IV

HOUSESTEADS WARE—A FRISIAN TRADITION ON HADRIANS WALL

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A NUMBER of sherds of a particular type of coarse pottery, often having finely burnished black exteriors and characteristic angular rim-forms, was found during the excavations of the civil settlement at Housesteads in the early 1930s (Birley, E., 1932–5). Pottery of this kind had previously been found only at Birdoswald, where the pots concerned had been described by the excavators as "native vessels" (Simpson and Richmond 1934). The term "Housesteads Ware" now used to describe this class of pottery was coined later, presumably because of its association with the civil settlement at that site.

Only a few examples of this pottery have ever been published, and even some of these sherds are now elusive. For the purposes of the present study almost two hundred sherds have been traced and examined, representing perhaps some forty different vessels (figs. 1–3). Although it has not been possible to make an exhaustive search through the mass of pottery from the frontier area as a whole, it would seem that at present Housesteads Ware has been found on only three sites, namely, Housesteads, Chesterholm, and Birdoswald. One possible addition, about which there could be some doubt, is provided by two wall-sherds and a rim in Tullie House Museum, Carlisle, labelled as having come from Castlesteads (p. 132 below). In fabric, finish and forms the pottery from all of these sites gives the appearance of homogeneity. There are no close parallels in Iron Age or native contexts of the Roman period to the north of the frontier (Jobey 1977), or for that matter, that are known to this writer, in the south. Housesteads Ware may then be treated as a class of pottery in its own right, even if shown not to be native in the accepted sense.

Microscopic examination has revealed a fabric that is generally similar in all vessels. The clay is well levigated and in many cases has minute inclusions of white felspar. Cores are dark grey-brown and the surfaces are usually oxidized to buff-red or a sandy brown colour, giving a fairly uniform sandwich effect. Most of the surfaces have been lightly tooled with a narrow-gauge spatula, and many sherds, including the majority of the rim-sherds, exhibit a hard and smooth, black-brown, burnished finish. This burnishing occurs particularly on the exteriors, though in some cases continues over the rims and down the interiors of the vessels. Some rim-sherds and a number of miscellaneous wall and base fragments, especially from Housesteads, now show no traces of burnishing though faint tooling marks are still discernible. It is always possible that the lower parts of these vessels were left unburnished

intentionally, but many of these fragments have extensive traces of burning and any finish may have been lost through use. Although the quality of the material as a whole is good, the vessels would appear to have been hand-made. There are no distinct wheel-marks or other signs of wheel-throwing and several vessels do show slight unevenness in construction, with finger-impressions on the inside surfaces as if from moulding.

Slightly less than half of the forty odd rim-sherds examined are ornamented with a simple row of "finger-tipped" decoration, though sometimes this would seem to have been pinched or executed with a sharp instrument. This decoration usually occurs on the lip of the rim (figs. 1–3). Only one body-sherd is decorated, this by a band of pinch-marks around the girth of the vessel (fig. 1:8).

It is difficult to make a reliable and meaningful typological analysis of the collection of Housesteads Ware as it exists at present. There are perhaps too few vessels represented and many of the sherds are fragmentary, so that accurate reconstructions of complete pots are rarely possible. In like manner any developed rim-typology is hazardous, not least because of uncertain stratification. For the time being, however, the bulk of the material can probably be separated into two general forms.

- (i) Carinated, wide-mouthed vessels which have everted, thickened rims and curved necks. The rims may be flattened on top or truly faceted. These vessels may also have either a stem-like foot (fig. 1:1) or a base which is small in relationship to the height of the vessel (e.g. fig. 1:3, 8). Generally speaking, the vessels with a stem-like foot are likely to be smaller than those with a flat base.
- (ii) Wide-mouthed jars which have rounded shoulders and bellies (figs. 2:16–25, 3:26–32). There is a strong possibility of some variation in the body-shape and size of this kind of vessel and the existence of a narrow-mouthed variant cannot be ruled out. Rims are everted and usually flattened or faceted, sometimes with a sharp inner ridge, though several slacker forms are also present. One wall-sherd, not illustrated here, is from a handled example of this form with rough lug-handles attached to the shoulder of the vessel.

