-glazed vessels which are highly decorated with vertical clay strips and scrolls (Fig 5).

The first recorded use of white slip around the inside of the neck of a redware jug can be dated to the early to mid-13th century, in the Worcester area. A few vessels from Hereford, made in a local Herefordshire clay, also employ this technique and have been dated by stratigraphy and their typological similarity to the Worcester jugs to the mid-13th century.

It is in the second half of the 13th century that the use of a total white slip covering first occurs outside London. To the west, the use of white slip and green glaze occurs in the latest phase of the Newbury Group C industry[9]. The introduction of the technique is dated by the City of London Archaeological Society's excavations at Netherton, in northern Hampshire, to pre-*c.* 1280. Further west, in Wiltshire, the Nash Hill pottery near Lacock also produced white slipped, green-glazed wares, the only West Country industry to do so[10]. Other features of these western industries are vaguely reminiscent of London-type ware, for example the use of circular-sectioned 'rod' handles.

To the north-east of London, three groups of white-slipped jugs were produced. The first of these is known only from occupation sites in the Harlow region, the second was probably made in the Colchester region while the third was produced at Mill Green, near Ingatestone, about 6 miles south-west of Chelmsford[11]. These industries share several

9. A. G. Vince (forthcoming) Excavations at 143-5 Bartholomew Street, Newbury, 1979. *Berks Arch J.* The precise source of this group is unknown but distribution evidence points to the area around Reading. I am grateful to Mr. J. Fairbrother for discussing the finds from his excavations at Netherton with me.
10. McCarthy, M. R. (1974) The Medieval Kilns on Nash Hill, Lacock, Wiltshire. *Wilts Archaeol Mag* **69,** 97-160.
11. The Harlow area vessels were seen in the collections Passmore Edwards Museum, whose staff I would like to thank for allowing me to examine them.
    The Colchester industry has recently been isolated by Carol Cunningham, of the Chelmsford Archaeological Unit.
    The Mill Green industry is described in Part 1 of the London Medieval Pottery type series, see note 3.
12. see note 5.

other typological features, for example the use of oval-sectioned handles, the presence of two 'ears' impressed with the thumb at the top of the handle and the use of a copper-green glaze over the white slip and a distinctive inturned collar-rim (Fig. 1).

To the south of London, only one centre producing white-slipped redware is known, that at Earlswood in Surrey[12]. Two complete vessels have been found at Earlswood Common, one of which is in the British Museum and the other in Guildford Museum[13]. Both vessels use white slip in decoration, but not as slip cover. Neither is identical to material from the kiln site, excavated by D Turner in 1973-4, which includes vessels with ring and dot stamps, sgraffitto decoration and applied strips over a white slip. Other, less well known, slipware industries must have existed in the south-east of England. For example, sherds of ungrouped slipped jugs have been seen amongst material from various sites in Surrey in Guildford Museum.

Some of the jugs made in the Rye kilns in Sussex, which are dated to the later 13th and 14th centuries, use white slip on the inside of the rim only, in the same way as the Worcester and Herefordshire jugs noted previously[14].

On the Continent, the best known slipware industry is that termed 'Aardenberg ware'[15]. It is now thought that similar vessels were not only produced at Aardenberg but in other parts of the Low Countries as well. A few white-slipped, green-glazed vessels occur amongst the vessels from Northern France published by Barton[16]. These continental vessels are not well-dated but are thought to be of late 13th or 14h century date.

In the 16th and 17th centuries the technique of slipping vessels, with or without further decoration, was used in a number of centres, from the Low countries to the south-west of England. At present, however, there is no known link between these industries and their medieval predecessors, at least in England. The London-type industry declined during the 14th century, as did that at Mill Green and the Newbury Group C industry. All three were replaced by the white-ware industry of the Surrey-Hampshire border. The industries at Nash Hill and Colchester may have continued longer, although the evidence for the continuance of the Nash Hill industry past the end of the 14th century is slight. The later Colchester products are not white-slipped but use white slip for painted decoration so that, although an industry continued in the area, the technique of white-slipping did not[17].

Discussion

The evidence presented above shows that one medieval potting technique can be traced from its late 12th century origins in the London area to its high point in the late 13th to 14th century, when it was used over a wide area of southern and eastern England. Although the precise date of its disappearance is unknown it is clear that the technique declined in popularity over much of this area in the middle of the 14th century.

The reasons for the use of white slipping and for its subsequent decline may be summarised as follows. Firstly, white slip may be used to give the impression that a white-firing clay has been used. Throughout the medieval period the highest quality pottery was made from white-firing clay. In the late 12th century the main source of such vessels was Stamford, in Lincolnshire, while northern France became more important in the early 13th century. Locally-produced white-wares first appeared in the middle of the 13th century, the main source for the London area being Kingston-upon-Thames and by the late 14th century much of the Thames valley was supplied with light-firing pottery, either Surrey white wares, such as those of Kingston, Cheam and the Surrey-Hampshire border or wares with a low-iron content such as Brill ware in Buckinghamshire and Oxfordshire or the Late Medieval Hertfordshire glazed ware[18]. It may therefore be the desire to produce vessels which imitate these light-bodied wares which aided the spread of white-slipping.

