

THE PETROLOGY AND TYPOLOGY OF THE EARLIEST IDENTIFIED CENTRAL GAULISH IMPORTS

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A limited range of vessels from late Iron Age sites in southern Britain including the Welwyn Garden City burial (WGC) and the King Harry Lane Cemetery, St Albans, Herts (KHL) have been thin-sectioned as part of a joint programme of research undertaken by the Research Laboratory and the Department of Prehistoric and Romano-British Antiquities, of the British Museum. Three petrologically related but superficially distinct fabric groups with a preferred source of origin in Central Gaul were identified. Although no actual production centres have been found, limited typological research has supported the petrology, and the following paper summarises the results and briefly discusses the implications.

FABRIC GROUP 1 - the standard fabric

This fabric group includes flagons, platters and lid-seated jars in respectively cream-slipped, red-slipped and mica-coated wares, which in the hand specimen can appear different but, in thin-section, have proved to be variations of the same basic clay matrix masked by different finishes. In recent contributions to excavation reports, this fabric has been referred to as the standard fabric, and this continues below.

The petrology

In thin-section the fabric typically consists of a deep red-brown birefringent clay which contains a number of large rounded iron oxide-rich clay pellets up to 2mm in diameter. The clay matrix consists of 10-20% by volume of a poorly sorted, very fine, sand with a mean grain-size of 0.10-0.15mm. Mineralogically the sand is immature, containing prominent alkali and plagioclase feldspars in addition to common quartz. Micaceous minerals are common, but less frequent than might be expected from the

surfaces of some sherds. Both amphibole and augite are present in most slides, with occasional sphene and olivine. Electron microprobe analysis of the minerals (Freestone 1982, 106) indicates feldspars from both plutonic (ie granites) and volcanic rocks, and the amphiboles include a variety known as kaersutite, which is characteristic of that group of volcanic rocks termed alkaline. Rock fragments are not common, but occasional granite, metamorphic and volcanic rocks, up to 1mm or more in diameter, are observed in some sections. A provenance in a geologically mixed area is suggested by the petrology and the alkaline volcanic rocks and the granitic material strongly suggest the Massif Central in Gaul. Samples of sand from the Loire Valley between the Massif Central and Orléans, kindly provided by Dr P Tyers, are of similar type to that in the pottery and an origin in this area appears probable.

The clay matrix

In the hand specimen the fine grained clay matrix is red-brown, centred on Munsell 2.5 YR 6/6, frequently with a grey core due to under-firing. It varies according to the proportions of the main aplastic inclusions - golden mica (muscovite) and rounded red, white and black clay pellets which were probably natural constituents of the raw materials, rather than specifically added tempering agents. Generally the flagons and jars have only a comparatively light stipple of mica while the clay pellets are numerous and prominent. The platters are more obviously highly micaceous, with fewer clay pellets.

Surface finishes

A. Red slip - micaceous terra rubra (mica TR)

A red slip originally covered the whole vessel. Adhesion between the vessel and its slip was apparently poor because normally only thin patches survive, although at least one example from Braughing retains areas of thick slip with traces of a highly-polished finish. The red slipped finish may have been reserved for shallow platters, and possibly also deeper dishes or cups.

Vessel types

Type P.1 - platters similar to Cam. form 1.

These platters are simple in shape, with a tapering wall, dished

or sagging base, and a tall applied footring. Where the base survives, there is sometimes evidence for concentric rouletted wreaths on the upper surface.

Five examples have been sampled, and seven identified as hand specimens: (*).

- i Welwyn Garden City (WGC) Herts, cremation burial (2) - one platter sampled, found with a second smaller example. Terminus ante-quem c. 15 BC (Fig.1, P.1).
- ii a. Braughing, Herts, the Wickham Kennels site, a settlement area (2) - two platters sampled (Partridge 1983).

b. Braughing - Skeleton Green - Gatesbury, Herts - at least six examples recorded in material excavated from late Iron Age settlements in this area (*).
- iii Canterbury, Kent, the Marlowe Sites (excavations by the Canterbury Archaeological Trust) - two base sherds, forms unknown, sampled (Publication forthcoming).