As will be apparent the rim-sherds show some variety in detail, such as one might expect with hand-built pottery, although all are everted to a greater or lesser extent. A number have a slightly rounded internal bevel with a rounded lip and are generally somewhat triangular in section. The majority, however, have two or more distinct facets whatever the precise angle of the rim. A few of the latter are more upright than most and more rectangular in section (fig. 3:26–7).

A list of the material is given below (Appendix A, p. 142), and covers all known forms although it does not comprise the entire corpus of known sherds. The vessels are numbered consecutively to correspond with the illustrations in figs. 1–3. Although a type number has been attributed to most vessels this is based upon the typology of possible continental parallels, yet to be discussed.

In order to arrive at some datable contexts for this pottery, however general these may prove to be, it is necessary to examine the provenances in more detail. The pottery from Birdoswald was discovered in 1933, when three phases of occupation were distinguished on the promontory to the south of the fort. These three phases were

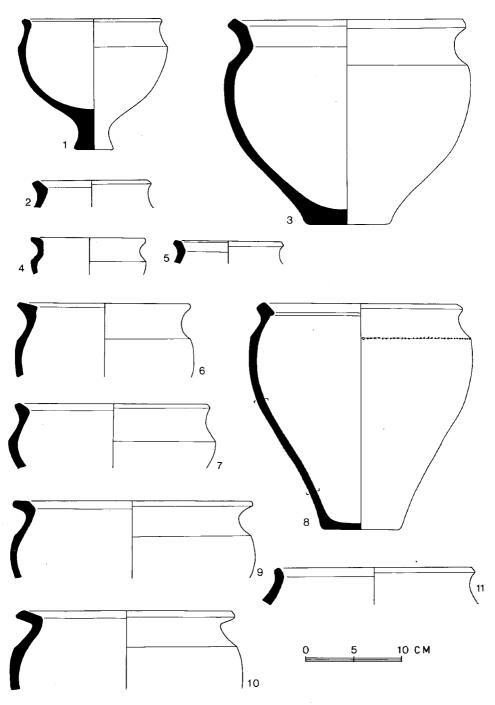


Fig. 1. $(\frac{1}{4})$.

then thought to pre-date the stone fort, but it now seems that at least the buildings of phase III must be later than the construction of the fort. Phase III consisted of a spread of timber buildings, probably covering most of the promontory and in places overlying the obliterated Vallum (Simpson and Richmond 1934, fig. p. 126). Some of the so-called native sherds were found in a pit-like hollow on the edge of the Vallum ditch, apparently together with decorated samian pottery which was said to be Trajanic in date. The pit certainly preceded phase III, though its relationship with the Vallum is uncertain despite the excavators' inferential assumption that it was earlier. The remainder of the pottery, including the vessels restored and photographed for the excavation report (figs. 1:1, 2:18 below), came from a second pit nearer to the edge of the promontory on the east and was assumed to belong to phase I. This pit also contained ashes from an associated hearth which was said to have been rendered unsafe for use by the timber walls of the phase III buildings. The pottery would then seem to have been deposited before or when the buildings of phase III were erected, although the evidence is perhaps tenuous. It has been suggested subsequently, and with some justification, that a date in the mid to late 130s is likely for the infilling of the Vallum (Swinbank and Gillam 1950), though there is no evidence to suggest that the buildings of phase III were necessarily erected immediately after this event. Consequently, apart from suggesting that the deposition of these sherds could well have taken place some time later than the report infers, with a terminus post quem in the later part of Hadrian's reign, more precise dating is not possible.

Amongst the sherds of Housesteads Ware from Chesterholm there are a number of sherds which at first sight would seem to have come from firmly stratified and dated deposits. In the report on the pre-Hadrianic pottery from the site there are three rim-sherds from levels described as Flavian III/IV (Hird 1977, nos. 419–21). These levels were taken to be associated with the occupation of the second pre-stone fort on the site which was overlaid by the civil settlement of the later stone forts, and a date of between A.D. 110 and 125 was assigned to them (information Vindolanda Trust; also Birley, R. E. 1973, 1974). However, the report on the pre-Hadrianic pottery also includes some twenty-four sherds of Roman coarse pottery that are likely to be post-Hadrianic in date, including several sherds attributed to later intrusion. At best, therefore, the relevant stratification for these sherds of Housesteads Ware may be considered inconclusive. Further vessels of Housesteads Ware. illustrated in the excavation report of 1970, were found with several other unpublished sherds in the upper levels of the mansio, "associated with the last period of occupation" (Birley, R. E. 1970, figs. 5, 7 and 8). It has not been possible to ascertain from the published drawings if these vessels are amongst those represented here, and the narrow footstand shown in the report cannot now be traced. Several sherds also came from the mansio courtyard in an unstratified context, as, incidentally, did some supposed sherds of Romano-Saxon type. The remaining sherds from Chesterholm were found in or near to building XXX/XXXS. Some were completely unstratified but a rim and two base-fragments came from near to the west wall of the building, above what was then considered to have been a fourth century floor (Vindolanda Trust). It could well be that more recent discoveries at Chester-

