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AMPHORAE FROM THE ROMAN PALACE AT  
FISHBOURNE, SUSSEX

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Summary

Examination of some 960 amphorae sherds resulted in the recognition of the following types: Dressel 20, Dressel 2-4, Dressel 1 - Pascual 1, Pélichet 47, Camulodunum 185A, Peacock & Williams Class 59, Camulodunum 186A, Camulodunum 186B, Dressel 7-11, Southern Spanish, Rhodian style, Pseudo-Koan. Of particular interest were the finds of early Dressel 20 forms and the Republican type Dressel 1 - Pascual 1, which normally occur on pre\_Roman British sites.

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# AMPHORAE FROM THE ROMAN PALACE AT FISHBOURNE, SUSSEX

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## Introduction

No complete amphora was found during the 1985-6 excavations, but a large number of rims, handles and spikes were recovered, together with many featureless bodysherds: over 950 sherds in all. The amphorae sherds as a whole were classified by fabric and form. The classification of types is based on Dressel (1899), Pascual (1962), the Camulodunum series (Hawkes and Hull, 1947), Pélichet (1946), Laubenheimer (1985) and Peacock and Williams (1986), supplemented by descriptive terms suggested by Peacock (1971; 1977a) and in common usage (Peacock and Williams, 1986). The commonest amphorae form present is the southern Spanish olive-oil vessel Dressel 20, with lesser amounts of Dressel 2-4, Dressel 1 - Pascual 1, Pélichet 47, Camulodunum 185A, Peacock and Williams Class 59, Camulodunum 186A, Camulodunum 186C, Dressel 7-11, southern Spanish, Rhodian style, pseudo-Koan and a small number of unassigned sherds. Brief notes on the origins and chronological span of the amphorae are given below.

Numbers of Individual Sherds for each Amphorae Type:

Dressel 20	493
Dressel 2-4	93
Dressel 1 - Pascual 1	2
Pélichet 47	105
Camulodunum 185A	36
Peacock & Williams Class 59	11
Camulodunum 186A	7
Camulodunum 186C	2
Camulodunum 186sp	82
Dressel 7-11	4
Southern Spanish	53
Rhodian style	13
Pseudo-Koan	8
Unassigned	<u>51</u>
	<u>960</u>

Dressel 20

Rims: Ditch B1(d), B410, C9, D5(3), C17, D506A, D1002(3), D1006, D1021, D1033(2), D1067, D1114, D1127C, D1197, E15A, E16(2), E50(2), E50B, E93, E92, E140(2), F3.

Handles: C9(2), A8, D5(2), D501, C20, D506A(4), 516B, D513, D1002(4), D1002(2), D1008(3), D1045, D1034A(2), D555, D1075, D1021, D1127B, E2(2), E20/E27, E50(3), E137, E75A, E79, E93(4), E144, E197, E253, F3, F2(3), F34, D1131.

Warts: E2.

Bodysherds: A5, Ditch B1(d), C6(3), C8(5), C9(8), D1(3), D5(11), D501(3), C19, Ph C1, Ph C21(2), C13(2), C21, C17(2), C18(2), C11, D506A(38), D520, D554(4), D516B(2), D531A(2), D1002(25), D1002(30), D1016(3), D1006(2), D1017, D1008(4), D1021(4), D1034A(2), D1034B(5), D1034F(2), D1034D(3), D1034C(4), D1034A(4), D1028, D1032, D1033(7), D1034B(2), D1075(2), D1046, D1111, D1110(4), D1100(3), D1097(2), D1081, D1096(5), D1094, D1008(16), D1130(5), D1127B(3), D1127A(2), D1198(3), D1181, D1203(11), D1197(10), E2(3), E15A(9), E15B, E25/26B, E 34 Fill B, E34A(2), E33, E20/27(5), E16, E50(9), E34, E167(3), E137, E58(2), E75A(4), E75B(5), E77(4), E79(8), E93(4), E104, E81(4), E106/E128(5), E141(3), E122(4), E139(2), E129/126(2), E116(7), E152(3), E144, E197, E210, E255(2), F3, F31(10), F5(8), F6, F37/41B(4), F34(15), F48, H3(5).