The platter-form is common throughout Gaul and was being produced in the second half of the first century BC. No examples of micaceous TR have been identified in the likely areas of Central Gaul, although versions in reduced micaceous fabrics are common in the region in the area of the northern Massif Central and Morvan, eg Mont Beuvray (Saône), Alesia and Vertault (Côte d'Or) and Saint Marcel (Indre).

B. Cream slip

The pale slip, which analysis has shown to be kaolin-based, is confined to the outer surface. Again adhesion appears to have been poor and frequently the slip survives only in the protected areas of grooves, folds and over-hangs so that vessels have smooth orange- or red-brown surfaces. Two examples also have the remains of a thin red, matt underslip on the inner surface. A matt black bitumen coating survives in patches on the inner body surface of the WGC flagon. Pale slipped finishes appear to have been reserved for flagons.

Vessel types

Type F.1 - flagon with reeded rim

There is only one known example of this type. Its overall proportions are atypical, the neck diameter being unusually wide at about one-third of the body height. The body and neck were apparently made in one operation so there is no thickened "seam" or overlap at the base of the neck. The rim is reeded, there are groups of raised cordons on the neck, and the handles have four ribs. Like the other flagons samples, it is notably thin-walled for its size.

- i WGC burial - terminus ante-quem c.15 BC (Fig.1, F.1).

Type F.2 - tall flagon, with reeded rim

There is only one known example. It is larger than and is differently proportioned to the WGC flagon with a ratio of neck diameter to body height of 1:4. Made in one operation, it has a broad hollow cordon on the neck, broad five-ribbed handles and an applied footring.

- i Dorton, Bucks, a cremation burial - one of two flagons accompanying a decorated bronze mirror and three amphorae (Farley 1983, fig.12, no.1).

Type F.3 - tall flagon with dished cornice rim.

The sharply defined and dished cornice rim is identical for both single- and two-handled versions.

Variant a - the single-handled version

The neck is short, straight sided and plain. The handle is four-ribbed.

- i King Harry Lane Cemetery (KHL), St Albans, Herts - one example in the central grave of the earliest enclosure accompanied by Gallo-Belgic wares which pre-date AD 15 (Fig.1 F.3a).

- ii Skeleton Green - probably one almost complete example (*)
Partridge 1981, fig.40, 1).

Variant b - two-handled versions, Cam. form 165.

The proportions of neck to body are the same as F.2; in fact the main differences lie in the details of the rim shape and the neck