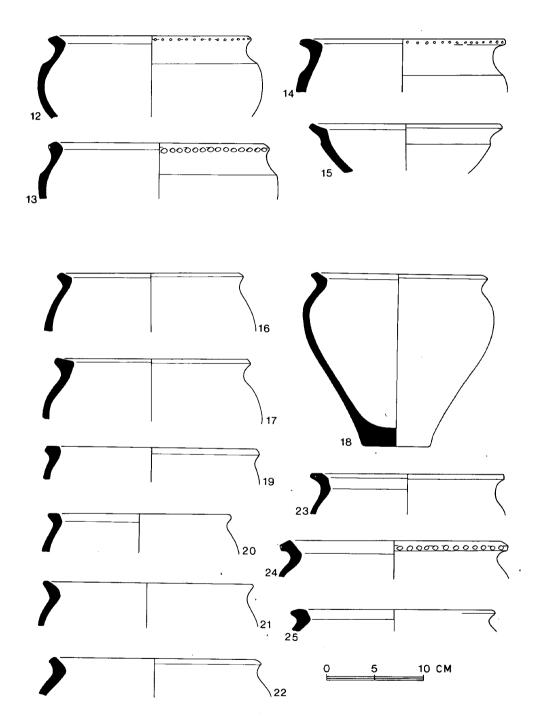


Fig. 2. $(\frac{1}{4})$.

holm may lead to some revision of the previously suggested chronology, and until there are additional definitive reports it is not possible to go further.

The material from Housesteads, which provides the majority of the sherds available for examination, comes from a number of different provenances. In the first place it includes a dish, no longer traceable, which was discovered during the excavation of barrack XIV. This vessel, which at present has no parallel in form amongst the rest of the material from the northern frontier, came from beneath a stone bench of period III, and, on the basis of the pottery from the floor levels of period III, was given a date of emergence not later than the end of the third century (Wilkes 1960). The majority of the sherds under review, however, were stored in the Department of Archaeology at Durham and were unmarked. Nevertheless, it has been confirmed that this material came from the excavations in the civil settlement between 1931 and 1934. This also applies to several sherds in the Department of Archaeology in Newcastle and to sherds in Housesteads Museum, including the reconstructed vessel Gillam type 188 provisionally dated A.D. 300–370 (Gillam 1970). Although the full records of these excavations were lost during the last war. Professor E. Birley has confirmed that the pottery came from levels assignable to his Wall periods II and III, with late II as a starting point. It was found in rubbish immediately underlying the floors of period III, suggesting a date of emergence before the close of the third century. Two additional rim-sherds were also found in the excavation of barrack XIII in 1977, but both were unstratified in a layer of humus and rubble above the western end of the barrack block (unpublished). All told, at least a third century currency would seem likely for this class of pottery at Housesteads, despite the present lack of detailed records.

The three sherds supposedly from Castlesteads are from a vessel which in size and form resembles the pot with a stem-like foot from Birdoswald (fig. 1:1), although no base survives and the rim is thicker and more triangular in section. The accession register in Tullie House Museum merely records the accession number in 1946 and designates the pottery as Iron Age, from Castlesteads in 1934. The report on this year's work at the fort does not record the finds in detail (Richmond and Hodgson 1934), so that apart from noting the possibility of the occurrence of this pottery as far to the west as Castlesteads nothing more can be said with regard to its context.