This is the most common amphora form imported into Roman Britain, and was already present in some numbers during the late Iron Age (Williams and Peacock, 1983). Dressel 20 amphorae were made along the banks of the River Guadalquivir and its tributaries between Seville and Cordoba in the southern Spanish province of Baetica, where they were used for the long-distance transportation of olive-oil (Ponsich, 1974; 1979). This type of amphora has a wide date-range, from

the Augustan prototype (Oberaden 83) with a fairly upright rim, a short spike and less of a squat bulbous body than the later form, to the well-known globular vessel which, with some typological variation was in use up to at least the late third century A.D. (Peacock and Williams, 1986, Classes 24 and 25). Rim forms of the earlier Oberaden 83 type are known from pre-Roman levels at Prae Wood, Gatesbury Track and Silchester, so that importation of Baetican olive-oil into Britain may have begun as early as the last decade of the first century B.C. At Fishbourne the earliest Dressel 20 rim is dated elsewhere to the Tiberian period (fig. 1), with the majority of other rim forms falling in the date-range second half of the first century A.D. - early second century A.D. All the Dressel 20 rims from Fishbourne can be paralleled with examples from Augst illustrated by Martin-Kilcher (1983) in her scheme for the development of the Dressel 20 rim:

D1002	Dated at Augst to the Tiberian period ( <u>ibid.</u> , no. 3)				
E16, F3	"	"	mid 1st century A.D. ( <u>ibid.</u> , no. 8)		
D1197	"	"	"	"	( <u>ibid.</u> , no. 9)
B410, D1021, E16, E50B	"	"	"	"	( <u>ibid.</u> , no. 12)
Ditch B1(d)	"	"	"	"	( <u>ibid.</u> , no. 6)
D5(2), C17, D1006, D1033, E15A	"	"	A.D. 55-75 ( <u>ibid.</u> , no. 15)		
C9, D1002, D1033, D1067, D1114, D1127C	"	"	later 1st century A.D. - early 2nd century ( <u>ibid.</u> , no. 17)		
E92	"	"	"	"	( <u>ibid.</u> , no. 20)
E93	"	"	"	"	( <u>ibid.</u> , no. 21).
E50	"	"	"	"	( <u>ibid.</u> , no. 23)
D506A	"	"	first half of 2nd century A.D. ( <u>ibid.</u> , nos. 24/25)		
D5, D1002, E140(2)	"	"	mid 2nd century A.D. ( <u>ibid.</u> , no. 27)		
E50	"	"	"	"	( <u>ibid.</u> , no. 29)

Fifty-one handles or part handles were recovered, which included one partial stamp which may be Q.CAL.MAR.SI (fig. 2; Callender, 1965, no. 1427, dated A.D. 90-140 ?). Also present was a basal wort (E2) and a bodysherd that had been deliberately 'rounded' (A5).

#### Dressel 2-4

Rims: A8, D1127B, D1097, E33, E116, E34, F2(2).

Handles: C11, D506A, D1002, D1008, D1096, D1127C(2), E15A(2), E75A, E79, E140, F34, E197, C9, D1002, C18.

Spikes: D1008, E50, E140, F33.

Bodysherds: A5, D1, D5(2), D506A, D1127C(12), E15B, E50(7), E76(2), E79(12), E140, E255, E92, E191(2), F5(3), D1034A(2), D1033, B22, D1, D506A(2), D1021, D1111, E34 fill G, E50, F31, E106/E128(3), E75A, E188A/E187.

This form of amphora has a simple rounded rim, long bifid handles formed from two rods and a solid, slightly flared or knobbed spike (figs. 3-9). Dressel 2-4 amphorae are the direct successors on Italian kiln sites to Dressel 1B amphorae and occur in a wide range of fabrics, dating from the latter half of the first century B.C. to the mid second century A.D. (Peacock, 1977b; Zevi, 1966). However, in addition to Italy this form was produced elsewhere in considerable quantity, mostly but not exclusively in the western Mediterranean region. Tituli picti suggest that the main content carried was wine, although on occasion other commodities such as dates, fish sauces and even olive-oil could be carried (Zevi, 1966; Sealey, 1985; Peacock and Williams, 1986, Class 10).

Included in the material listed above is a rim (F2, fig.10) and two bodysherds (E75A, E188A/E187) in a dark red to reddish-brown fabric containing conspicuous inclusions of felspar with some granite fragments. It is probable that this vessel represents the Catalanian form of the Dressel 2-4 amphora (*ibid.*). Also at Fishbourne is a rim (F2, fig.11) and a number of handles and bodysherds (C9, D1002, C18, B22, D1, D506A(2), D1021, D1111, E34 fill G, E50, F31, E106/128(3)) in a distinctive 'black sand' fabric - caused by the inclusion in the clay of frequent dark-coloured grains of augite. This particular fabric is generally thought to indicate an origin in the area around Pompeii and Herculaneum (*ibid.*). The remainder of the Dressel 2-4 material appears to be made up of a majority of Italian fabrics.