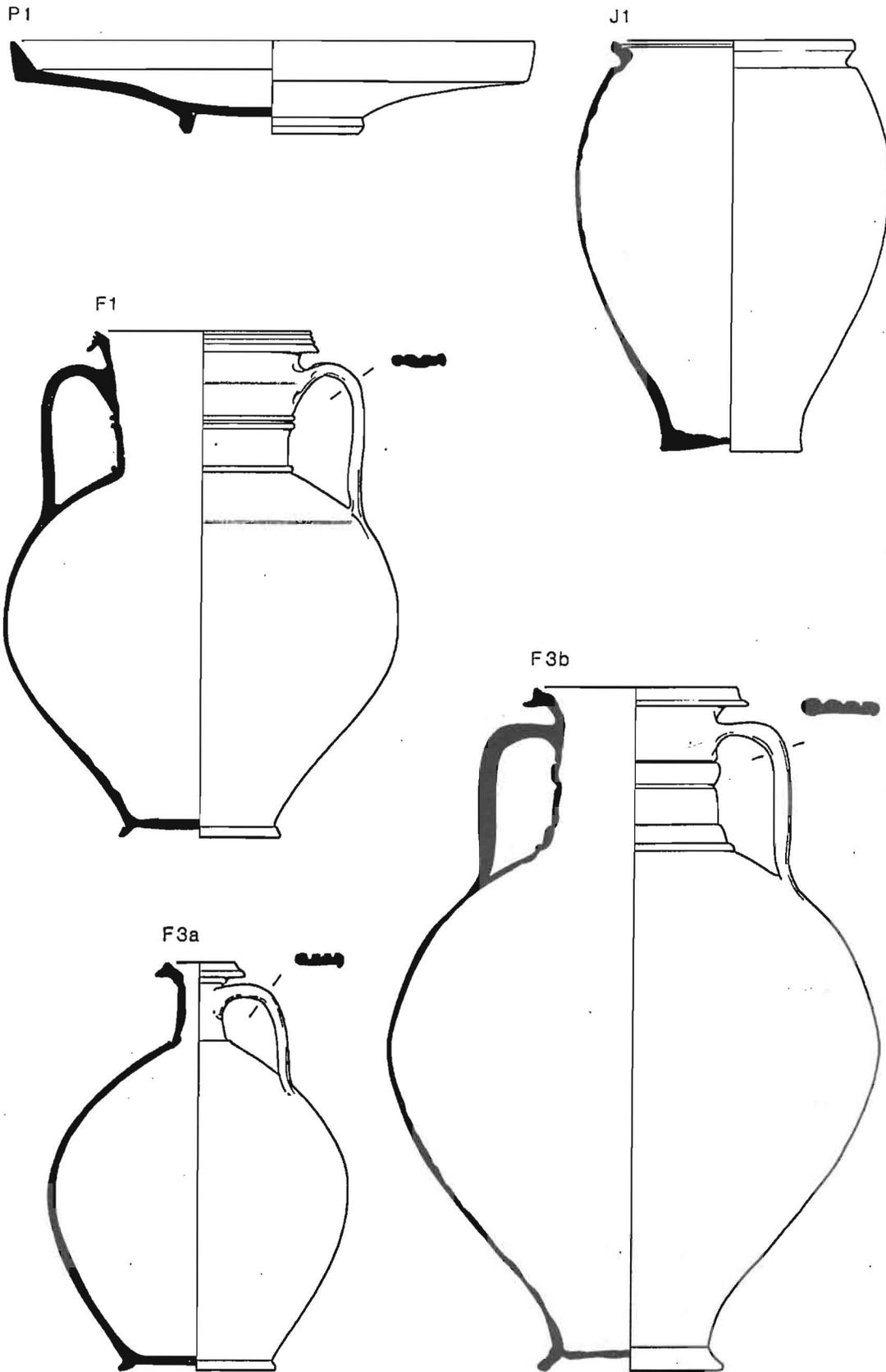


FIG.1 The typology of vessels in the standard fabric (scale 1:4)

cordons, therefore it seems likely that all examples of this type and F.2 were made in the same workshop.

Flagons from a number of different dates and sources in pale slipped red wares were grouped together as Cam.form 165 in the original publication (Hawkes and Hull 1947, 248). Since they were assumed to be copies of the Tiberio-Claudian pipeclay flagons of Cam.form 161 and 163, they were dated to the Claudio-Neronian period. The identification of late Augustan Central Gaulish versions frees at least some examples of Cam.form 165 from this chronological restraint (Boon 1969, 73).

- i KHL Cemetery (Burial AA17) - a pair in the central grave of an enclosure. Late Augustan.
- ii Boxgrove, Sussex - an area of the Chichester Dykes (Bedwin and Orton 1984, 63-74).
- iii Canterbury, Kent (excavations by the Canterbury Arch. Trust).
- iv a.Colchester, Essex, Abbey field, a cremation burial found in 1904 - the complete neck and handles, no body sherds survive; accompanied by a pedestalled jar (Birchall 1965, fig.20, 171-2).
b.Sheepen excavations (unpublished).
- v Dorton, Bucks, the mirror burial - one example, found with one example of F.2 (Farley 1983, fig.12, 2).
- vi Silchester, Hants - a rim sherd found in a group with a lid-seated jar in standard fabric and other related Central Gaulish imports (Boon 1969, fig.14, 165) (*).
- vii Burnham-on-Crouch, Essex - the type example in Hawkes and Hull 1947, pl LXIII, 165. Possibly a Central Gaulish import (*).

Sherds from unidentified flagon forms

- i Leicester, the Blackfriars site (excavated by the Leicestershire Unit. (publication forthcoming) - a body sherd.
- ii Skeleton Green - a base sherd (Feature F.52) and body sherds (Feature F.9).