If the evidence outlined above were to be taken at face value it would then seem that Housesteads Ware could have emerged by Hadrianic times, would have had a more certain currency in the third century and may have extended into the fourth. In quantitative terms, however, the comparatively small number of sherds recovered from excavations to date, together with their restricted geographical distribution, must throw some doubt upon longevity, a doubt which cannot be resolved satisfactorily in the absence of more precise stratigraphical information. The confined distribution of the pottery may also point to the possibility of a local source, somewhere in the central sector of Hadrian's Wall, but to date no obvious wasters have been noted and such petrological analysis as has been carried out has not been helpful in determining a likely location for any kilns.

The provenances of the sherds, confined to certain military sites or their environs,

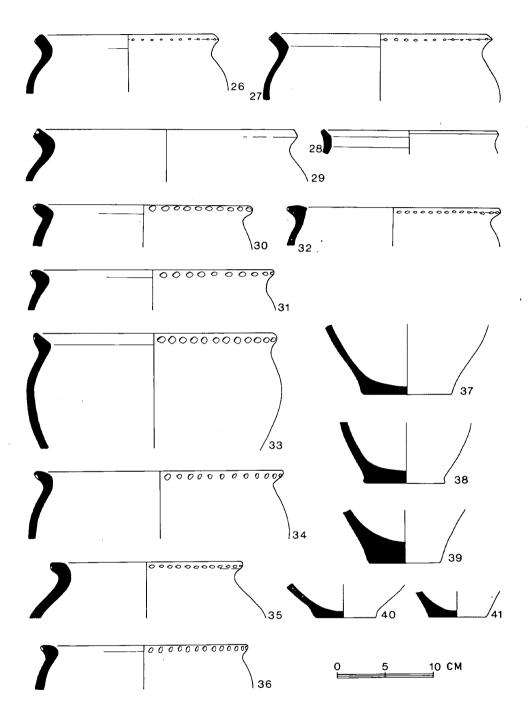


Fig. 3. $(\frac{1}{4})$.

may also be indicative of the presence of specific military units, responsible for imports or, more likely imported traditions transferred to local manufacture. Some years ago a search was made for possible parallels amongst native pottery in the Rhineland, but without any immediate success. More recently, Mr. J. P. Gillam noted what seemed to be similarities between Housesteads Ware and some native vessels of the Roman period on display in the Netherlands. It is this line of enquiry which now appears to be worthy of further consideration.

In the later prehistoric period in northern Europe it is possible to distinguish the development of an archaeological grouping that stretches from the Elbe along the North Sea coast to the Rhine (fig. 6). This may be designated the North Sea Coastal province (e.g. Todd 1975). Within this province the culture of the Frisian area had developed separately to some extent, notably in the particular ceramic forms of the area such as the distinctive Streepband wares (Waterbolk 1975; van Es 1965). It is only during the succeeding Roman Iron Age that the characteristics of the pottery of the coastal lands begin to mingle with the ceramic types from further inland, as can be seen at Wijster which has provided one of the largest of the recently published collections of pottery from the Netherlands (van Es 1967). Although the pottery of the province shares the same basic development in this later period, the assemblages from the western Netherlands are remarkably free from some of the more characteristic types from further east (e.g. Schmid 1965). Whilst the area around Groningen shows some degree of eastern influence, these types did not reach Friesland in any quantity. Comparison may usefully be made between the ceramic assemblages of the Frisian sites and the extensively excavated settlement of Feddersen Wierde near Bremerhaven (Germania 1956, 1957, 1961, 1963). In brief, the culture and development of the coastal terpen remain basically similar yet the differences in ceramic detail can be clearly seen, and it is in the Dutch coastal groups that Housesteads Ware must have had its origin.

It is not from Wijster on the sands of the Drenthe that the closest parallels to Housesteads Ware appear to come, but from the terp settlements of the clay lands in the modern provinces of Friesland, Groningen and North Holland (fig. 6). This group extends southwards down the Dutch coast through the territory of the Cananefates, but south of this, beyond the Maas, pottery of the type under discussion does not occur (Bloemers 1978). In particular, similarities can be seen in the published material from Leeuwarden in Friesland (van Es and Miedema 1970) and Paddepoel near Groningen (van Es 1968). Leeuwarden developed in the first century A.D. and the vast majority of the pottery dates before A.D. 250-75. The settlement at Paddepoel, though developing earlier, seems to have been abandoned between A.D. 200-50. In the early third century many coastal terpen began to be affected by marine transgression, with resulting pressure on land, whilst the progressive dislocation caused by the decline in Roman control must also have tended towards a breakdown in trade and security (van Es 1965). To infer that unsettled conditions in their homeland may have had some bearing on the appearance of irregular Frisian units in northern Britain goes far beyond the evidence discussed here, though the background may be worth considering.