#### Dressel 1 - Pascual 1

Handles: E140, F31.

One small handle (E140, fig. 12) and part of a handle stump of the amphora form Dressel 1 - Pascual 1. This form is characteristic of the Catalonia region of Spain, particularly the area around Barcelona, and probably carried wine (Pascual, 1977; Keay and Jones, 1982). It was made from the late Republican period to A.D. 79 at Pompeii (Tchernia, 1971), although the majority of dateable finds from north western Europe are generally Augustan in date (Williams, 1981; 1988; Galliou, 1984). The two sherds from Fishbourne are in my Fabric 1 (see Williams, 1981). It is possible that the two bodysherds from the Catalan amphora above may in fact belong to this form rather than Dressel 2-4.

In Britain, sherds of Dressel 1 - Pascual 1 are usually found on late Iron Age pre-Roman sites, and the distribution tends to be concentrated in the central southern area (Williams, 1988). Recent finds of this form have come from nearby Chichester (Theological College).



Pélichet 47/Gauloise 4

Rims: C9(3), C26, D1021, D1094, E50(2), F2(2), F39, E15A, C8.

Handles: D1, D5, D1034B, D1094(2), E93, F2.

Bases: D506A(2), F50A.

Bodysherds: C26(17), C18(3), F6(4), D1034D(2), D1094(7), E50, F50A(18), F39(18),  
H5, D506A(11).

This is a flat-bottomed wine amphora type predominantly made in southern France, more particularly around the mouth of the Rhône in Languedoc, where a growing number of kilns have been discovered in recent years (Laubenheimer, 1985; figs. 13,14). This form was produced for many years, from about the middle of the first century A.D. to at least the early fourth century A.D. (Panella, 1973; Laubenheimer, 1985). In Britain, Pélichet 47 does not appear to be present in pre-Boudiccan levels (Peacock, 1978), with the main concentration of finds appearing to come from second century contexts.

Camulodunum 185A

Rims: D1196, D1005, D1075, D1002(2)

Handles: C19, D1002, 1034B, E50, E129/E126(2), W/M u/s, E140.

Spikes: D1002, D1064, E u/s.

Bodysherds: C19, D1002(9), 1034B, D1075(2), E2, E23(3), E140, D506A, E125.

This form has its origin in Baetica, southern Spain (Tchernia, 1980), the similarity in fabric with the more common Dressel 20 suggesting a source in the region of the River Guadalquivir (Peacock, 1971; figs. 15-18). Amphorae of Camulodunum 185A form (Haltern 70) recovered from the Port Vendres II shipwreck carry inscriptions describing the contents as defrutum, a sweet liquid obtained by boiling down the must (Colls et al., 1977; Farker and Price, 1981).

For a more recent discussion of the contents and interpretation of defrutum as belonging to the vins cuits, see van der Werff (1984). However, fish-sauce also appears to have been carried in this form, a recent titulus pictus from London reads mur(ia) (Rodriquez-Almeida, 1981). The date-range for Camulodunum 185A is from about the mid first century A.D. to around the mid first century A.D. (Colls et al, 1977; Tchernia, 1980).

Peacock and Williams Class 59

Rim: D531A.

Bodysherds: D531A(10).

A rim (fig. 19) and some bodysherds of a spindle-shaped amphora of first to early second century A.D. date and a fabric which has some similarities with the Baetican forms Dressel 20 and Camulodunum 185A, suggesting that this may also have been the region of origin for this type to. An example of this form from the Thames Estuary contained olives in defrutum (Sealey, 1985). This class of amphora is already known from Fishbourne (Cunliffe, 1971, Fig. 100, no. 148.8).

Camulodunum 186A

Rims: D1, F2, D1127C, Eu/s, E50, D1008, D5(fig. 20).

This amphora form was made along the southern Spanish coast, tituli picti found on these vessels suggest that fish-based products such as the sauces garum, liquamen and muria were carried, as well as the salted fish themselves (Zevi, 1966; Beltrán, 1970; Peacock, 1974). Camulodunum 186A was made from the late first century B.C. to the early second century A.D. and was widely distributed in the western Roman Empire.

Camulodunum 186C

Rims: D1021, E258.(fig. 21).

A similar amphora form to Camulodunum 186A only with a broader neck and hooked rim, while the latter displays a bell mouth and a thickened short rim with a concave outer face. Made in the same region as Camulodunum 186A and carried much the same goods, although appearing at a slightly later date, from about the Flavian period or shortly before to the early second century A.D. (Beltrán, 1970; Panella, 1973).