No identical parallels have been found outside southern Britain, although a similar two-handled flagon was found during excavations on the Saint-Herbland site, Rouen. In shape and proportion it resembles closely types F2 and F3 and it is in white slipped redware, but it retains traces of a design or inscription painted in ochre. Associated with Aco beakers and Gallo-Belgic wares, a late Augustan date has been proposed for the deposit by the excavation (Mangard 1978, 310-13). Unfortunately, the condition of most British examples is such that little or no evidence of painting could survive.

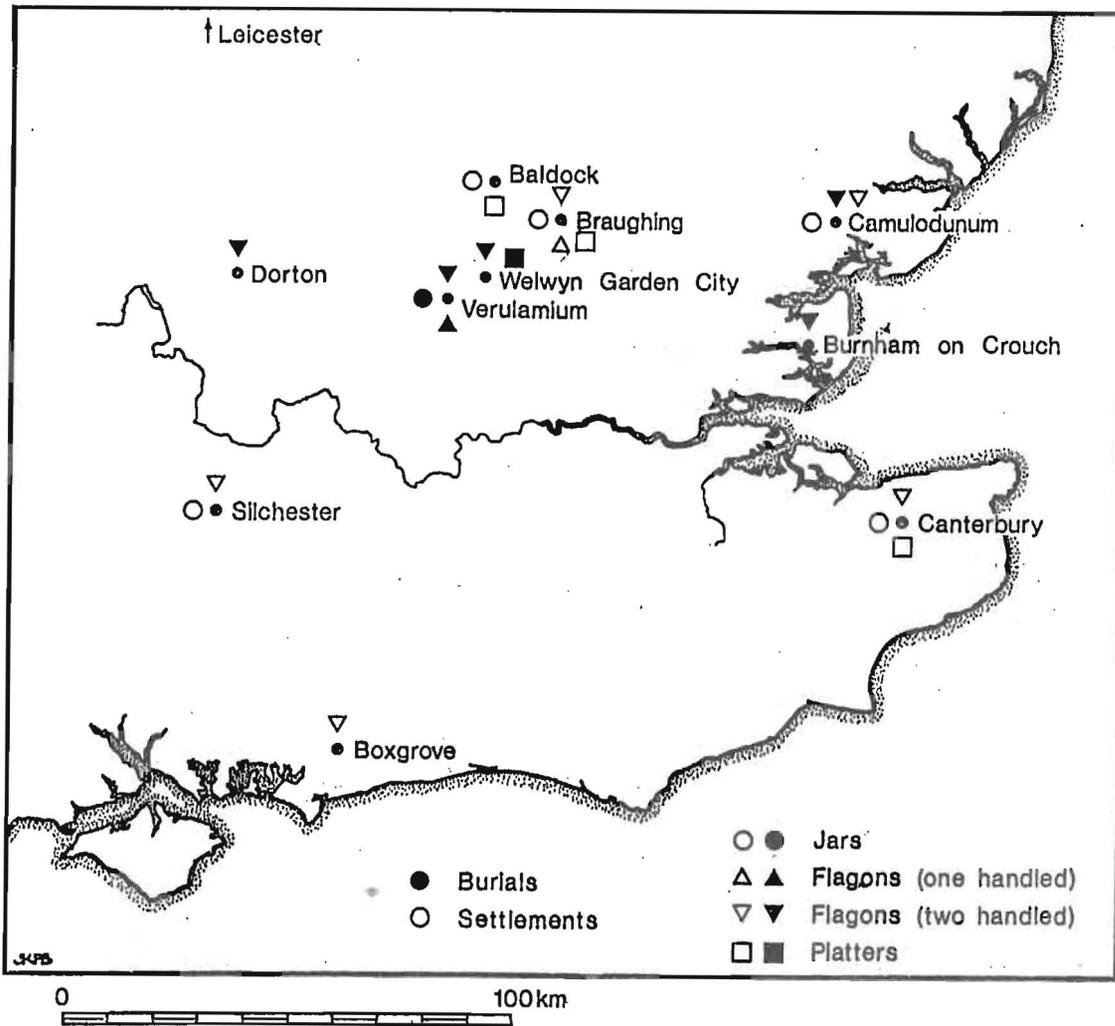


FIG.2 The distribution of flagons, platters and jars in the standard fabric.