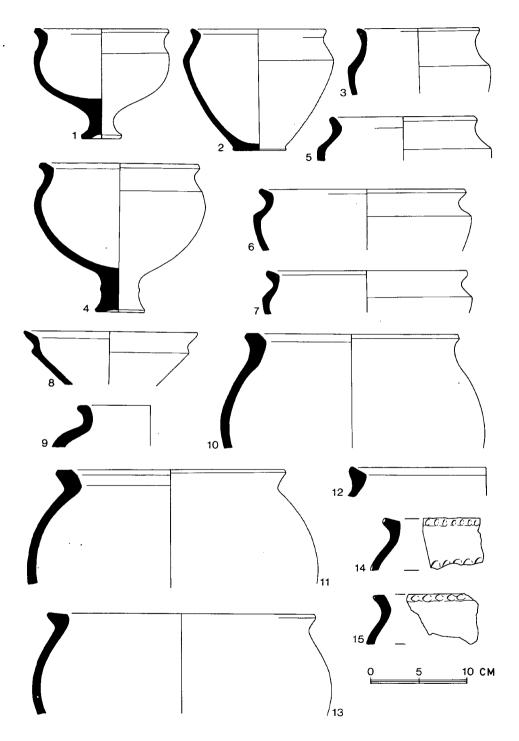


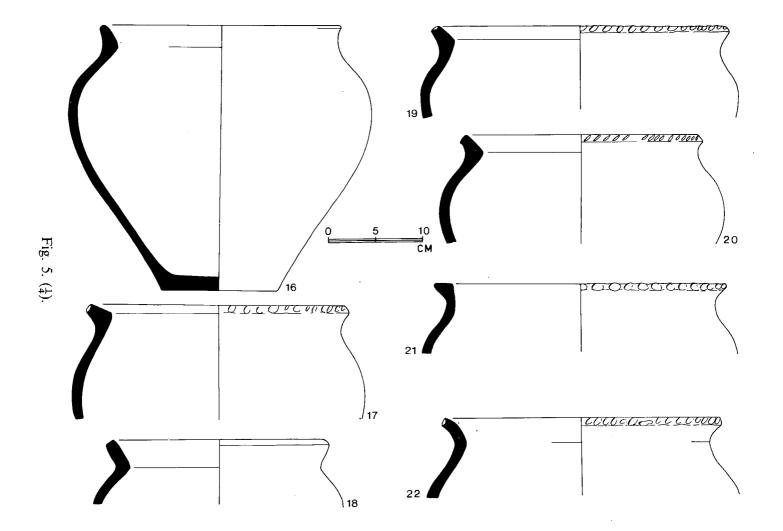
Fig. 4. $(\frac{1}{4})$.

The closest parallels to Housesteads Ware may be found in Paddepoel and Leeuwarden types 1 and 4, and for purposes of the present classification the British material fits tolerably well into the scheme proposed for the Frisian vessels. A selection of Frisian Vessels is illustrated in figs. 4 and 5, a list of sites is in Appendix B, p. 143.

Type 1a/c (fig. 4:1-8) comprises medium-sized cups or situlae with a sharp transition from belly to neck and little distinguishable shoulder, a tall curved neck, and a thickened rim. These pots have been fired in reducing conditions and many display black burnished outer and inner surfaces. Two forms are commonly found, one with a small flat base and the other with a stem-like foot. The latter is obviously similar to the vessel from Birdoswald (fig. 1:1). It is a typical Frisian type, although in the Netherlands these forms are also found in North Holland in the territory of the Cananefates, on Texel, and in the Frisian islands (information Dr. Bloemers; v. also Bloemers 1978). Close similarities can be seen in cups from Kubaard (fig. 4:1). Hitchum (fig. 4:4), Beetgum, Rinsumageest, and at Wijster, where type 1c represents the same form of vessel (van Es 1967, fig. 10). Vessels of this type with simple, flat bases are generally similar to Housesteads Ware nos. 3 and 8 and perhaps nos. 6-14 inclusive. Material from Paddepoel which has been examined recently by the writer shows that some la types may be somewhat smaller and thinner in section than the British examples, but this need not be important in the circumstances. Frisian 1b types are not distinguishable amongst the collection of Housesteads Ware though the stratified dish from Housesteads (fig. 2:15), is similar to Wijster type 1bi (fig. 4:8).