Camulodunum 186sp

Handles: D506A (fig. 22), D1100, D1197, E75A (fig. 23).

Hollow spikes: E75A (fig. 24), D1008.

Bodysherds: D5(2), C13, D506A(2), D516A(2), D513(6), D1002(2), D1021(4),  
D1040, D1034A(2), 1034B, D1097, D1081, D1008(9), D1127C, E50(13),  
Eu/s(4), E15A(4), E75(2), E79(11), E117(4), E140, F31, F34.

Due to the similarities of form and fabric in the Camulodunum 186A and B varieties, it is not possible to say whether the above sherds belong to one form rather than the other.

Dressel 7-11

Rims: F2,

Handles: F5, E139, D1002.

A rim (F2, fig. 25A) and three handles, probably from a Dressel 7-11 amphorae form (Peacock and Williams, Class 16). This type probably derives from the coastal regions of southern Spain and carried fish-based products, from the late first century B.C. into the first century A.D. (Beltrán, 1970; Peacock, 1974).

### Southern Spanish

Rim: F19/51 (fig. 25B).

Bodysherds: C6, D5(3), D516B(2), E531A(2), D1002(3), D1017, D1006, D1032,  
D1033, D1127A, E1203, D1198(4), E33, E23, E93, E214(2), E257,  
F2, F37/41B(2), F19/51(20), E144(2).

This material probably derives from the coastal regions of southern Spain, in particular between Cadiz and Malaga. The amphorae would have been used to carry fish-based products from around the late first century B.C. to the second century A.D. (Peacock, 1971; 1974).

### Rhodian Style

Handles: D1094, E16, E140 (fig. 26), D1021, E93 (fig. 27), E269, E75A (fig. 28).

Spikes: D506A, E197 (fig. 29), D1021, D1008.

Bodysherds: E197(2).

This form of amphora, with simple rounded rim, cylindrical neck joined to a body that tapers to end in a solid spike and long single rod handles which rise to a sharp peak, developed from late Hellenistic prototypes by the late first century B.C. and probably continued into the early second century A.D. (Panella, 1973; Peacock and Williams, Class 9). The majority of the material from Fishbourne seems to be in Peacock's Fabric 1 or 2 (1977a), which is commonly found on early military sites in Britain and probably comes from Rhodes itself, possibly by way of a tribute of wine imposed on the island by Claudius. However, one of the rod handles examined in thin section under the petrological microscope almost certainly belongs to Peacock's Fabric 3, the origin of which is uncertain (E269). Other British examples of this particular fabric come from Colchester and Fishbourne (*ibid.*).

Pseudo-Koan

Handle: D1197 (fig. 30).

Bodysherds: D1197(7).

Part of the top section of a bifid rim which rises to a peak (cf. Peacock and Williams, 1986, Class 11). Little is known of this form, which seems to be partly modelled on the Dressel 2-4/Koan type. An eastern Mediterranean source seems likely, with a date-range from the first century A.D. to the second century A.D. (ibid.).

Unassigned

Rims: F50A(2), F58(2).

Bodysherds: C6, D5(2), C11, D506A(3), D1034A(2), E50B(4), E75A, E93, E141, E139(2), E188A/E187(2), E197(8), E144, 273(3), F2(2), E246(4), F31(3), F10, F48(2), E2(3).

Bibliography

- Beltrán, M. (1970) Las anforas romanas en Espana, Zaragoza.
- Callender, M.H. (1965) Roman Amphorae, London.
- Colls, D., Etienne, R., (1977) 'L'epave Port-Vendres II et le commerce de la  
Lequement, B., Liou, B. Betique a l'epoque de Claude', Archæonautica,  
and Mayet, F. 1(1977).
- Cunliffe, B. (1971) Excavations at Fishbourne, 1961-1969, Vol. II:  
The Finds, Res. Rep. Soc. Ant. Ldn., no. 27.
- Dressel, H. (1899) Corpus Inscriptionum Latinarum, XV, Pars 1,  
Berlin.
- Galliou, P. (1984) 'Days of wine and roses? Early Armorica and the  
Atlantic wine trade', in S. Macready and F.H.  
Thompson (eds.), Cross-Channel Trade Between  
Gaul and Britain in the Pre-Roman Iron Age, Soc.  
Ant. London Occ. Paper N.S. 4, 24-36.
- Hawkes, C.F.C. and (1947) Camulodunum, Res. Rep. Com. Soc. Ant. London, 14.
- Hull, M.R.
- Keay, S.J. and (1982) 'Differentiation of early Imperial amphora  
production in Hispania Tarraconensis', in I.  
Jones, L. Freestone, C. Johns and T. Potter (eds.), Current  
Research in Ceramics: Thin Section Studies, B.M.  
Occ. Paper, 32, 45-61.
- Laubenheimer, F. (1985) La Production Des Amphores En Gaul Narbonnaise,  
Paris.
- Martin-Kilcher, S. (1983) 'Les amphores romaines a huile de Betique (Dressel  
20 et 23) d'Augst (Colonia Augusta Rauricorum) et  
Kaiseraugst (Castrum Rauracense). Un rapport  
preliminary', in J.M. Blazquez and J. Remesal (eds.)  
Prod. Y Com. del Aceite en la Antigüedad. II Congre:  
Madrid, 337-347.