C. Golden mica-coating

A thick coating of mica flakes was applied to the rim and the upper shoulder. One form has been identified, a high-shouldered jar with a grooved or lid-seated rim, similar to Cam.form 262 (1).

Vessel types

Type J.1 - lid-seated jar, Cam.form 262. The mica-coating is confined to the rim and a narrow band on the shoulder; the lower body remains self-coloured orange-brown with a rather rough, matt finish.

- i KHL Cemetery, Burial AA38 - are examples in a subsidiary burial, within one of the enclosures, Late Augustan-Tiberian.
- ii Baldock, Herts - one example (Stead and Rigby forthcoming no.92).
- iii Canterbury, Kent - at least four examples from various sites (Canterbury Arch. Trust, publication forthcoming).
- iv Silchester - one example, in the same group as the flagon F.3 (Boon 1969, fig.15, 168).
- v Skeleton Green, Herts - the largest group of published examples with a petrological report by D F Williams and typological discussion by P Tyers (Partridge 1981, fig.51 & p 99-103).

The basic high-shouldered jar shape with varying types of grooved and lid-seated rim was adopted over a wide area of Central and North Gaul, from the northern Massif Central to the Aisne and Moselle valleys, in the mid- to late- first century BC (Ferdrière 1972). The form was made in a number of oxidised and reduced fabrics, which varied from the comparative fineness of the standard fabric, through sand-tempered non-micaceous cooking pot wares, to coarse-textured, highly micaceous rock-tempered versions. Mica-coated versions certainly reached Alet (Saint-Malo, Ile et Vilaine) and presumably other sites in Brittany and Normandy (Langouët 1984, 84). In addition to those examples in the standard fabric listed above, a number of variant jars, in at least two petrologically distinct but related fabrics have been identified in southern Britain, for example Sheepen (Niblett 1985, fig.26, 103; 31,

219), and Silchester (Boon 1969, fig.15, 167). Versions may have been identified at Cleavel Point, Owre, Dorset (Galliou 1984, 35 note 14).

Source of origin

No kilns or production centres for any version of the standard fabric have been found. Thin-sectioning has characterised a preferred source area for the standard fabric along the northern edge of the Massif Central, but it cannot pinpoint specific locations (fig.3). The examination of sands sampled in the Orléans area of the Loire Valley suggests that this is a likely source area while typological research suggests an area extending north from the Massif Central, within the boundaries of the distribution pattern of the basic lid-seated jar form (Ferdrière 1972, fig.3). An example found at Vertault (Côte d'Or), apparently in the standard fabric, is displayed in the museum at Châtillon-sur-Seine but could not be examined.

From the mid-first century BC to the end of the first century AD, the platter form, in a variety of different, mainly reduced, fabrics, was common and widespread throughout Gaul. At much the same time, related flagon forms in pale-slipped red wares were common in Central Gaul, and in self-coloured pale wares in North Gaul. At Mont Beuvray which lies within the petrologically preferred area, related platter, flagon and jar variants occur, although none in the standard fabric was found in the sample examined. Therefore, the platter, flagon and jar forms of the standard fabric, as defined by examples found in southern Britain, fall within the typological traditions of Central and North Gaul, which include the preferred source area as established by petrological examination. In contrast, the flagons and jars do not fit the typological traditions of South Gaul, although the platters do. The preferred areas of both petrological and typological research therefore coincide in the area of the middle Loire valley, the Morvan, and the northern Massif Central (fig.3).