Housesteads Ware nos. 16–34 fit well into a general scheme of cooking-pot types from the coastal area of the Netherlands, corresponding to type 4 at Paddepoel, Wijster, Leeuwarden and other sites. These are generally medium-sized, wide-mouthed pots with rounded shoulders, though the shapes of the bodies can vary. Handles occur sporadically on this type (e.g. van Es 1968, fig. 53), and one body-sherd from Housesteads has just such a roughly formed handle on the shoulder. Leeuwarden 4c vessels, with everted and thickened rims (fig. 5:19-20) are represented, for example, by Housesteads Ware nos. 18, 22 and 30-34; type 4d, with the rim bent out, broadened and flattened on the upper side (fig. 5:21), by Housesteads Ware nos. 17, 19, 20 and 23 amongst others; and types 4e/f with the rim bent outwards to the same overall thickness (fig. 5:18, 22) by Housesteads Ware nos. 26 and 27. Dr. Bloemers has drawn my attention to minor differences between type 4 vessels from the Netherlands and their British equivalents. In Friesland the black burnished exterior occurs mainly on the smaller vessels of type 1, and is uncommon on the heavier cooking pots which have a brown-beige exterior that is sometimes roughened. However, many wall-sherds in Housesteads Ware show no trace of burnishing and some rims of type 4 have only a brown-buff exterior, for example nos. 18 and 22. Frisian vessels also tend to be slightly larger than the British pots but this is of no great importance bearing in mind the marked similarity in form.

Type 4 cooking pots in the Netherlands occur from the first century B.C. throughout the Roman period, with only a slight tendency to develop more slender and drawn out forms. The most convincing parallels to Housesteads Ware are found amongst



pots given a late first century A.D. to third century A.D. date by Van Es.

The dating suggested in the Dutch reports might seem somewhat early in the context that will be suggested for Housesteads Ware, especially with regard to the la/lc types, but a general observation concerning the development of the Dutch pots may be noted at this stage. In the Netherlands truly faceted rims evolved into slacker forms from the early second century A.D. Many of the rims from the British northern frontier exhibit just such slack forms including, incidentally, the supposedly pre-Hadrianic type 4 vessels from Chesterholm. At Paddepoel, van Es admits that no close dating may be possible for hand-made types, and both here and at Leeuwarden, circumstances of excavation worked against the development of an accurate chronology. At Rijswijk, the quantities of datable samian ware in association with native, hand-made sherds, and the exhaustive nature of the excavation, led the excavator to attempt a study of the possibility of applying a closer dating to native typology. The results, however, in the excavator's own words, were "not encouraging". The hand-made vessels were found to continue from the first century through to the early third without marked change. At most, faceted, flat rims occurred more often in the earlier periods (Bloemers 1978). Although Rijswijk actually lies south of the limes, the native hand-built pottery has great similarity to that from North Holland, Friesland and Groningen, and can thus be regarded as part of the same pottery province.

It would seem then, that pottery types found in the western part of the North Sea Coastal Province appeared at some stage in the environs of military sites in the central sector of the northern frontier in Britain. Consequently, if this pottery is seen as a local product moulded to foreign tradition and taste it may be possible to relate its presence to specific military garrisons.

Although Tungrian units are attested at Castlesteads, Housesteads, and, doubtfully, at Birdoswald (e.g. Breeze and Dobson 1976), their homeland is well removed from the area where the closest continental parallels have been envisaged. Indeed, of the four sites concerned, only Housesteads has clear evidence of troops that might have come from Free Germany. It has been assumed that the third century garrison at Housesteads was Coh. I Tungrorum mil. ped., a unit which was of milliary strength by A.D. 103. As the accommodation for units at Housesteads seems to have remained much the same from the construction of the fort until the early fourth century, this cohort could well have formed the original garrison of the fort. What is more to the point, however, is that supplementary garrisons are also known to have been stationed in or near Housesteads, one of them most probably and the other certainly in the third century. These are a Numerus Hnaudifridi and a Cuneus Frisiorum, and both of these units are likely to have come from the area of origin of the ceramic forms under discussion.