- Panella, C. (1973) 'Appunti su un gruppo di anfore della prima, media e tarda eta Imperiale', Ostia III, 460-633.
- Parker, A.J. and Price, J. (1981) 'Spanish exports of the Claudian period: the significance of the Port Vendres II wreck reconsidered', Int. J. Nautical Arch. and Underwater Explor., 10(1981), 221-228.
- Pascual Guasch, R. (1962) 'Centros de produccion y diffusion geographica de un tipo anfore', VIIe Congresso Nacional de Arqueologia, Saragge, 334-345.
- Pascual Guasch, R. (1977) 'Las anforas de la Layetania', Coll. de L'Ecole Francaise de Rome, 32(1977), 47-96.
- Peacock, D.P.S. (1971) 'Roman amphorae in pre-Roman Britain', in M. Jesson and D. Hill (eds.), The Iron Age and its Hill-Forts, Southampton, 169-188.
- Peacock, D.P.S. (1974) 'Amphorae and the Baetican fish industry', Antiq. J., 54(1974), 232-243.
- Peacock, D.P.S. (1977a) 'Roman amphorae: typology, fabric and origins', Coll. de L'Ecole Francaise de Rome, 32(1977), 261-278.
- Peacock, D.P.S. (1977b) 'Recent discoveries of Roman amphora kilns in Italy', Antiq. J., 57(1977), 262-269.
- Peacock, D.P.S. (1978) 'The Rhine and the problem of Gaulish wine in Roman Britain', in J. du Plat Taylor and H. Cleere (eds.), Roman Shipping and Trade: Britain and the Rhine Provinces, CBA Res. Rep. 24, 49-51.
- Peacock, D.P.S. and Williams, D.P.S. (1986) Amphorae and the Roman Economy, London.
- Pelichet, P.E. (1946) 'A propos des amphores romaines trouvees a Nyon', Zeit Schweiz Arch. und Kungstesch, 8(1946), 189-209.
- Ponsich, M. (1974) Implantation Rurale Antique sur le Bas-Guadalquivir, Madrid.



- Ponsich, M. (1979) Implantation Rurale Antique sur le Bas-Guadalquivir, Paris.
- Rodriguez-Almeida, E. (1981) 'Amphora inscription from London', in M. Hassall and R. Tomolin, 'Instrumentum Domesticum', Britannia, 13 (1981), 417, no. 61.
- Sealey, P. (1985) Amphoras from the 1970 Excavations at Colchester - Sheepen, BAR British Series, no. 142.
- Tchernia, A. (1971) 'Les amphores vinaïres de Tarraconaise et leur exportation au début de l'empire', Archivo Espanol De Arqueologia, 44(1971), 38-85.
- Tchernia, A. (1980) 'Quelques remarques sur le commerce du vin les amphores', in J.H. D'Arms and E.C. Kopff (eds.), The Seaborne Commerce of Ancient Rome: Studies in Archaeology and History, Mem. Amer. Academy in Rome, 36(1980), 305-312.
- van der Werff, J.H. (1984) 'Roman amphoras at Nijmegen - a preliminary report', ROB, 34(1984), 347-387.
- Williams, D.F. (1981) 'The Roman amphorae trade with Late Iron Age Britain', in H. Howard and E.L. Morris (eds.), Production and Distribution: a ceramic viewpoint, BAR Int. Series, 120, 123-132.
- Williams, D.F. (1988) 'The impact of the Roman amphorae trade with pre-Roman Britain', World Archaeological Congress, forthcoming.
- Williams, D.F. and Peacock, D.P.S. (1983) 'The importation of olive-oil into Roman Britain', in J. Blázquez and J. Remesal (eds.), Prod. Y Com. de Aceite en la Antigüedad. II Congreso, Madrid. 263-280.
- Zevi, F. (1966) 'Appunti sulle anfore romane', Arch. Classica, 18 (1966), 207-247.