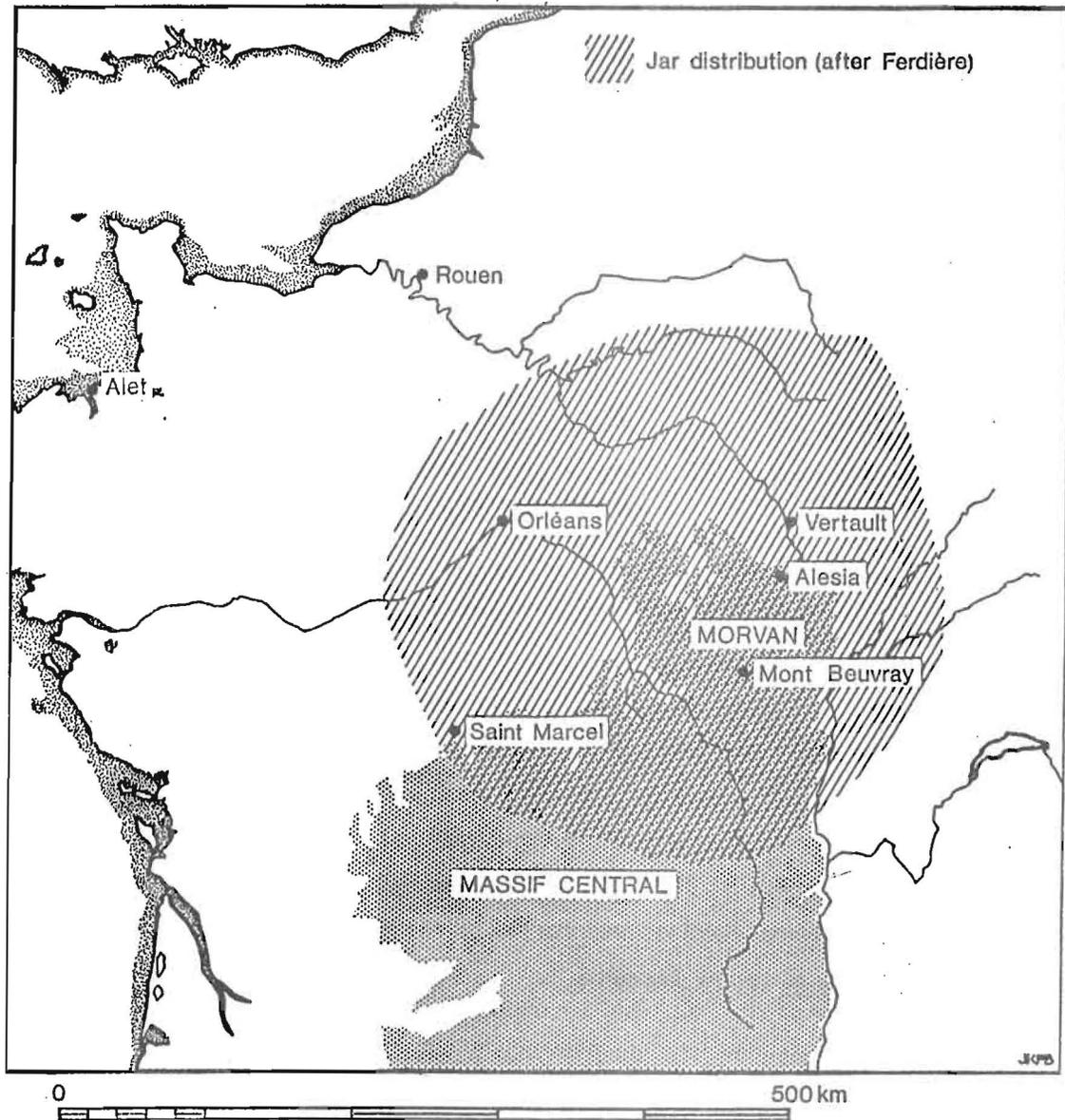


FIG.3 The preferred source area of the standard fabric in Central Gaul, based on the petrology and the typology.

DISCUSSION

It was the Roman custom to drink strained, diluted and mixed wine, and metal and ceramic vessels had been evolved for these specialised functions. Such customs were not universal, and more than one classical author expressed his contemptuous opinion of drunken Celts who swigged neat wine. The association in the WGC burial of wine amphorae, ceramic flagons, a bronze strainer and mixing bowl with silver and ceramic stemmed drinking cups suggests that at least one inhabitant of late Iron Age Britain drank wine in the approved Roman fashion.