These units are known from three altars found within a few yards of each other near the foot of Chapel Hill to the south of the fort at Housesteads (Clayton 1885; Bosanquet 1922). Two of these altars are dedicated by Germans of the "cives Tuihanti" (RIB 1593, 1594). Although the unit, a Cuneus of Frisians, is only mentioned on one of the altars, both are dedicated by tribesmen of the Tuihantes so

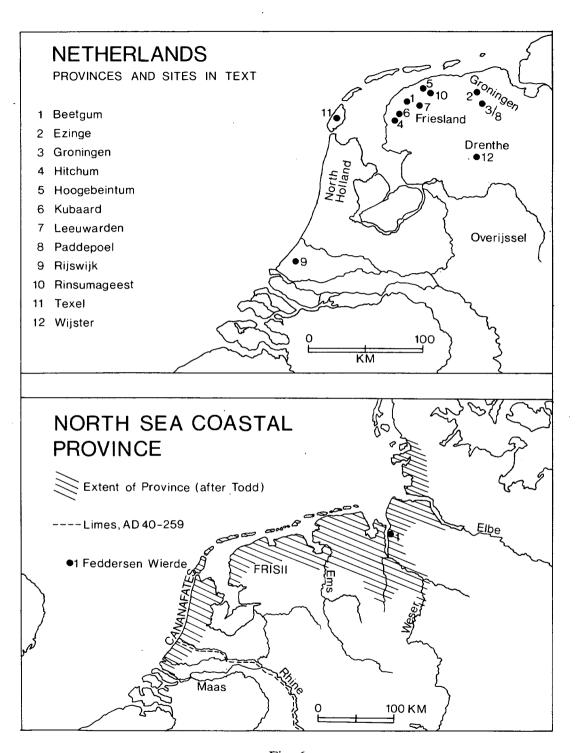


Fig. 6.

that the attribution of both altars to the Frisian unit is clear. The unit concerned was styled "Severus Alexander's", suggesting that the dedication was made during his reign, A.D. 222–35. Although one intact inscription of Severus Alexander survives (RIB 978), three others known from the frontier area have the emperor's name erased (RIB 1060, 1218, 1465). In this case the Housesteads altars may only have escaped such treatment because of subsequent disuse of the shrine or disbanding of the units, as the unit is unlikely to have retained an emperor's name that was no longer in favour. The remaining altar from Housesteads is dedicated by a Numerus Hnaudifridi, the troop of Notfried, a style which presumably retains the tribal chieftain's name in the unit title (RIB 1576).

One of the altars dedicated by the Cuneus of Frisians is to an otherwise unknown deity, Mars Thincsus, and to the two Alaisiagae. The other is dedicated to Mars, but also to the two Alaisiagae so that the Mars in question is likely to be the same deity. It is not the purpose of this paper to re-examine the theories, philological or otherwise, that have been advanced in the past concerning the identity of the deities in question (e.g. Bosanquet 1922; Clayton 1885; Hogg 1960). One interpretation suggests that Thincsus represents an identification of Mars with the Germanic war god Tiw and perhaps the Alaisiagae, Beda and Fimmilena, as his valkyrie-like accomplices. The dedications are interesting in themselves, confirming as they do the existence of a shrine at Housesteads used by men of Germanic origin almost certainly from outside the Empire. It has also been suggested that the Tuihantes may be connected with the modern district of Twenthe in the province of Over-Ijssel (Clayton 1885, p. 148f). However, Twenthe itself would not seem to be exactly within the area of origin of the ceramic forms under discussion.

Mars Thincsus is not mentioned on the altar dedicated by the Numerus Hnaudifridi but the two Alaisiagae appear as Baudihillia and Friagabis. Consequently, the three dedications in the same shrine, made to otherwise unknown deities, suggest some close connection between the two units.

