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Note to go at the base of page 1 .

D.F.Williams : D.o.E Ceramic Petrology Project , Department of Archaeology

University of Southampton .

B.P.Harrison : D.o.E. Sherborne Old Castle .

SHERBORNE OLD CASTLE , DORSET : MEDIEVAL POTTERY FABRICS .

By D.F.Williams , Ph.D and B.P.Harrison , B.A.

Introduction (BPH)

From 1900 onwards there have been considerable excavations at Sherborne Old Castle , in the parish of Castleton, on the edge of Sherborne (National Grid Reference : ST 648167) . This work has produced large quantities of Medieval coarse wares , particularly from the latest excavations conducted by Peter White , Inspector of Ancient Monuments , for the Department of the Environment, and has provided an opportunity to further pursue the queries of R.A.H.Farrar who discussed the pottery from the Old Castle and Durrant Close , Sherborne [1], recovered in both cases by C.E.Bean , F.S.A . At the same time it seems reasonable to describe the means by which this pottery study has been undertaken .

The surviving remains of Sherborne Old Castle originate in the twelfth century , but there is scattered evidence of earlier activity on the site , notably a graveyard disturbed by a rock cut ditch and by the building of the castle-palace [2]. The earliest groups of pottery occurring on the site date from the twelfth century , although there have been a few sherds of what seems to be grass tempered ware from the North Gate excavation . The Castle was built by Bishop Roger of Sarum , 1107 - 1139 , the Chancellor of Henry I , who often acted as Viceroy when Henry was away on long visits to his French possesssions . When Stephen was crowned King in 1136 Roger supported him , but Roger's power was curtailed in 1139 and Sherborne was confiscated with Roger's other castles at Devizes , Malmesbury and Sarum . During the Crown's occupation Sherborne was garrisoned from time to time and it was during this period that major additions were made . In 1354 Bishop Wyville regained the Castle for the See of Salisbury from the Earl of Montague , who held the Castle at that time . The castle was used and maintained by his successors until 1542 . It was held by the Crown again until Elizabeth I transferred it to Sir Walter Raleigh in 1592 , but it was in need of too much attention and fell out of use when he moved to the Lodge

now the New Castle . The last major period of use was during the Civil War , when the Castle was besieged twice , once in 1642 and again in 1645 , after which it was slighted . The pottery sequence of the site shows this general continuity, with a little disruption caused by redeposited material [3] .

A seies of medieval pot sherds was submitted to Dr Williams from the most recent excavations , which is the basis for this study , although sherds from the Castle also match pottery from the town of Sherborne and its immediate district [4] . The main problem in the Sherborne area is that there has been very little work undertaken on medieval pot types and fabrics , in consequence any analysis at this stage must be in isolation . The large quantity of pottery has made it difficult to do anything other than select a representative group for thin sectioning and heavy mineral analysis and gaps are bound to be left as a result . It must be stressed that this study is only the beginning of what must be a larger study in the area , and could be successfully continued as excavations occur .

Throughout the medieval period there would have been hundreds of kilns scattered over the country , producing many varied wares . A kiln needs to be sited where there is a supply of clay , water and fuel in addition to a market for the product [5], so that whenever any of these factors changed , like the clay running out , the kiln would be resited . John Musty suggested that in the case of Laverstock , the kilns had a life of five years each and that the industry on the site lasted about fifty years [6]. The potter himself was classed as a very insignificant person in medieval society and his pots were equally so , certainly in the early period . Most coarse pottery was used in the kitchens and by those unable to afford anything better , so this market tended to be very conservative and the potter changed his techniques very little in consequence . Pottery was a cheap product and profit margins were very small , so that the potter could not afford to tolerate wastage of time or resources by over refining the clay or travelling over long distances with a very brittle product . Thus the early pots were made with the clay available , as close as possible to a suitable market . Cook-pots were made for local use only , using unrefined clay [7] . This

was the case at Laverstock , where the cook-pots are of a coarser fabric than the jugs [8] . It is this coarseness of the wares that facilitates study of the fabrics . It seems possible that certain fabrics were used for vessels made for specific tasks , the main example at Sherborne being that the fine flint ware (Fabric B) continues alongside a more carefully refined hard sandy ware (FabricE) yet it is only the flinty wares which have the'furred'deposit from the constant boiling of water , as if these wares stayed in use as water boilers .