In the first century BC it would have been necessary to import specialised vessels used in the preparation of wine, whether metal or ceramic, because no functionally suitable vessels were available from local sources. In particular, there were no markedly narrow-necked flasks or handled flagons for pouring liquids, stemmed drinking cups and foot-ring platters until after the arrival of Roman fine table wares in the second half of the first century BC.

The imports were copied by local potters in typical grog-tempered fabrics requiring no radical change in established production techniques before the Roman conquest. The rapidity with which the copies were produced is illustrated by eight other vessels in the WGC burial, three flagons, a flask and four stemmed drinking cups (Stead 1967, fig.8, 14-7, 25; 9, 33-5). All must copy metal or ceramic imports for which, as yet, no prototypes have been identified, but which must be at the latest contemporary with the flagon type F.1 and platters type P.1 in standard fabric, and may represent an even earlier generation of imports. By the time the KHL Cemetery was in use, locally made platters were quite common but flagons in grog-tempered wares are outnumbered by Gaulish imports by 5:1. Possibly the coarser textured local products with red or grey burnished outer surfaces were less satisfactory than finer-grained and slipped imports.

There is no evidence from the KHL Cemetery that copies of fine sand-tempered wares were made before the Roman conquest. Such fine-grained and thin-walled vessels would require more advanced techniques than those employed for grog-tempered wares, including the selection and preparation of clay and tempering for the fabric and slip, and firing in a kiln.

Dating evidence

The WGC burial provides a terminus ante quem of 15 BC for both red-slipped platters and the specific flagon variant type F.1 basically because of the presence of five Campanian amphorae of Dressel form 1B, coupled with the absence of Arretine and Gallo-Belgic imports (Stead 1967, 46-8).

The remaining flagon types F.2-3 and the lid-seated jar type J.1

appear to be somewhat later in date, although they could still pre-date AD 15. The single-handled version F.3a was found in the central burial of one of the earliest enclosures of the KHL Cemetery, associated with five Gallo-Belgic vessels manufactured between 15 BC and AD 15, and a broken amphora of Cam.form 185, of Spanish origin (information provided by Doctor D F Williams). The two-handled versions, type F.3b, formed a pair in the central grave of a second enclosure which also produced the only example of the lid-seated jar type to be found in the cemetery. The Dorton "Mirror" burial associates flagon types F.2 and 3b, implying that they were contemporary. The grave also included three amphorae, all with the neck and handles trimmed off in antiquity; two are of Italian origin, one a Dressel form 1B, as in the WGC burial, and the second a Dressel form 2-4, which is paralleled in the KHL Cemetery. The third is probably of Spanish origin. The burials therefore suggest a sequence with the red-slipped platters of type P.1 and the cream-slipped flagons of type F.1 as the earliest imports no longer available by the time the KHL Cemetery was established. Flagons of types F.2-3 and the mica-coated jars continue the Central Gaulish connection into the early decades of the first century AD.

Settlement material naturally presents a more disordered appearance. More examples of the platters and lid-seated jars have been produced by the joint Skeleton Green-Braughing-Gatesbury settlements than any other area, but they are noticeably short of flagons. At Skeleton Green, the features F.52 and 9 produced valuable pottery groups, associating imported fine wares and local products, for both should have been deposited before AD 30 at the latest, and possibly as early as AD 10 (Partridge 1981, 40-1). No red-slipped platters are represented in these groups, but each produced base or body sherds from two flagons of unknown form in cream-slipped ware, and a minimum of eight mica-coated jars.

At Silchester, a flagon type F.3b and a lid-seated jar type J.1 were found in a group with other Central Gaulish imports in a context which has been interpreted as post-conquest (Boon 1969, fig.14, 165 & 15, 167-8). These finds may indicate a much longer time-scale for the standard fabric than the burials suggest. However, the dating of the group was greatly influenced by the Claudio-Neronian dating given by Hawkes and Hull to flagons of Cam.form 165 (1947, 248).