In this event, one or both of these units could have been responsible for an imported ceramic tradition, if not indeed the actual presence of the dependents of some of the men in service. Although there are cunei of Frisians attested at other forts in northern Britain, so far as is known to the writer no Housesteads Ware has come from these sites. Nevertheless, the possibility remains that the units at Housesteads could have been of comparatively recent origin, and not quite so subject to the same discipline or the marketing patterns of the regular Roman army. The Numerus Hnaudifridi would probably be a more likely contender in this respect than the Cuneus Frisiorum, which already bore the emperor's name. If Housesteads held its full complement of infantry at this time it would seem unlikely that irregular units could also be quartered in the fort, particularly as both probably had a strong cavalry contingent and no accommodation of this nature is at present known at Housesteads. As such, they may have had a certain operational mobility that is not attested epigraphically elsewhere. Unfortunately, as the evidence stands at the moment, this hypothesis cannot be extended to explain the occurrence of Housesteads Ware in an apparently earlier second century context at Chesterholm and Birdoswald.

Even though some of the foregoing may appear to be somewhat tenuous, it will at least draw attention to a particular type of coarse pottery on the northern frontier which has received little notice in print hitherto. An area of origin has been suggested for the ceramic style and it is hoped future work may cement this relationship.

ACKNOWLEDGEMENTS

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APPENDIX A. HOUSESTEADS WARE (figs. 1-3)

1. Birdoswald. Type 1a.

 CW^2 , 50, 54–62.

- 2. Housesteads. Type 1a.
- 3. Housesteads. Type 1a. Gillam type 188.
- 4. Housesteads. Type 1a.
- 5. Housesteads. Type 1a. "H 13 II TS". (1977).
- 6. Housesteads. Type 1a.
- 7. Housesteads. Type la.
- 8. Housesteads. Type 1a. "V III 56".
- 9. Housesteads. Type 1a.
- 10. Birdoswald. Type 1a. "Birdoswald 1933; Iron Age depression... B I".
- 11. Birdoswald. Type 1a. "Birdoswald 1933; Iron Age depression".
- 12. Chesterholm. Type 1. "VB 40".
- 13. Housesteads. Type 1a.
- 14. Birdoswald. Type 1a. "Birdoswald 1933; Iron Age depression".
- 15. Housesteads. Type 1b.I. AA⁴, XXXVIII (1960), 68.
- 16. Housesteads. Type 4.
- 17. Housesteads. Type 4.
- 18. Birdoswald. Type 4.
- 19. Housesteads. Type 4.
- 20. Birdoswald. Type 4. "1933. 31. B2".

- 21. Housesteads. Type 4.
- 22. Housesteads. Type 4. "H 13 II TS". (1977).
- 23. Housesteads. Type 4.
- 24. Housesteads. Type 4. "Housesteads III".
- 25. Birdoswald. Type 4. "Birdoswald 1933; Iron Age depression".
- 26. Housesteads. Type 4.
- 27. Housesteads. Type 4.
- 28. Housesteads. Type 4.
- 29. Housesteads. Type 4.
- Chesterholm. Type 4. "VB 40. Vindolanda 33".
- 31. Chesterholm. Type 4. "L 87". Pre-Hadrianic, reputedly Flavian III/IV.
- 32. Housesteads. Type 4.
- 33. Chesterholm. Type 4.
- 34. Chesterholm. Type 4.
- 35. Housesteads. Type 4.
- 36. Chesterholm. Type 4. "L 82 VI 90". From south of building III in Flavian III/IV levels.
- 37-41. Base-sherds.
- 37-9. Housesteads.
- 40-41. Chesterholm.

APPENDIX B. CONTINENTAL TYPES (figs. 4, 5)

1.	Kubaard. Type 1a.
2.	Paddepoel. Type 1a.
3.	Leeuwarden. Type 1a.
4.	Hitchum. Type 1c.
5.	Leeuwarden. Type 1a.
6.	Leeuwarden. Type 1a.
7.	Leeuwarden. Type 1a.
8.	Wijster. Type 1bi.
9.	Fochtelo. Type 3.
10.	Paddepoel. Type 4a.
11.	Ezinge. Type 4a.

12. Leeuwarden. Type 1a?
13. Paddepoel. Type 4c.
14. Kootwijk. Type 4.
15. Leeuwarden. Type 4.
16. Rijswijk. Type 4b.
17. Leeuwarden. Type 4c.
18. Leeuwarden. Type 4f.
19. Leeuwarden. Type 4c.
20. Leeuwarden. Type 4c.
21. Leeuwarden. Type 4d.
22. Leeuwarden. Type 4e.