METHODS OF SORTING . (BPH)

If very large quantities of pottery are expected from one site or from an area where a project is being conducted , it is advantageous to set out with the intention of analysing wares as they appear , to prevent duplication of effort, a method used in London and by other archaeological units . The pottery fabric types are constantly brought up to date and attention is concentrated on the smaller quantities of pottery involved . Unfortunately it is more normal to wait until the end of an excavation and write the pottery report in retrospect . This has been the case at Sherborne Old Castle .

In these circumstances the best technique at Sherborne was to sort through the pottery from the site on a general basis , noting the various inclusions in the pottery and grouping on this basis . At the same time the vessel types were also defined wherever possible , this was made slightly easier by the coincidence of pottery fabrics with certain vessel types , but this could not always be relied upon . (Reference is made to the list of vessel classifications with notes on the fabrics used to produce them at the end of this paper .) As examples of each type were found , some sherds were kept as a control and some were put-aside for thin sectioning and heavy mineral analysis . In the early stages reassessment was frequently necessary Details were made clearer by use of a magnifying glass .

At the same time any published material on the pottery from other excavations in the area was consulted and sites likely to have any bearing on the pottery of Sherborne were taken into consideration . Generally there are very few sites noted in the Sherborne area . There was only one known kiln site , at Hermitage [9], just

over five miles to the south of Sherborne and this has been considered in the fabric assessment . There have been excavations in South Dorset at Wareham and Corfe [10] , which have produced pottery and this has been compared with Sherborne pottery regarding shape only [11] . Material from Laverstock seemed similar and was taken into consideration . Wherever similarities were seen samples were taken for comparison [12] .

By the time thin sectioning and heavy mineral analysis was considered for the Sherborne pottery , a very definate set of questions had been formulated , so that direct comparisons could be made where necessary and fabrics defined within a pre-existing framework . (What is the precise petrology of the fabrics evident ? How do the fabrics from the Old Castle compare with samples submitted from : Hermitage , Laverstock , Corfe Castle and Wareham ?) The report by Dr Williams is the reply to the series of questions from Sherborne Old Castle , but as will be seen the answers are of use to researchers in other parts of Dorset , as the pottery samples were taken from a wide area .

FABRIC ANALYSIS (DFW)

Introduction .

A range of Medieval sherds from Sherborne Old Castle , and other sites , were submitted for petrological analysis . As a first step all the sherds were examined with the aid of a binocular microscope (X 20) . This was followed by selective thin sectioning and heavy mineral separation (Table) to allow study in polarized light under the petrological microscope . As a result of this work a number of fabric divisions could be made on the basis of the aplastic inclusions present in the pottery . These are listed below following description of the sherds . Munsell colour charts are referred to together with free descriptive terms .

The Methods .

For thin section examination a small sample of pottery (c. 10mm X 10mm)

is ground down until the majority of non-plastic inclusions present in the clay are transparent , and can be identified by their optical properties in polarized light under the petrological microscope . This method of fabric analysis is extremely valuable for characterization , for pottery made in a similar way from the same materials will appear alike under the microscope . When fragments of rocks or certain unique minerals are present in the clay it is frequently possible to determine the source of the raw materials , thereby indicating the area of origin of the pottery-making and the area of distribution achieved .

However , much medieval pottery contains a range of common inclusions , such as flint and quartz sand , the thin sectioning of which does not allow the same degree of precision in suggesting likely origins . In cases such as these the technique can still be used profitably , for it allows a textural analysis to be made , where not only the type of inclusion , but also the latter's size , shape and relative frequency can be considered . A comparison of the texture of different sherds can often provide evidence for suggesting a common source , or alternatively several different ones .