Chronologically it is somewhat unexpected that the cream-slipped flagon and red-slipped platters in the WGC burial originated in Central Gaul rather than Italy, for they appear to pre-date the period of expanding pottery trade with the northern Roman provinces which developed also c.15 BC. Once the need for specialised ceramic vessels in southern Britain was realised, it is possible that they were added to cargoes of much more valuable wine and Mediterranean products during their transport north. Several routes from the Mediterranean to northern Europe passed through Gaul; they used the main river systems as far as possible, but each had an overland section. Platters were comparatively tough and easy to pack, but flagons were large, bulky, fragile and empty, so it would have been prudent to restrict the number of times they were loaded and unloaded, and to limit the distance they were carried. To obtain supplies at the point where a cargo for Britain was loaded aboard ship for the final river passage in Gaul would have been advantageous. The Rhône-Saône route took cargo into an area of Central Gaul from which it was possible to reach a number of different river systems. The overland section of routes continuing via the Loire or the Seine passed through the "standard fabric preferred source" area (Fig.3). Thus it would have been possible for Campanian wine and Gaulish flagons (type F.1) and platters to be shipped together to coastal settlements of Brittany and Normandy as well as southern Britain. Once the connection had been made then it could continue with other Central Gaulish products and those originating in northern Gaul, such as Gallo-Belgic wares, joining standard ware flagons types F.2-3 and jars in the increased trade of the period after 15 BC.

A notable degree of typological standardisation has been observed particularly in the case of flagons of type 3b. The details of the rim shape and the texture and colour of the fabrics of examples from Boxgrove, Canterbury, Colchester - Abbey Field, Dorton, KHL Cemetery (2), and Silchester are identical. The wide dispersal in southern Britain of such identical vessels can give rise to interesting speculation.

They must all have been produced at the same workshop and could even be the work of the same potter, part of the same kiln load and hence identical in date. The pair of flagons from the KHL Cemetery weigh three kilos each when empty, with an estimated capacity of 9.5

litres they would have weighed about 12 kilos when filled with wine. They are bulky, with maximum dimensions of 45cm and 35cm, and notably thin-walled so particularly fragile. The combination of capacity and fragility makes their use as containers for the transportation of commodities unlikely unless soft and light items were involved which could act as packaging. On the other hand, their size and colour should have made them prized vessels, decorative rather than functional objects.

As identical flagons they presumably comprised part of the same consignment from Central Gaul and their delivery must have posed more than usually difficult problems especially if they were being used as containers in which to transport commodities. Six of the seven recorded examples, Dorton being the exception, were found in the vicinity of late Iron Age oppida where a wide selection of other pre-conquest Gaulish imports are represented and which therefore had established trading routes. Presumably water transport was used for each settlement lay reasonably close to a coastal or river unloading point where the required number of items could be removed for the final overland phase.

The typological standardisation of flagons of F.3b combined with their type and date of context suggest that they were part of the varied trade with Gaul and the Mediterranean which developed in the first century AD. The date and context of the flagon type F.1 in the WGC burial suggest that it and the associated platters may have been diplomatic gifts.

To summarise the results, petrological and typological study has identified a fabric with three different slipped finishes and a preferred source of origin in Central Gaul. The range of vessel forms is strictly limited and highly standardised and a distinct form/function/finish relationship has been established. The earliest context in which examples have been identified is the WGC burial which is considered to pre-date 15BC. In consequence the flagon type F.1 and the platter type P.1 are amongst the earliest, if not the earliest, Central Gaulish fine ware imports found in Britain. Their association with Italian wine in the WGC burial suggests that in the second half of the first century BC at least some wine destined for southern Britain was

transported via the Rhône-Saône and Loire or Seine rivers, routes which pass through the preferred source area of the standard fabric. Although the vessels in standard fabric in the WGC burial may best be interpreted as gifts rather than traded items, the remainder are more satisfactorily explained as part of the varied and increasing trading contacts which developed between southern Britain and Gaul in the period after Caesar's invasions. Whether they indicate the adoption of Roman customs by some of the native population or the presence of Romanised immigrants remains uncertain.

NOTE

- (1) A detailed consideration of the jars has been undertaken by Paul Tyers in his doctoral thesis. He and Thierry Odier are continuing their research and have provided samples of sand from the Loire valley for analysis.

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