Two reasons may be advanced to suggest why white-firing clays were not used instead of white-slipped redware in addition to the decorative possibilities of the technique noted above. Firstly, white-firing clays have a limited distribution, so that their use for the body of a pot would be prohibitively expensive except in the area surrounding their natural outcrop and, secondly, white-firing clays need to be fired at a higher temperature than red-firing ones,

13. The British Museum jug from Earlswood Common is illustrated in Rackham, B. (1972, 2nd ed. revised J. B. Hurst) *Medieval English Pottery* Plate 61. The Guildford Museum jug from Earlswood Common is illustrated in Hooper, W. (1945) *Reigate: its story through the ages.*

14. Rye slipped jugs, information from Clive Orton. Vidler, L. A. (1933) Medieval Pottery and Kilns found at Rye, *Sussex Archaeol Coll* **74,** 45-64.

15. see note 6.

16. K. J. Barton (1977) Some examples of medieval oxidized and decorated earthenwares occurring in North-Eastern France. *Medieval Archaeol* **21,** 47-67. Barton considers that the slipped jugs which he publishes are actually Low Countries imports.

17. C. M. Cunningham 'Medieval and Post-medieval Pottery' *in* P. J. Drury 'Aspects of the Origins and Developments of Colchester Castle' *Archaeol J* **139** (1982) 358-80.

18. M. A. Jenner & A. G. Vince (forthcoming) A Dated Type-series of London Medieval Pottery: Part 3. Late Medieval Hertfordshire Glazed ware *Trans London & Middlesex Arch Soc.*

since the iron in the latter acts as a flux to bring down the vitrification temperature. White-firing pots would therefore have been more expensive to fire than red-firing ones[19].

These are probably the reasons why there were large areas of the country in which the use of white slip was extremely limited and in which neither light--firing wares nor totally white-slipped redwares are found. White-slipped redware may be limited by economics to areas bordering those in which white-firing wares were produced. By no means every area producing white-firing pottery was surrounded by an area of white-slipped redware production so that, although one can partially explain the spread and use of white-slipped redware in terms of the need to complete with the producers of white-firing wares, this cannot be the whole explanation. Neither can the cost of white clay be totally responsible for the limited area in which white-slipped redwares were produced.

The disappearance or decline of the technique in the later medieval period may have two causes. Firstly, it may be a symptom of the increasing plainness of later medieval jugs. In the 14th century, decoration, the amount of glaze used and individuality of form all declined. Secondly, in their central area of use the white-slipped redwares were replaced by light-firing wares, due mainly to the expansion of pre-existing industries such as that on the Surrey-Hampshire border.

Why an industry situated in a marginal woodland area, producing less well-made pottery in a clay that is more expensive to fire should become the most successful medieval pottery in the country is a question whose answer is worthy of another article.

19. The sources of white-firing clay known in the medieval period and the extent of their utilisation is under review. A recent summary of the use of white clays in the floor tile industry is given by P. J. Drury in D. Crossley (ed. 1980) *Medieval Industries.*

(continued from p.325)

although this was again brought to a close by fire, probably some time during the late 3rd century.

The last phase of road-building (Horizon IV Phase 1) involved a southerly shift in the alignment, which effectively sealed the Horizon III Phase II occupation beneath it. The former road surface to the north was abandoned and quickly overtaken by roadside occupation — an episode hitherto difficult to explain, except in terms of a dislocation of communications in the early years of the 4th century.

The final deposit which can be related to the Romano-British occupation of the area consists of a much-disturbed dark soil containing late 3rd and 4th century pottery and coins which seals all earlier activity. Whether or not this layer can be equated with the late- or sub-Roman 'dark earths' recorded on other urban sites[27] is, however, unclear. More certain is the absence of Saxon material from the recent excavations — somewhat of a disappointment in view of the single *Grubenhaus* located in 1970-1[28], but not surprising considering the disturbed nature of the late Roman and post-Roman deposits in the area.

Conclusion

The last eight years of work in the town have therefore succeeded in answering certain specific questions about its early development. In particular, the position and chronology of its most important feature, the London to Silchester road, have been established with some degree of certainty, and progress made on unravelling the various phases of clay and timber buildings which existed alongside. However, a number of problems remain unresolved, particularly regarding the whereabouts of any later prehistoric, pre-Flavian and Saxon occupation in the area. It is therefore to be hoped that further work at the western end of the High Street, parts of which are scheduled for redevelopment over the next five years, will enable a still fuller account of the town's early history to be written in the years to come.

Acknowledgements

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26. H. L. Sheldon 'A Decline in the London Settlement A.D. 150 - 250 ' *London Archaeol* 2 (1975), 278 - 284; H. L. Sheldon 'London and South East Britain' in A. King & M. Henig (eds.) *The Roman West in the Third Century*' BAR S **109** (1981), 363-382.
27. e.g. Sheldon (1981) *op.cit.* 365 - 367.
28. Canham *op.cit.*, 30 - 31.