When dealing with very sandy fabrics , heavy mineral separation , a much under-used technique , can often provide a useful means of classifying the sand present in the pottery , as distinctive heavy mineral assemblages can usually be assigned to a specific geological source . For this method a comparatively large ammount of sample is required (17 - 20 gms) , which is crushed and floated in a heavy liquid such as bromoform , allowing the heavy minerals to be siphoned off . These can be mounted on a glass slide and studied under the petrological microscope , allowing identification and counting of individual grains .

The Fabric Groups.

Fabric A (Coarse flint ware)

Hard harsh fabric , the surface colour varies from light red (2.5YR 6/8) to dark grey (2.5Y N4/) , with a light to dark grey core . Flint and quartz sand are normally clearly visible throughout the fabric .

Petrology

Inclusions of flint are common , average size 2.5mm across , together with frequent

ill-sorted subangular quartz grains , ranging in size from 0.20 - 1.00 mm. , and a little limestone .

Fabric B (Fine flint ware)

The description of Fabric A could almost equally be applied to the sherds in this group , the only difference being the smaller size of the flint present , up to a maximum of 1.5mm. across and the fact that it appears to be less frequent in the paste than for Fabric A .

Fabrics A and B , representing the majority of pottery from the site , have been grouped very tentatively on the basis of the presence of two extremely common inclusions in much medieval pottery , flint and frequent quartz grains . It is possible that careful study may reveal several subdivisions of this pottery by making a detailed textural analysis of the main constituents present . However , to obtain meaningful results such work is best done by incorporating the Sherborne pottery in a general review of medieval flint tempered ware from several local sites , and as such this lies outside the scope of the present work . Due to the common nature of the inclusions , therefore , it is difficult to be precise about possible origins , though given the large quantity of pottery involved a fairly local source seems likely .

Sherborne is situated on Upper Fullers Earth and flinty clay levels . Both deposits contain frequent fragments of flint , which would be present in the clay if this was used for pottery-making , even if an attempt was made to refine the clay somewhat . A heavy mineral separation on a sherd from Fabric B (Table) produced a fairly wide range of minerals , but as these are all common types and little similar work has been done in the area , it has not been possible to be precise about origins . However , at this stage there is nothing in the thin section or heavy mineral results to suggest a non-local source for either of these fabric groups .

Fabric C (Coarse quartz ware)

Very hard , rough fabric , grey or black outside surface , sometimes with a dull olive-green glaze , normally with a dark grey core and creamy inside surface . Numerous quartz grains protrude through the surfaces giving the fabric a 'pimply'

texture .

Petrology

Frequent subangular quartz grains , average size 0.60 - 1.00mm , though some are up to 2.00mm across , and a little flint . A heavy mineral separation on a sample from this group , and also from Fabric D below , in both cases produced too few grains to give a meaningful result .

Fabric D (Fine quartz ware)

Hard smooth fabric , mottled olive-green glaze with a white core and inside surface.

Petrology

Frequent inclusions of subangular quartz grains , average size 0.20 - 0.40mm .

Fabric E ('Hermitage-Type' ware)

Hard fairly rough sandy fabric , surfaces tend to be light red (2.5YR 6/8) , with traces of an olive-green glaze , and a lightish grey core .

Petrology

Abundant inclusions of subangular quartz , average size 0.20 - 0.50mm.
Also present are frequent fairly well-rounded light brown grains of limonite (altered glauconite) , and some collophane .

The presence in some numbers of glauconite suggests an origin in the Greensand and Gault Beds , of which the nearest deposits to Sherborne lie some six miles to the south . Close to these deposits is situated a thirteenth century kiln at Hermitage whose products appear fairly similar in the hand-specimen to those at Sherborne [13] . Thin sectioning of waste material from the Hermitage kiln revealed a similar range of inclusions to the Sherborne pottery including the glauconite grains . A heavy mineral separation on samples from Sherborne and wasters from Hermitage also displayed points of similarity , noteably in the comparatively high percentage of rutile , contrasting with a separation on a sherd from Sherborne Fabric B (Table) . It seems quite possible,therefore , that this fabric group , ranging in date from the thirteenth century to 1450 plus , was made in the general area

of Hermitage . Indeed , some of the thirteenth century examples from Sherborne may even be products of the Hermitage kiln itself .

Laverstock-Type ware

Two sherds from Sherborne Old Castle appear similar to certain jug types from the Laverstock kilns near Salisbury [14] . Thin sectioning of the Sherborne sherds reveals frequent subangular quartz grains , average size 0.20mm - 0.30mm , and flecks of mica . This agrees quite well with similar analyses of jugs from the Laverstock kilns , and the Sherborne jugs may well come from there , though this cannot as yet be conclusively demonstrated . Heavy mineral analysis on two products of the Laverstock kilns , a tile and coarse jug , produced too few grains for a meaningful assemblage . However , one interesting point did arise from thin sectioning , namely that a section from a Laverstock cooking-pot differed from the jug sample tested . The former contained only a scatter of subangular quartz grains , and these were a size grade higher than those in the jug , average size 0.40 - 0.60mm . Either a slightly coarser clay was used for cooking-pots as opposed to jugs , or else the added sand was gently crushed for the jugs . The coarser texture of the cooking-pots was probably deliberate , adding refractory qualities to the vessels .

South Dorset Wares

A small amount of comparative material from Wareham (unglazed) and Corfe Castle (both glazed and unglazed) was also examined , to see if South Dorset Wares were represented at Sherborne . The Wareham samples contained little else but quartz grains , average size 0.30 - 0.40mm. A heavy mineral separation on one of these sherds (Table) produced a tourmaline-rich assembly recalling that found in the pottery of the Romano-British black-burnished industry centred around the western shores of Poole Harbour and on the heathlands south of Wareham [15]. An origin in this area may also be likely for the Wareham sherds , the medieval potters utilizing roughly the same clay beds as were in use during the Roman period . Neither thin sections nor the heavy mineral assemblage agreed with those of the Sherborne samples studied .

Thin sectioning of the Corfe Castle , sherds showed a scatter of subangular quartz grains , average size 0.80 - 1.00mm , with a little flint and iron ore . Texturally , these sherds appear to be slightly different to those samples from Sherborne Fabrics A , B , and C , containing less quartz than the latter , and so suggesting the possibility of a different origin , though it is difficult to be precise on this point .

TABLE

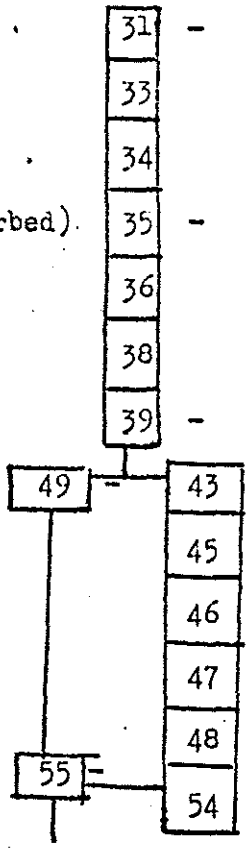
PERCENTAGE OF NON-OPAQUE MINERALS

Site	Zircon	Tourmaline	Rutile	Kyanite	Andalusite	Staurolite	Garnet	Apatite	No. of grains counted .
Sherborne Old Castle . Fabric B	71.0	13.4	2.8	1.4	4.3	1.4	4.3	1.4	269
Sherborne Old Castle. Fabric E	83.6	4.2	8.8	1.3	-	-	1.4	0.7	277
Hermitage Kiln	80.6	2.5	11.2	2.1	-	-	2.1	1.5	397
Wareham	40.8	51.9	0.9	0.9	3.7	0.9	-	0.9	308

Ratios of pottery fabrics (BPH)

Selected wares from one section of Sherborne Old Castle have been used to demonstrate the variation in occurence of the different pottery fabrics , as shown by the grid to the left of the details . The ratios are independent within each layer shown , as the layers are not uniform in size or content . Bracketted numbers indicate a suggested ratio based on weight rather than vessel count which is used in the other cases . In the most prolific layer (55) weight only was used as a vessel count was not practicable . In the case of the structures at the end of the list - given as examples of the more extreme variations - the precise number of identified vessels has been given .

South West Undercroft area



	A	B	C	D	E
31 -	-	2	0	1	2
(Disturbed) 35 -	7	14	1	4	7
39 -	-	6(2)	5(1)	7(1)	3(1)
49 - 43	4	9	5	2	1
55 - 54	(5)	(2)	(3)	(1)	0
Structure YC : (12th Cent.)	3	2	1	0	0
Structure W : (14th Cent)	-	(1)	1	1	16
Structure H :(Tudor)	-	(1)	0	0	7 plus

Ceramic Influences in the Medieval Period at Sherborne . (EPH)

Sherborne is on the Somerset - Dorset border , but there seems to be more evidence suggesting a ceramic link with South Dorset , than with Somerset . Traditionally Sherborne , like the rest of Dorset , is part of the West Country pottery grouping for pot shapes , and there is definate similarity to vessel shapes from Burrow Mump [16], Castle Neroche [17] , Yeovil and other Somerset sites .. This is where the similarity stops , because on visual assessment of the pottery fabrics there is no comparison between any of the Somerset material and that from Sherborne and its hinterland . This even includes Yeovil [18] , despite the short distance between the two settlements , made easier by the valley of the River Yeo . There may be some similarity in the late medieval period , but more evidence is needed .

In the petrological analysis two sources of pottery , other than the immediate locality , have been suggested , the Hermitage area and the Laverstock kiln . It is thought that Laverstock ware travelled over large distances [19] , mainly because it was of such fine quality and there was probably a market for its range of fine jugs , as exemplified in a small way at Sherborne . (There seems to be evidence of Laverstock jug types at Sherborne from the petrological analysis and there is some evidence of Laverstock roof tile , based on shape rather than fabric [20] .) The larger identified grouping of pottery is from the Hermitage area , as the chronological occurrence of this fabric type on the site of Sherborne Old Castle is greater than the period in the thirteenth century , when the Hermitage kiln appeared to have been in production . The Hermitage kiln and area lies on Oxford clay , with other clay types in the vicinity , and many streams start in the area [21] , thus fulfilling two needs for a successful pottery kiln . It is also known that there was a kiln sited at Holnest in the sixteenth century and into the seventeenth century , as it is mentioned in the Consistory Court records at Canterbury in 1617 [22] . On the evidence , it seems likely that the area around Hermitage and Holnest could have been ideal for pottery kilns , supplying Sherborne and possibly markets further

afield . There are certainly vessels in the same tradition of shape and pattern as Hermitage ware from the later contexts of the site at Sherborne Old Castle .

Conclusions .

At this time there are still many questions unanswered on the pottery fabrics found at Sherborne , especially on the Old Castle site , but one can hope that as further research is undetaken more of these questions will be answered . The largest quantity of pottery on the site is of a fabric apparently restricted to the Sherborne area , although the precise boundries have yet to be defined , as evidence is still to scanty -; from the writer's research the type is not found in Somerset . Effectively we are left with a coarse local fabric of flint , chalk and ferrous inclusions in a grey matrix , with variations within the three main inclusions . Present in lesser quantities is the quartzy ware , which is really just a heavily sanded ware , as can be seen in the fabric ratio chart . We do not yet know the origins of this type of pottery . There is nothing to connect it with South Dorset . There are very definate similarities with quartzy pottery from Shaftesbury , based on visual assessment at this stage [23] , so that further research is necessary in this direction . There is a practical limit to thin sectioning and heavy mineral analyses carried out in isolation on a site with large quantities of medieval coarse wares , like Sherborne . The greatest value of such a programme would come from a study of North Dorset as a whole , hopefully using Sherborne as the starting point .

Medieval Pottery Fabrics linked to vessel types - Sherborne Old Castle

1. Grass tempered ware . Total of 5 sherds recovered . B

2. Hand thrown cook-pots . A , B , C .

3. Hand thrown / wheel finished cook-pots . A , B , C .

4 .Wheel made coarse cook-pots [1], largest group . A , B and some C .

5.Pans , shallow bowls , rims like c ass 4 [1] . A , B .

6. Handled pan - one example - hand finished . A .

7. Tripod pitchers . Green glazed , globular . B , C .

8. Heavy coarse pitchers , sometimes confused with class 7 ; glazed , thick walls . A , B , C .

9. Lighter fine jugs . Glazed and painted . Includes imports . (B) C , D , E .

10 . Large late medieval to 16th Century round jugs . Glazed with accurate combing marks around girth . E ('Hermitage-type')

11. Large cook-pots same fabric and tradition as class 10 above . E ('Hermitage-type')

lla. Lids for the cook-pot type identified above . Also combed . Many perforatic

12. Late medieval straight sided pans , often glazed inside, sometimes with a pouring lip . B and E .

13. Utilitarian vessels: like salt cellars , fish dishes , lamps and several not identified. A , B , C ,D , E .

The Post Medieval wares are almost all of the general type E Fabric, that is a hard orange sandy ware . Some vessels have been identified as coming from Donyatt.

Notes

1. Farrar , R.A.H. : Archaeological notes on C.E.Bean's imformation on excavated material from the Mound to the East of the Old Castle amd and on the pottery from Durrant Close . Would be classed as Fabrics A and B . PDNHAS 73 (1951) pages 106-111 .

2. Mr C.E.Bean , F.S.A : Verbal communication and PDNHAS 77 (1955) Archaeological notes . In addition Mr P.R.White , on the Department of the Environment excavations .

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4. C.E.Bean , verbal communication and viewing of selected material from the town .

5. Musty , John : Medieval Pottery Kilns - in Medieval Pottery from Excavations : Studies presented to Gerald Clough Dunning . (Dunning)

6. Musty,J. , Algar,D.J. , and Ewance, P.F. :'The Medieval po_ttery kilns at Laverstock , near Salisbury , Wiltshire'. Archaeologia 102 (1969) all article pp83-150 , but in this case :pp 92-3 .

7. Hodges , Henry. :'The medieval potter : Artist or artisan ?' Dunning pp 33-40.

8. Williams , D.F. : on Laverstock ware in this report and (see note 6) Laverstock report pp 91-2 .

9. Field , N.H. : 'A thirteenth century kiln at Hermitage , Dorset ' PDNHAS 88 (1966) pp 161 - 175 .

10. Medieval Archaeology : Vol.3 (1959) Wareham West Walls .
    Vol.4 (1960) R.C.H.M.(Eng) : West Bailey , Corfe Castle.
    " " D.F. Renn : The Keep of Wareham Castle .

11 . Comparison with material from Sherborne provided by Mr C.E.Bean .

12. Thanks are due to Dorset County Museum for material from the sites of: Hermitage , Wareham and Corfe , also to the South Wiltshire Museum , Salisbury ,

12. Cont : for kiln wasters from Laverstock .

13. Field , N.H. : as note 9 .

14. Musty , J. , Algar, D.J. , and Ewance , P.F. : (1969) as note 6 , pp 83-150 .

15. Williams , D.F. (1977) : 'The Romano-British black-burnished industry : an essay on characterization by heavy mineral analysis', in Peacock , D.P.S. (ed.) Pottery and Early Commerce (London , 1977) 163 - 220 .

16. Gray , H.St.George : 'Excavations at Burrow Mump' , especially the section by Dunning on the pottery . PSANHS 85 (1939) .

17. Gray , H.St.George : 'Excavations at Castle Neroche' especially pottery notes . PSANHS 49 (1903)

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18. Thanks are due to Mr L.C.Hayward of the Yeovil Archaeological and Local History Society , who traced the appropriate pottery in the Yeovil town museum .

19. Laverstock report (note 6): pp 143-7 .

20. Laverstock Report (note 6) : Sect.XIII pp. 139-40 .

21. Geological Survey Sheet no:312 .

22. Brears , Peter C.D. :'The English Country Pottery' , Gazeeteer - Holnest .

23. Thanks are due to MrsJ.Grainger , Honourary Curator Shaftesbury Museum and Mr W.Moore , Shaftesbury Archaeological Society .

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